



NOUVO

SOCIALIZING THE NEWS

FINAL REPORT

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1. Introduction

Team Members & Roles

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- Ethan Hellman (Prototype Designer)
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Project Summary

Nuovo aims to promote increased engagement with current events, news outlets and alternative news media. This is in the hopes of promoting informed discussions within families, friend groups and other users on Nuovo. Features include frictionless news-sharing, daily curated news digests and a live feed showing activity amongst friends and family. Essentially, Nuova operates like Apple news but with a significant focus on socialization.

2. Problem Space

Literature Review

For individual summaries of our articles [click here](#)

The reviewed studies collectively provide motivation for our inquiry into news engagement behaviors amongst college students, especially in the digital age. Key themes, such as the influence of social interactions, academic settings, digital media platforms, and individual psychological factors, align closely with the core objectives of our study. By revealing the diverse ways in which college students access, consume, and share news, these studies illuminate the complex dynamics of news engagement in a generation deeply intertwined with digital media. This rich body of research not only validates our study's focus but also guides its future direction, emphasizing the importance of considering the interplay between social environments, digital literacy, and individual preferences. It provides a foundational framework for developing strategies to enhance news literacy and engagement among college students, ensuring they are well-equipped to navigate the evolving landscape of digital news consumption.

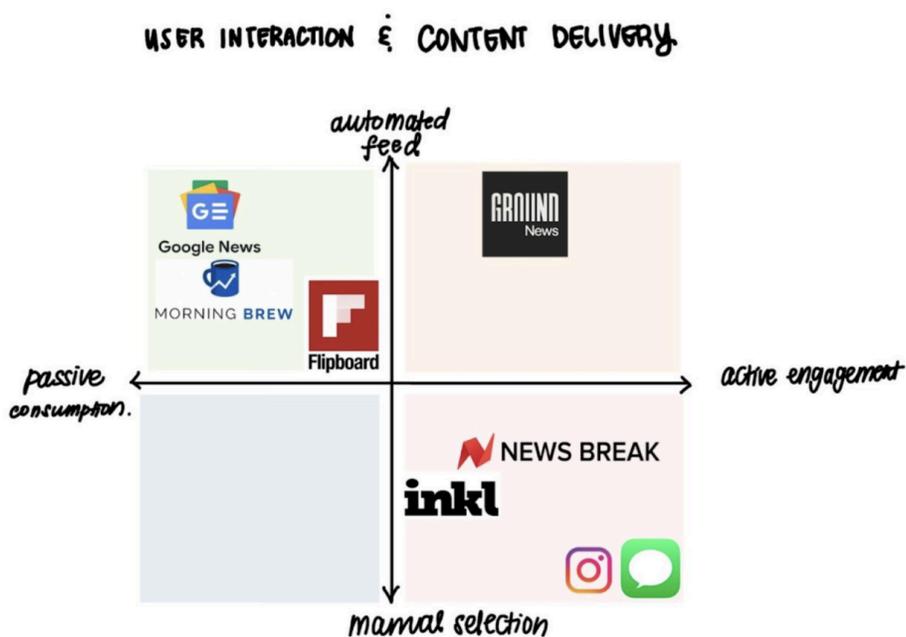
Moving on to discussing our literature review process, we decided to study the body of literature surrounding news consumption behaviors amongst college students. A central theme across these studies is the significant role of social interactions and academic environments in shaping news habits and discerning credible news sources, as illustrated by Head et al. (2019) and Antunovic et al. (2018). These findings underscore a generational shift towards digital media, emphasizing the need for products to adapt to changing news engagement patterns.

Another key aspect is the influence of digital platforms and social media regulations on news consumption. Studies by Etta et al. (2023) and Omar et al. (2023) demonstrate how content moderation policies and factors like news credibility significantly impact user engagement and preferences.

Additionally, we decided to explore the psychological and societal implications of news consumption. Kormelink's (2023) study on news habit formation and Villi et al.'s (2022) research on news avoidance reveal the complex interplay between personal routines, mental well-being, and news consumption. Complementing this, Schröder's (2019) work on personal relevance in news choices and Karnowski et al.'s (2018) study on news-sharing behavior highlight the importance of individual preferences and social motives in news engagement.

In essence, these studies collectively reveal a nuanced picture of news consumption, marked by the interplay of social influence, digital platform dynamics, individual preferences, and psychological factors, offering valuable perspectives for understanding and addressing news engagement behaviors in the modern digital landscape.

Comparator Analysis



Our comparative analysis extended across a spectrum of platforms, from social media platforms to traditional news aggregators like Google News to innovative newsletters such as Morning Brew, content curation platforms like Flipboard, and services like Ground News that highlight news biases. Each platform was critically evaluated for its approach to personalizing content for the user, the cognitive effort required to digest the content, the opportunities it provides for active engagement with other users, and the overall quality of knowledge imparted.

A prominent trend identified was the growing emphasis on personalization, as seen in platforms like Inkl and Flipboard, which tailor news based on user interests and behaviors. However, this personalization often leads to cognitive overload, with the vast volume resulting in disengagement or selective news exposure.

The levels of active engagement facilitated by these platforms also varied significantly. Social media channels like Instagram allow users to share, comment on, and discuss news stories within a familiar social network, thereby enhancing the social dimensions of news consumption. Conversely, traditional news aggregators offer limited interaction opportunities, possibly diminishing the depth of engagement with the content.

We examined different applications' designs, specifically how news stories are presented to the user. This aspect could significantly influence user engagement, highlighting a UX challenge in the information layout rather than the content itself. Furthermore, understanding how active and passive modes of engagement alters news consumption became a focal point of our analysis. For example, the experience of consuming news on Instagram versus Google News varies greatly, with Instagram fostering a more interactive and social environment.

Furthermore, the automation of content curation, especially in platforms like Instagram, Twitter, and Facebook, was another critical area of exploration. Despite their heavy reliance on algorithms for content selection, the automated systems these platforms employ can have far-reaching consequences, as seen in the case of Facebook's role in Myanmar. The automated news systems, by prioritizing engagement over accuracy, can inadvertently amplify harmful content, underscoring the ethical considerations required in automated news dissemination.

Our analysis culminated in the creation of a 2x2 matrix based on personalization and user engagement, revealing a market gap for a platform that adeptly combines high personalization with active engagement. As we transition to the ideation phase, our goal is to conceptualize a solution that bridges this gap while anticipating the future dynamics of news consumption. By addressing the needs of a demographic increasingly disillusioned with traditional media channels, our proposed solution aims to reinvigorate interest in current affairs and foster a more informed and interactive public discourse.

3. Baseline Study

Target Audience

We identified college-aged individuals as a suitable demographic due to the high variability in news consumption habits within this group compared to older populations, where news tends to be more universally important, and younger populations, where news is generally less prioritized. Our target audience was comprised of college students who expressed an interest in expanding their knowledge of current events and engaging in discussions about the news with peers or family members. To achieve this goal, we aimed to recruit participants who met the following criteria: 1) demonstrated an interest in reading the news, or expressed a desire to increase their news consumption beyond their current levels, and 2) were willing to engage in discussions about the news with their friends or family, or were open to the idea of doing so. By focusing on individuals who met these criteria, we aimed to gain insights into the motivations and barriers related to news consumption and discussion among college-age students, ultimately informing strategies to encourage and facilitate greater engagement with current events within this demographic.

Baseline Study

The goal of the diary study was to examine the behavior of college students when engaging with current events. Participants were required to record their daily consumption of news and journalism, including the topic, publication, mode of consumption (primary and secondary), and their accuracy of information recall on a scale of 1 to 10 as a proxy for engagement. Additionally, participants documented any additional types of engagement, such as discussions with peers or sharing links related to the news.

Each day, participants selected one piece of media from their consumption list and provided a rationale for why they initially decided to engage with it. This provided insights into their motivations for engaging with specific news content. The data collected was both qualitative and quantitative in nature. Qualitative data included the nature and motivation of engagement, while quantitative data encompassed the level of recall, frequency of consumption, topics of interest, number of sources consulted, and mode of consumption.

To facilitate data collection, participants were provided with a Google Sheets spreadsheet to populate with their daily records. They received a daily email reminder with a link to their specific sheet to encourage consistent participation. In cases where participants failed to fulfill their obligation, individual follow-ups were conducted to ensure data completeness and accuracy. This structured approach aimed to provide comprehensive insights into the behaviors and motivations of college students when engaging with current events.

Baseline Study Outline

Goal: Examine the behavior of college students when engaging with current events.

Diary Study Outline:

- Record (DAILY): Each piece of news/journalism consumed:
 - Topic
 - Publication
 - Mode of Consumption (Primary)
 - Information Recall Accuracy (1-10) at the end of each day
 - Additional Types of Engagement (ie. discussion with peers, sharing links, etc.)
 - One selected piece of media from the above list and the rationale for why the participant originally decided to engage with it. *(Only one is selected to reduce burden on participants + interesting to see if the the article they chose has consistent patterns in terms of media or content type)*
- Data Types:
 - Qualitative:
 - Nature of Engagement
 - Motivation for Engagement
 - Quantitative:
 - Level of Recall
 - Frequency of Consumption
 - Topics of Interest
 - Number of Sources

- Mode of Consumption
- Data Format:
 - We will create a spreadsheet (Google Sheets) for each participant to populate with their data. Each day, we will send an email with a link to their specific sheet to remind them to fill out the sheet according to the instructions of the study. We will expect the participants to fill this out each day. If we find that a participant is not fulfilling their obligation, we will follow up with them individually

4. Synthesis

Grounded Theory

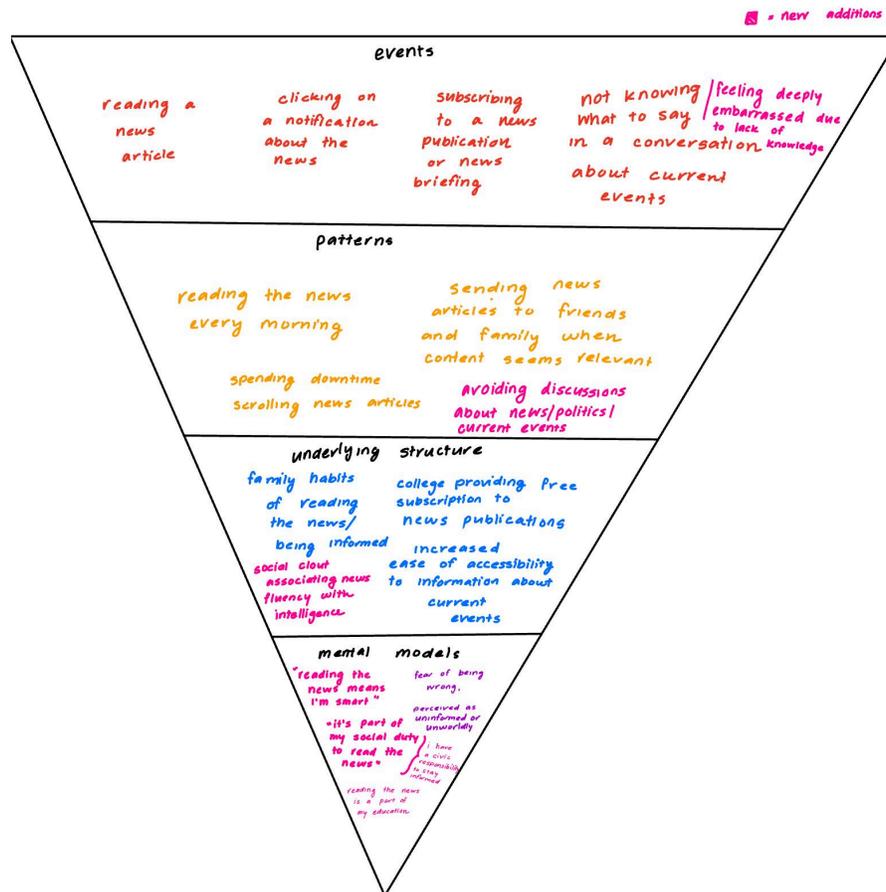
The trends and patterns unearthed through affinity mapping directly informed the development of our grounded theories. Each theory was rooted in the empirical data gathered from our participants, yet their formation was guided by the nuanced understanding that emerged from our affinity analysis. For instance, the social dynamics of news consumption, the overwhelming nature of news content, and the private manner in which students engaged with news were all themes that surfaced prominently during the mapping process. These insights became the cornerstones of our grounded theories, each reflecting a different aspect of the student news consumption experience.

The first theory posited that students' news reading habits are significantly shaped by the social dimensions of their consumption—how it's perceived by peers and society at large. This insight revealed a tension between the desire to appear informed and the fear of being perceived as insufficiently knowledgeable or even as a pseudo-intellectual. This dichotomy was especially pronounced when considering news source prestige and the apprehension around sharing or discussing news without extensive background research.

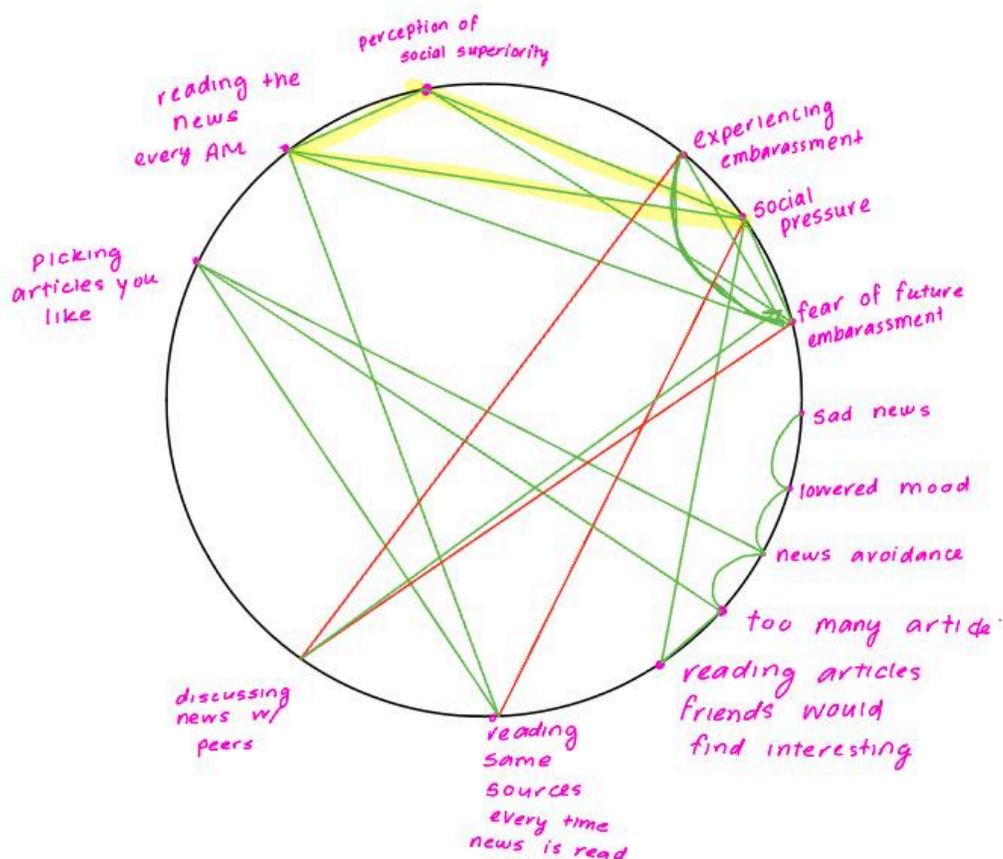
The second theory highlighted the aversion many students feel towards news consumption due to its overwhelming nature, often inducing feelings of confusion, sadness, or anxiety. A perceived high barrier to entry, in terms of understanding complex stories, frequently led students to default to more accessible forms of entertainment or social media.

Lastly, our third theory uncovered that for many students, news consumption is a deeply personal and private activity. This preference stems from vulnerabilities around reading pace, comprehension abilities, or interests in certain types of news, leading to habits of private engagement with minimal public sharing or discussion.

System Models



The Iceberg Model served as a powerful analytical tool in our study, enabling us to peel back the layers of observable news consumption behaviors to uncover the deeper underlying structures and mental models. Through this model, we discerned a striking correlation: students with a strong mental model around the fear of being perceived as misinformed or incorrect about current events exhibited a disciplined habit of daily news reading. This observation was pivotal, revealing how deeply ingrained fears and perceptions about social image and intellectual competence drive the consistency and rigor of news engagement. The Iceberg Model helped us understand that these mental models act as both a barrier and a motivator, influencing students' approach to news consumption in profound ways. This insight into the psychological underpinnings of news habits underscored the importance of addressing these mental models in our intervention strategies to foster a more positive and engaging news consumption experience.



The Connection Circle helped us synthesize different positive and negative reinforcement paths related to users news reading habits. For example, if individuals developed or engaged in the behavior of reading the news every AM, they would build a perception of social superiority, which may lead to increased feelings of social pressure to read the news more often. This would, in turn, reinforce the habit of reading the news every morning, and the cycle would continue again. Identifying these cycles of habits served useful as we thought about developing our proto-personas and our journey maps.

Proto-personas + Journey Maps

In our investigation into the diverse habits and challenges of news consumers, interviews revealed a complex landscape of preferences and needs, leading us to identify three key personas: the Avid Reader, who seeks depth and breadth in news; the Hobby Reader, who prefers news through the lens of personal interests; and the Avoidant Reader, who selectively engages with content to minimize exposure to distressing information. This segmentation allows us to delve into the nuanced ways individuals interact with news, aiming to enhance the consumption experience by addressing the unique behaviors, motivations, and challenges of each group.

Bisa – The Avid Reader Persona

Bisa embodies the dedicated student and finance intern archetype, who, under the influence of her family’s emphasis on the importance of staying informed, has cultivated a rigorous routine of consuming news every morning. This ritual begins in her bedroom where she begins her day by reading into the latest news briefings that arrive in her inbox. This routine, while reflective of a commitment to being well-informed, paradoxically leads to a sense of isolation. Bisa’s engagement with news is a solitary activity, devoid of interaction with others, which contradicts her underlying desire for social connection.

Despite the pride she takes in maintaining this habit and her self-perception as a worldly individual, she confronts the reality that her informed state does not facilitate social engagement.

Social Norms Theory suggests her news consumption is not just a personal choice but a response to the social expectations set by her family. BJ Fogg’s model further explains her behavior as a confluence of high motivation, ability facilitated by resources, and daily triggers (news briefings). However, the model also highlights a gap in her routine—the absence of triggers for social interaction related to her news consumption.

Addressing Bisa’s isolation requires ideation that introduces elements of social interaction into the news consumption process. Potential solutions could involve developing platforms or features that encourage discussions about news topics, enabling users to share insights and engage in debates. These social features could transform her solitary routine into a communal activity, bridging her need for information with her desire for social connection.

	Morning	Classes	Lunchtime	Recreational Activity	Evening
SAY	I get ready for the day, then I check the news before checking social media/viewing any content	I read the news to supplement readings from class or to get more informed on lecture material	I don't know how to bring up the news at lunchtime	I like to learn about new perspectives through different mediums	I feel good about ending the day with reading the news
THINK	The morning is me time and me time is news time, I find solace in staying informed	Bringing up the news will make me a better student and look smarter	Engaging with the news or discussing recent events seems too serious to bring up during lunch	Cannot waste time even on breaks and must consume news one way or another to remain productive	I want to withdraw and empty my head
DO	Read the news in the morning	Google or look through publication of choice to look for related articles	Send midday financial report to parents, go through breaking news headlines but news mostly kept private	Going on walks and listening to news podcasts	Miscellaneous news reading, sometimes don't read the news and just scroll
FEEL	Alert, energised and grounded in routine	Empowered, superior to other students	Internally knowledgeable but isolated/closed off	Feel productive during break times, feel that downtime is now justified because still learning	Proud that they put so much effort into reading the news, but feeling isolated
ROUTINE/HABITS	Habitually reads 3-4 different newspapers in the morning before going on social media and other tasks	Read articles in class that relate to class content to be more informed on the subject matter	Continue to digest some news, at lunch but never brings up with friends over lunch	Listen to podcast or news media when exercising, going for a walk etc.	If not too tired read the news before bed
PAIN POINTS	Feel like unable to bring up what I've read in the news to friends	None here	Wants to discuss the news and doesn't have an outlet to do so	Can't fully relax, always have compulsion to read more news or learn new things	Still feel like they can't share their thoughts on articles with anyone

Neel – The Hobby Reader Persona

Neel, transitioning from his past as an athlete to an international EE Masters student, navigates his news consumption with a distinct set of preferences and pressures. His engagement with news is two-fold:

driven by an inherent interest in hobbies and the appreciation for specific journalistic styles, and yet, formed by a sense of obligation to stay on top of significant global events. This dichotomy manifests in his morning routine, where he consumes news from various subscriptions while lying in bed or eating breakfast. While Neel enjoys articles that align with his interests, he also reads about global issues, motivated by a fear of social insecurity stemming from a lack of awareness.

Lewin's Equation hypothesizes that this behavior is a function of the individual and their environment, and PAC Motivators highlights the role of pleasure, avoidance of pain, and compliance in driving actions. Neel's scenario underscores a struggle to balance personal satisfaction derived from reading about hobbies with the societal expectation to be informed about significant events.

Ideation for Neel could focus on crafting a personalized news aggregation experience that balances his preferences with the sense of duty to be informed. By integrating algorithms that curate a mix of hobby-related content and summaries of significant news, the solution would cater to Neel's dual needs and mitigating his sense of obligation.

	Morning	Classes	Lunchtime	Recreational Activity	Evening
SAY	I like to read the news when I eat breakfast	Who checks the news in class?	Meals are associated with reading news in general for me	I only listen to music when I am relaxing/exercising in the afternoon	I just want to scroll and be lazy
THINK	I like to read things I'm interested in like the AO, likes to be informed and read local news to be connected to hometown family and friends	I want to focus in on class	I like to read things that pique my interest during the day	Downtime is sacred so I don't want to learn stuff during this time	I want to relax and not think about current events, need to destress
DO	Eat breakfast and read a physical newspaper	Pay full attention to class content	Scrolling on social media I'll often come across an interesting article and then I'll use hyperlink to article	Listen to music while working or laying in bed	Scrolling reels, if there's something news related will only investigate if funny/absurd
FEEL	Nostalgic, satisfied, better than everyone else	Focused and productive with the task at hand	Entertained	Relaxed, satisfied with wellness routine, rejuvenated	Relaxed, entertained, unmotivated
ROUTINE/HABITS	Read in mornings with breakfast	Removes distractions when in class	Reads entertaining news as opposed to current events/politics during the day	Block out most things during this time besides what he enjoys	Scroll at night and general avoid the news
PAIN POINTS	Feels insecure if doesn't know much about big current events	None really here	Politics and other news can be a little too depressing during the day, save it for the morning	None really here	Actively avoid the news because want to destress

Ari – The Avoidant Reader Persona

Ari presents a unique persona—an art student with an affinity for the outdoors, who consciously avoids news consumption that might adversely affect her emotional state. Her mantra, “Ignorance is bliss,” epitomizes her approach to news, aiming to stay minimally informed to ward off feelings of complete ignorance while protecting her emotional well-being. This approach manifests in selective engagement with news, primarily on topics that directly impact her life or pique her interest, and is often pursued in solitude. Despite occasional efforts to engage more actively with news through physical newspapers, Ari is caught in a tug-of-war between her desire to be more informed and the emotional toll such engagement exacts.

Ari's behavior aligns with the principles of PAC Motivators, especially the avoidance of pain, and Switch theory, which highlights her internal conflict between recognizing the importance of being informed and her preference for emotional comfort. This dichotomy points to a core need for news consumption that is emotionally neutral yet informative.

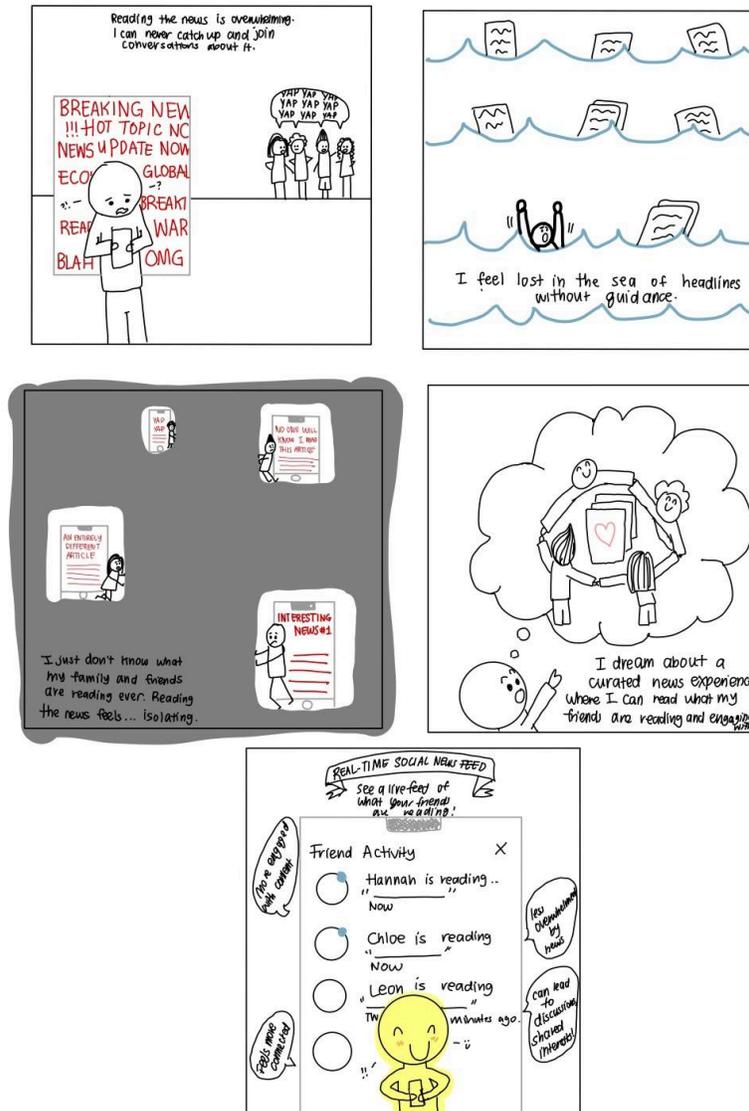
Ideation for Ari revolves around creating news content and platforms that minimize emotional distress while providing succinct, unbiased summaries of essential news. This could involve developing news outlets that focus on positive news or leveraging technology to filter news based on emotional tone, thereby offering Ari and similar users a way to stay informed without compromising their emotional well-being.

	Morning	Classes	Lunchtime	Recreational Activity	Evening
SAY	Im exhausted and too tired to focus on anything	I really my classes	Its time to catch up with friends and vibe and doodle	I'm talking about my dayt with my roommates and reading	I feel accomplished and satisfied with my day and myself
THINK	I hate mornings and I want sleep	I need to focus in class, school is fun and material is interesting	Thinking of other people and what to do	Thinks she wants to finish her work	Deserve to relax a little and spend time looking into things I'm interested in
DO	Set multiple alarms and disregard them all	Takes notes on things to look into later	Flirting with boys, recieve content from family and friends (likely not read)	Reading Wattpad, fanfiction storeis and doing homework	Deep dive into area of interest that she jotted down during class/earlier in the day
FEEL	Lack of motivation, comfortable, lazy	Unimpacted by things that are not clear or presented to her	Entertained, peaceful and sociable	Distracted, unproductive	Inspired to comment/share/contribute
ROUTINE/HABITS	Mornings are a time for myself and I don't feel motivated at all	Lock into class completely	Prioritise socialising over being informed	Likes socialising with friends during this time	Do research at night
PAIN POINTS	Lack of motivation to read causes me to not want to read the news or be productive	Lack of interest in things that don't directly affect her life	Priorities get in the way of reading the news	Feel unproductive while socialising	None here really

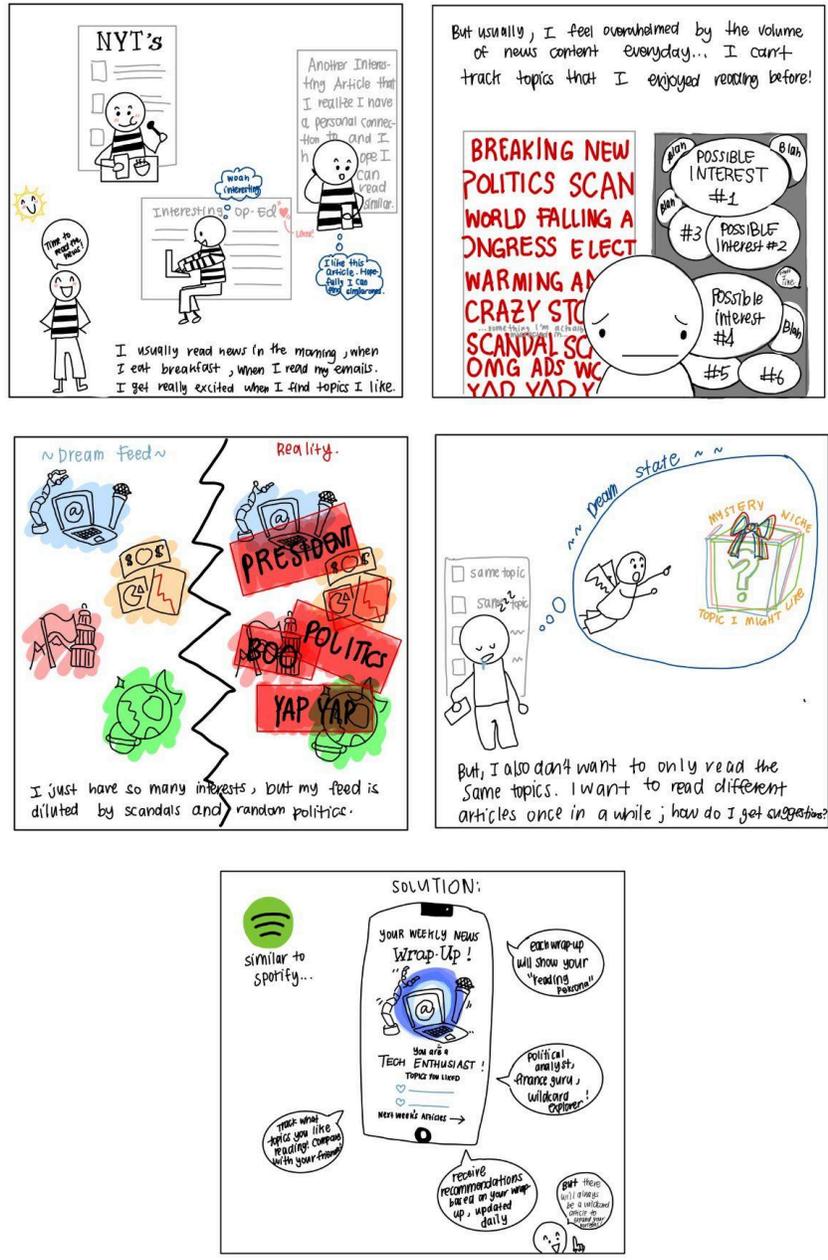
5. Intervention

Ideation

For our intervention study, we decided to prioritize our Hobby Reader persona. Unlike Avid Readers, who already possess a well-established routine, Hobby Readers demonstrate a keen interest in topics that resonate personally but lack a consistent habit of engaging with news broadly. This gap between interest and habit underscores a significant opportunity: Hobby Readers are on the cusp of deeper news engagement, requiring just the right nudge to transform interest into a regular practice. We had three main ideas for this study, which we illustrated through three storyboards.



In the first story board we depict the isolation felt while consuming news. Here, individuals find themselves lost in the plethora of headlines offered by news outlets. As they navigate the sheer volume of information it feels inaccessible and overwhelming, contributing to a sense of alienation when reading the news. Consequently the need for guidance is salient. Therefore we decided to lean into the mechanisms of information cascades (people will do what other people are doing) in the form of seeing what family and friends are reading is salient. Hence, being able to see what others are reading would provide much needed guidance for overwhelmed readers that align with Hobby readers who want to engage further with the news.



The second storyboard also relates to providing guidance for newsreaders, but more specifically covers the concept of choice overload. The storyboard explores how personalizing and streamlining one's incoming feed of news articles will promote further engagement with current events among hobby readers. When it comes to news reading, choice overload seems to result in reading less. This is paired with the fact that readers can become bored with certain topics, and sometimes like to read something new. Therefore the above illustration demonstrates how streamlining news exposure to become personalized, limiting choice and also providing 'curve-balls' can improve engagement with the news.



Our final storyboard describes challenges faced by those who align mostly with the avid reader persona. Here people often find that they do not know how to bring up the news in everyday conversation with their friends. Moreover they are very curious about how their friends think about certain topics. Therefore this storyboard provides a scenario where this issue is alleviated through our app, whereby they can now see how their friends think about certain issues/topics. Moreover we detail some of the features of group chats as well that promotes commentary amongst group members to provide an environment in which people can discuss current events/serious topics.

Intervention Study

Our intervention study plan is designed to explore the dynamics of information sharing and its impact on engagement with news content and social interactions. We pair a Knowledgeable Participant (KP) with an Ignorant Participant (IP), with the latter unaware of the study's existence. The KP is tasked with sharing articles or podcasts with the IP daily, using various communication mediums such as messages, email, or social media platforms. We collect both quantitative and qualitative data to assess several aspects of the intervention.

Firstly, we gather data regarding the types of articles or podcasts shared, categorizing them by topic, length, source, and format. This aims to understand the preferences and engagement levels of the participants. Additionally, we track the mode and frequency of sharing to analyze patterns in behavior. We also collect participant feedback to gain insights into the motivations behind content selection by the KP and the IP's response to the shared content, including interest level and relevance. Secondly, we monitor behavioral changes, particularly in the IP's news consumption habits and the frequency and depth of discussions between the KP and IP. We also note any expansion of content sharing beyond the study pair, such as with other friends or on social media platforms.

Most importantly, we conduct a post study interview to gather more open ended qualitative data. Furthermore we want to evaluate emotional and cognitive responses, including the IP's engagement and interest levels with the shared content and any changes in their knowledge or perspective on specific topics. Overall, our study aims to gather insight into how interpersonal information sharing influences news engagement and whether or not these social interactions are viewed in a positive light, and finally if such discussions valuable generate some new insight for people involved in the test.

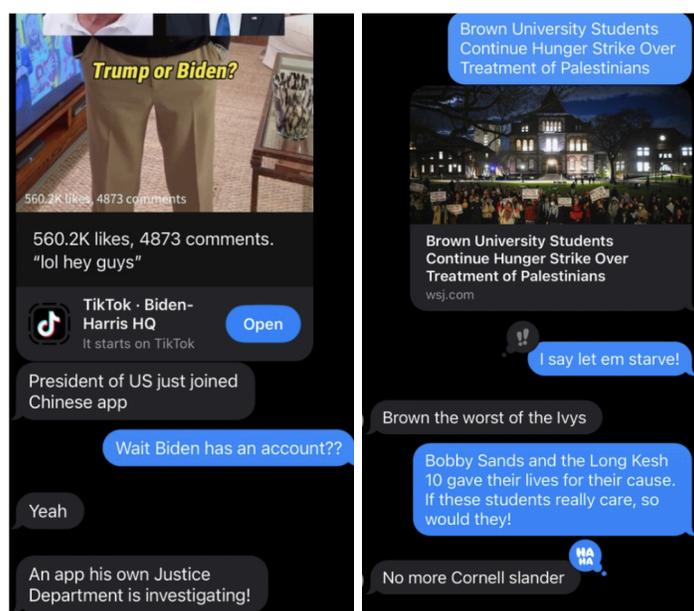
Method

1. **Recruitment of Participants:** Eight participants were recruited for the study through various channels, including social media platforms, email lists, and personal networks.
2. **Participant Instructions:** Once recruited, participants received detailed instructions on the study procedure and their roles, including identifying a friend for the intervention.
3. **Sharing Content:** Participants were instructed to share news-related content that they find interesting with a friend or group-chat over messaging platforms
4. **Engagement in Discussion:** Participants were encouraged to actively engage in discussions with their friend, asking open-ended questions and sharing their thoughts and opinions.
5. **Daily Reminders:** Throughout the intervention period (4 days), participants received periodic reminders to carry out the task and maintain regular communication with their friend.
6. **Data Collection:** At the end of the intervention period, participants were asked to submit screenshots or transcripts of their conversations with their friend regarding the shared content.
7. **Post-study Interview:** Participants were invited to provide feedback on their experience via an interview

Synthesis: Insights

Despite lower participation than in our diary study, four out of eight participants actively engaged, offering valuable insights into news sharing behaviors and informing our solution. The key data collected were screenshots of news article-related conversations, which we have yet to analyze quantitatively.

Participants primarily shared news articles, possibly due to ease of sharing and the likelihood of engagement. We observed significant variance in experiences, closely tied to their reading personas (avid, hobby, or avoidant readers). Avid readers experienced more engagement in their circles, suggesting that engagement levels may influence social interactions. Conversely, avoidant readers faced challenges in sparking discussions, with their attempts often ignored or misunderstood. These insights highlight the need to consider individual and social factors in our prototype to enhance news discussion and engagement.



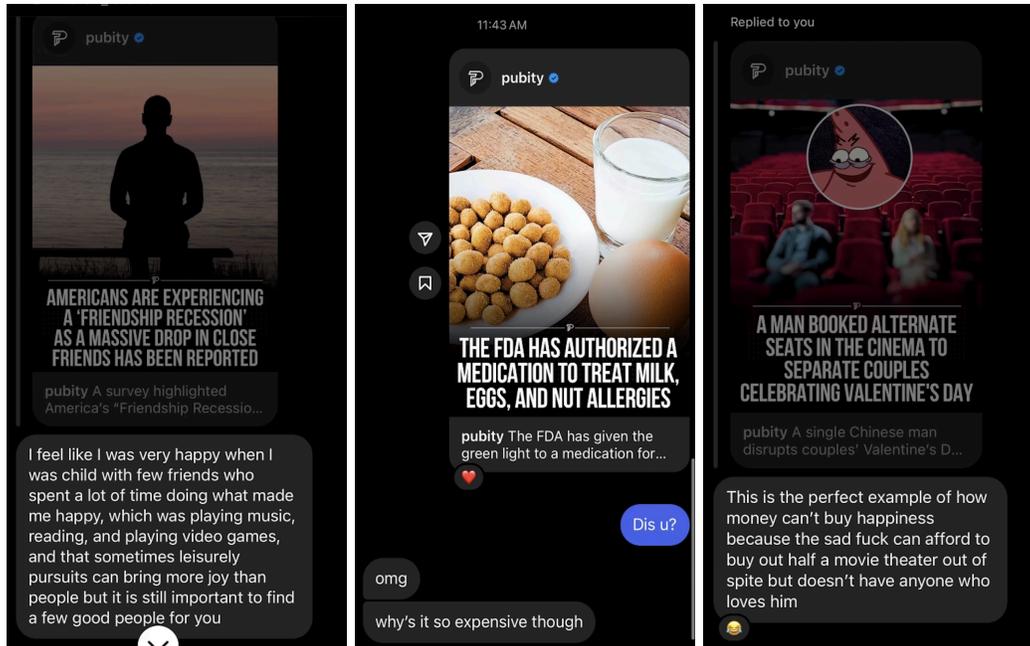
Amusing screenshots of satirical group chat created by one of our participants

In our study, we include some amusing screenshots from a participant who revealed how a pre-existing group chat with three close friends, centered around the presidential election, boosted their content engagement. This chat, active since September, served as a platform for sharing relevant articles and fueling in-person discussions later on. Interestingly, despite the grave topic, the exchanges often featured satirical or sarcastic comments that contrasted with their real political views, highlighting how humor played a role in keeping the group informed and open to different perspectives.



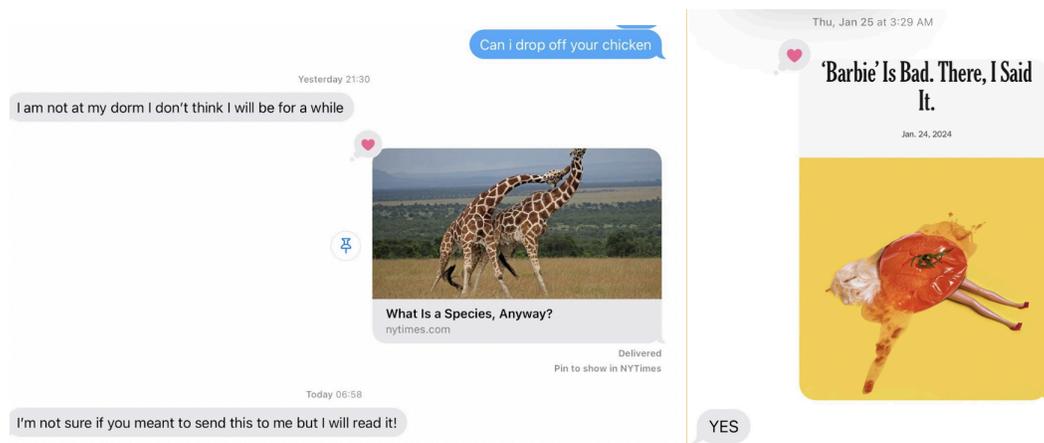
This participant's father only engaged in discussion with articles he sent

A participant aimed to create a reciprocal news-sharing dynamic with their father, who frequently shared articles with them. Despite their efforts, the participant noted their father rarely responded to the articles they shared but showed increased enthusiasm in discussing his own shares. Furthermore, the participant observed minimal engagement from friends with the news articles they shared, contrasting sharply with another participant's success within a pre-existing group chat. This disparity emphasizes the impact of established social dynamics and communication patterns on the success of fostering discussions around shared content.



We saw the most engagement from this participant, but this felt like more of a chore for the participant

A study participant, used to passively consuming information on social media, found actively searching for articles to share a burdensome deviation from their norm. Viewing the task as an unwelcome obligation, they lacked intrinsic motivation, possibly due to the study's demands. Despite sharing articles, the lack of reciprocal engagement from friends may have further decreased their enthusiasm. However, they showed a preference for sharing with close friends, indicating ingroup favoritism and a desire for comfortable social interactions. While not enjoying the task, they made an effort to choose articles that would resonate with their friends, showing empathy and a sense of connection. The experience ultimately raised the participant's awareness of their consumption habits, suggesting a potential shift towards more engaged and thoughtful news interaction.



This participants experience was defined by general confusion and huge variation in engagement

A participant, identifying as a 'hobby reader,' shared their unease and confusion over distributing random news articles to friends, as the study directed. This often led to perplexed reactions and scant follow-up from their circle, despite generating some amusing exchanges. They confessed to not always fully reading the articles they shared, picking topics based on personal curiosity or amusing debates, like the origins of Goldfish crackers, rather than their friends' interests. While these interactions were seen as entertaining and a bonus to their friendships, responses from friends were mixed. Interestingly, the participants noted an increase in their own news consumption and a newfound pleasure in reading articles, although their engagement faced hurdles when friends shared content from subscriptions they didn't have.

Interview Results

To offer a concise yet detailed summary, we focus on three interviews that provide diverse perspectives on news sharing, while also encapsulating common themes found across multiple interviews.

Participant A, an avid news reader, is actively involved in a group chat dedicated to discussing news about the presidential election, indicating a high level of engagement and genuine interest in the articles shared. They find the humorous nature of their exchanges does not detract from the seriousness with which the group engages with the content. This participant values the in-depth discussions that arise from the chat, suggesting these interactions enhance memory and understanding of the news. They propose an app concept encouraging users to share and discuss news from preferred outlets, highlighting a desire for a social platform that rewards active participation and allows users to explore what others are reading.

Participant B experiences the task of sharing articles as burdensome, contrasting with their usual passive consumption habits on social media. Despite making an effort to share articles tailored to their friends' interests, they encounter minimal engagement, feeling their efforts are more chore-like than rewarding. However, they note an increased engagement with news and appreciate the opportunity to attempt connecting with friends through shared articles, even in the absence of reciprocation. This experience suggests a varied threshold for news sharing and engagement among different individuals.

Participant C shares articles with a focus on amusement and light-hearted interactions, often choosing articles randomly without much consideration for relevance. They aim to avoid controversy, preferring to keep exchanges entertaining. Despite their casual approach and not always reading articles thoroughly, they find the process enhances their news consumption habits and values the entertaining aspect of these interactions. This participant's experience points to the potential for news sharing to strengthen social bonds through humor and lightheartedness, even when deep engagement with content is limited.

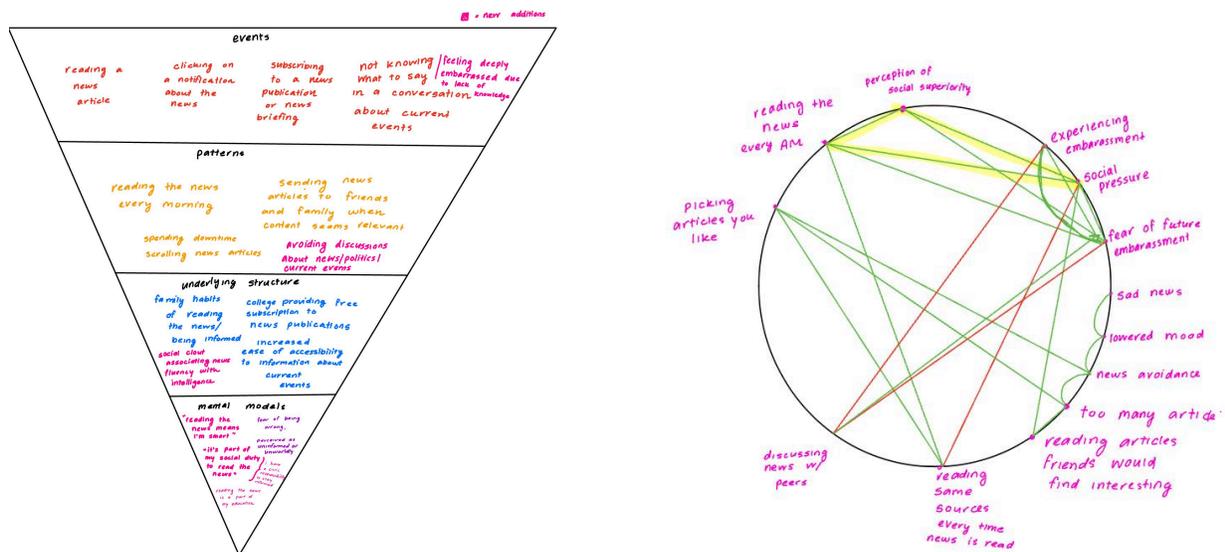
These interviews collectively reveal that while motivations and experiences of news sharing differ, there is a general openness and positive attitude towards the practice. It emphasizes the varied approaches to engaging with news and connecting with others, from deeply analytical discussions to more casual and entertaining exchanges. The overall increase in news engagement among participants underscores the potential of news sharing to foster meaningful connections and enhance awareness and understanding of current events.

Synthesis: System Models

Our key takeaways were five-fold:

1. Most participants find discussing articles with friends a fun/rewarding activity
2. Participants engage more with the news when an article is 'socialized'
3. Overall, participants were interested in seeing what their friends are reading and if their opinions aligned with
4. People would like to see what other well-read people think about certain news articles/issues
5. Some participants would like decreased friction when it comes to sharing articles with friends

Reflecting back on our two system models, our Iceberg model and our Connection Circle, we realized that our intervention study reinforced the layers and cycles that we had discovered in our initial interviews.



We found that leveraging the social element could encourage individuals to read the news more often. When news was framed as a social activity, or an article's content related to friends' interests, there was a higher likelihood of reading and engagement. However, we also realized the importance of existing social systems that could facilitate more effective news sharing. Additionally, we noticed that most shared articles were oriented towards positive or neutral news, reinforcing that sad news led to lowered mood and news avoidance within our connection circle. Few articles pertained to political topics, which in our Iceberg model, also led to news avoidance. We observed that if too many articles were sent, there was less likelihood of engagement. Thus, we concluded that a smaller, curated selection of articles would be most effective in encouraging people to read the news.

Synthesis: Reflection

The intervention study and subsequent interviews provided valuable insights that reaffirmed our confidence in the potential of developing a platform where users can readily share articles with friends, observe their friends' reading history, see others' opinions and initiate discussions with other users on specific topics. In the intervention study participants expressed a genuine interest in engaging with news content within their social circles, highlighting the inherent value of such platforms in facilitating meaningful exchanges and fostering connections based on shared interests. The interviews further revealed that participants found enjoyment and amusement in the process of sharing articles, indicating a positive reception towards the proposed platform's core functionalities.

Building upon these findings, we moved forward with enhancing the user experience and further incentivizing engagement with the platform. One avenue we explored is the implementation of scoring system that rewards users for their participation and contributions to discussions. By gamifying the experience, users will be motivated to actively engage with the platform, whether it's through sharing articles, initiating discussions, or participating in existing conversations. Nevertheless we thought we chose to use streaks as a measurement to prompt consistent use with the app over the scoring system. This is because we wanted to lean in more with socializing the news amongst friend circles as opposed to making it an anonymous discussion thread which often toxifies informed discussion.

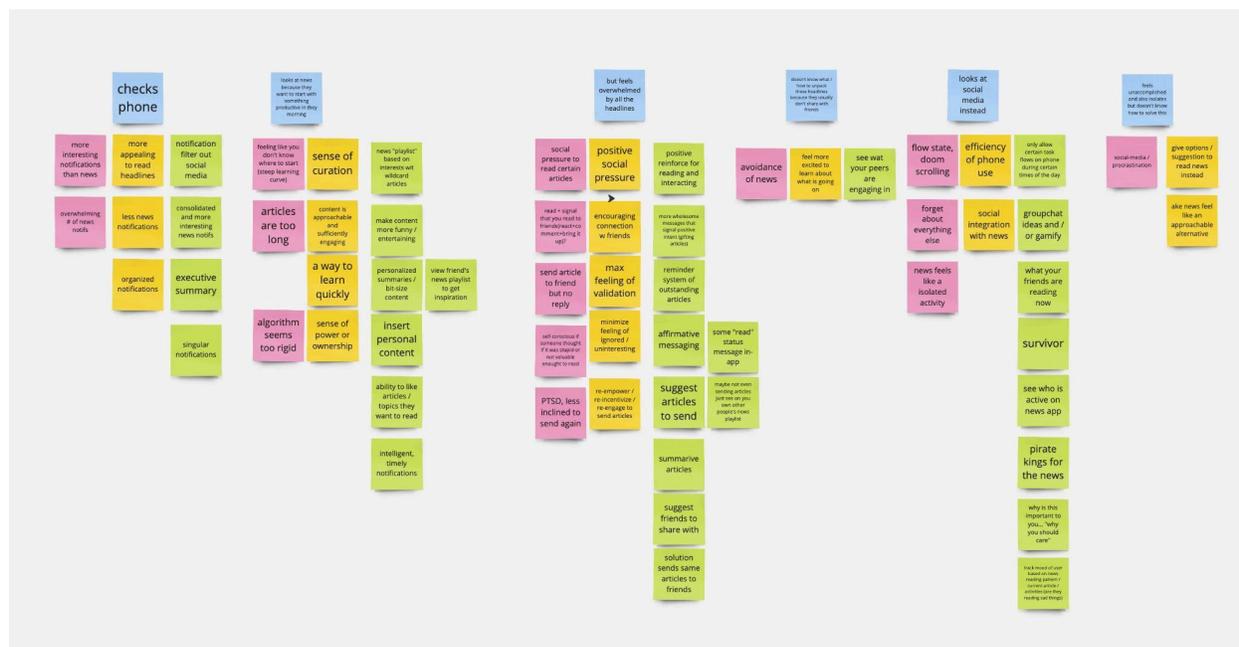
Another feature we chose to implement was to let users view insights about their friends' activity on our app. This is because several of our participants indicated that they were interested in seeing: 1) what their friends were reading 2) what they thought of certain articles. Finally we want to quantify and visualize how similar one's reading habits are with their friends. We thought about using a heat map, where users that are placed closer together on the map are generally more similar in terms of their reading habits and opinions. This aims to act as visual suggestions to create group discussions with people within their 'cluster'.

In summary, the intervention study and interviews have validated the demand for a platform that facilitates article sharing, discussions, and social interactions around news content. Moving forward, we are committed to enhancing the platform's features and implementing innovative incentives to drive user engagement and create a interactive and dynamic community centered around news consumption and discussions.

6. Solution Design

Design Architecture

Story Maps



In crafting the MVP features for the news reading app, the development process was rooted in a comprehensive understanding of the user's daily news interaction, informed by interviews and the construction of user personas. This approach involved mapping out the entire journey of a user's interaction with news, from the initial discovery to ending up on social media instead. For each step in this journey, specific pain points were identified—such as the effort required to find relevant articles or the lack of engagement in sharing and receiving content.

With these pain points in hand, the team then set goals aimed at addressing each one. The goals acted as solutions to the pain points and were aligned with the overall user experience we wanted to achieve. For instance, if a pain point was the "chore-like" feeling of finding news, a goal might be to "make discovering relevant news effortless and enjoyable."

From these goals, specific features were conceptualized. Each feature was designed to directly tackle a pain point and fulfill the corresponding goal. For example, to address the issue of finding articles feeling like a chore, a feature like an intelligent content curation system was proposed, which would learn a user's preferences and deliver a personalized news feed. This would not only streamline the discovery process but also aim to make it more engaging by tailoring the content to the user's interests.

Analyzing the story map provided reveals several key insights regarding users' interactions with news on their phones and how these interactions could shape the development of a news reading app. Firstly, there's a clear indication that users are overwhelmed by the volume of notifications and the length of articles, which suggests a need for more succinct content, like executive summaries, and a more organized notification system. Users also crave a sense of curation and ownership over their content, indicating that a personalized news "playlist" and smarter, more appealing headlines could be beneficial.

The map also suggests that social interaction plays a significant role in how users consume and interact with news. Users feel a social pressure to read and share articles, and there's a desire for positive social reinforcement from these actions. Features that allow users to see what their friends are reading and suggest articles to send could cater to this need for social connectivity.

Furthermore, there's an expressed need for a balance between engaging content and informational content. Users want a way to quickly learn from the news they consume without it feeling like a chore or just another task to complete. This might involve integrating humor or making content more entertaining, suggesting that a gamified approach to news reading could be effective.

Lastly, there's a tension between staying informed and the desire to avoid the negative psychological impact of news consumption, pointing to the need for features that allow users to filter out less desirable content. This could include mood tracking to suggest content based on the user's current sentiment or avoiding certain topics at specific times of the day.

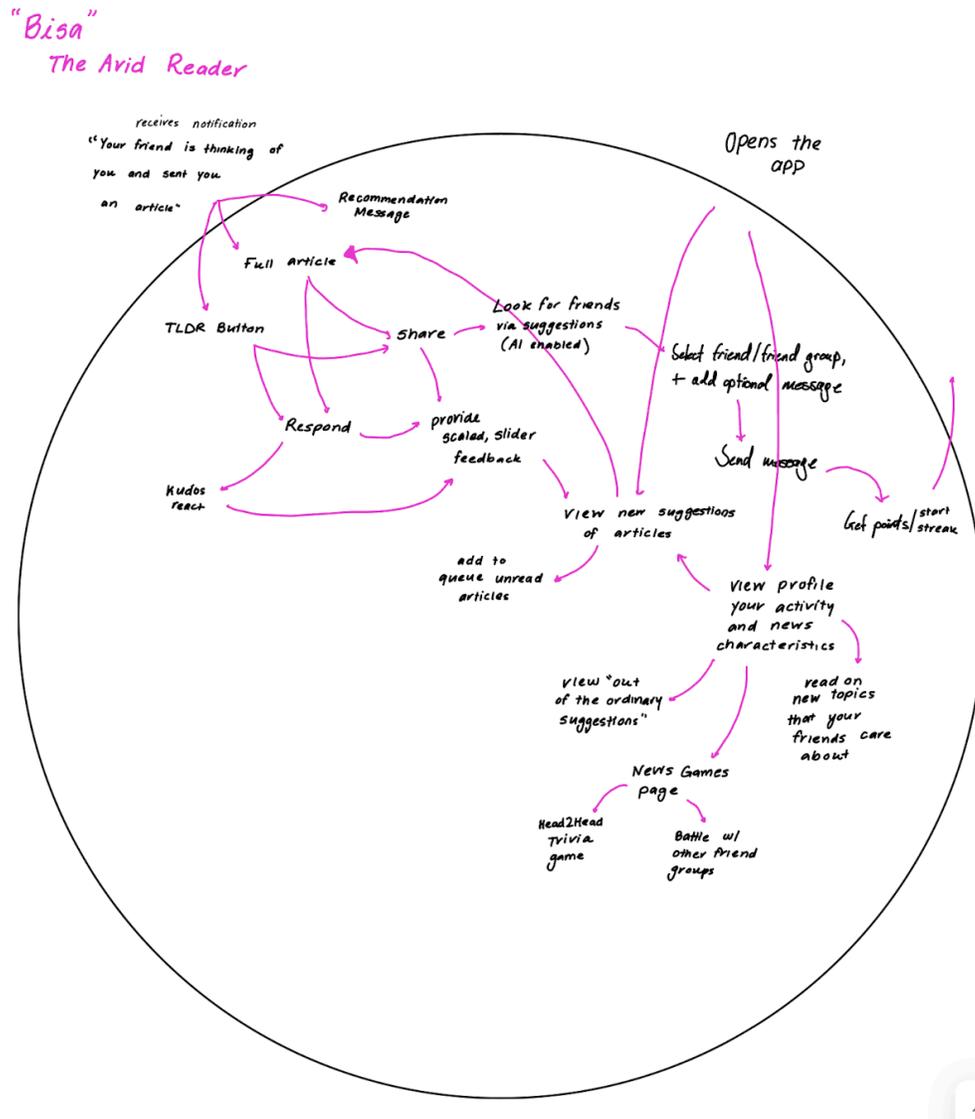
All together, these insights inform the development of an MVP that should prioritize content personalization, efficient and enjoyable learning, social sharing, and mental well-being in news consumption.

MVP Features

- **Curated News Playlist:** users have a daily "playlist" of news based on their interests, behavior, and wider audience trends.
- **Sharing:** Functions for users to easily share articles with friends and see what their friends are reading, encouraging social interaction around news content.
- **Executive Summaries:** Provide concise summaries of articles for users to get the gist quickly, with an option to read the full article if interested.
- **Personalization Algorithm:** A system to filter content based on the user's reading habits and preferences to provide a sense of ownership and control over the content, also have an option for users to provide feedback on articles to help refine the algorithm and content curation.
- **Intelligent Notifications:** Notifications for articles that align with the user's interests but are not overwhelming + A feature that nudges users to read articles they've sent or received by tracking and reminding
- **Interactivity:** Options such as the ability to like or comment on articles, or see "read" status indicators within the app, to encourage engagement.
- **Status/Gamification:** Features that reward reading or sharing articles, and extra functionality is used to reward those that engage with the news the most

- **Gamification:** Implement elements like "Pirate Kings for the news," which could involve competitive features such as leaderboards or challenges based on reading and sharing news.
- **Mood Tracking:** A feature to track the mood of the user and suggest content accordingly + an option to remove or reduce negative content to lessen the impact of potentially distressing news

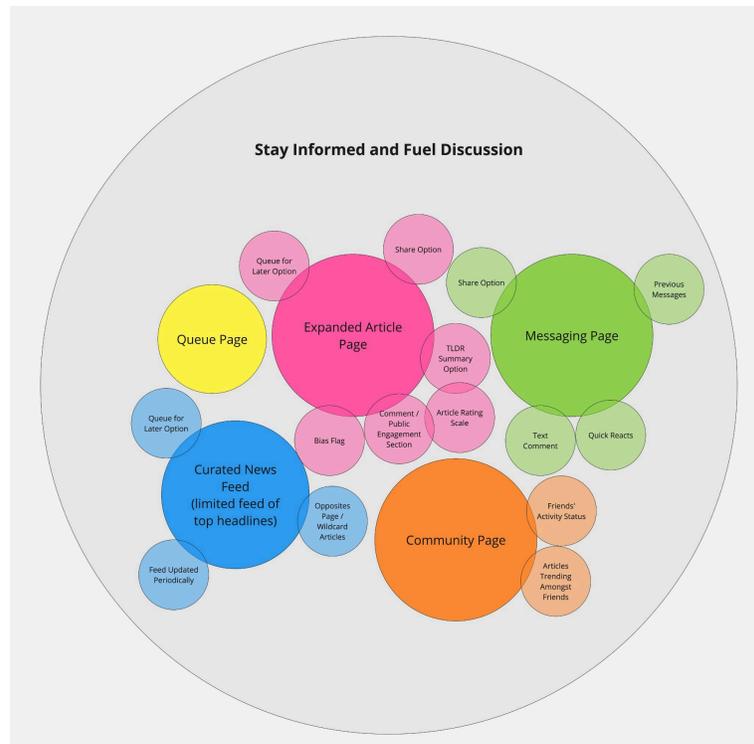
System Paths



In class, we created a system path for our Avid Reader persona called Bisa. The system path diagram was a mechanism that we could use to illustrate different ways one could interact with our MVP. By showing what the most avid type of user could do, we essentially captured most of the functions that any persona might be interested in acting on in our MVP. In other words, the above diagram illustrates all the behavior that any user would be able to act upon in our MVP, so illustrating different personas would lead to redundancy. Delving into the specifics of our diagram, users enter the system through notifications, which notify users of articles that their friends have sent. We first encourage users to read the article (they can do

so in multiple ways), and then react to what they have read (they can do so in multiple ways). The method of feedback will help curate a news feed for the users of articles that they might find interesting as well as articles they may want to share with friends. We also ideated a few additional features, such as News Games; a Profile; or Streaks, where individuals could further engage with their peers in new modes as opposed to just reading the news.

Bubble Maps



In our class working sessions, we collectively honed in on a suite of essential features that form the nucleus of our solution. The ability to curate a newsfeed is paramount—this foundational element is the epicenter from which all other functionalities radiate. A user's journey begins with personalized headlines, leading naturally to an in-depth exploration of articles. This progression from curation to expansion is critical for delivering content that resonates on a personal level while ensuring comprehensive access to information.

Our design philosophy embraces the social dynamics of news consumption. The Community Page and Messaging System are not just features; they are conduits for dialogue and exchange, driving the social interaction that is vital for engaging with the news positively. We aim to replicate the ease and familiarity of existing social interactions found in popular apps like iMessage or Instagram. The incorporation of a quick-share option, gesture-based reactions, and a history of past messages allows users to engage with our platform using well-established behavioral patterns, reducing the learning curve and enhancing the overall experience.

We've also incorporated visionary elements to address specific user needs surfaced during our research. The 'Queue' feature was born out of the observation that users often lose track of interesting content. By providing a space to save articles, we not only offer convenience but also position our platform as a go-to hub for personalized content curation.

Our bubble map also reflects a deliberate choice to cultivate a healthy public discourse. The 'Opposite/Wild Card Articles' bubble represents our commitment to diversity of thought, challenging users to engage with perspectives they may not have encountered otherwise. Similarly, the 'Bias Flag' feature was conceived to promote media literacy, encouraging users to critically analyze the tone and intent of the articles they consume.

These components are interconnected, not only by their functionality but by the underlying ethical principles they represent. We have been mindful to balance innovation with caution, particularly in the Community Page. Initiating with features that showcase friends' activities and trending articles among peers, we lay the groundwork for a community-centric experience while remaining vigilant of potential unintended consequences. We hope to continually hone this page with increasingly community-oriented features as we develop our solution.

Overall, our bubble map is more than just a visual representation; it's a narrative of our design strategy. The size of each bubble signifies the importance and volume of content, guiding users intuitively from one interaction to the next. We've crafted a user experience that is not just about staying informed but doing so within a community that values depth, diversity, and dialogue. Our goal is to elevate the platform beyond a mere tool for news consumption to a space where engagement and community thrive in the context of current events.

Reflection

Upon analyzing the story map, several key insights emerged regarding users' interactions with news on their phones and how these interactions could shape the development of the app. Users expressed feeling overwhelmed by the volume of notifications and the length of articles, suggesting a need for more succinct content and a streamlined notification system. Additionally, users desired a sense of curation and ownership over their content, indicating a preference for personalized news playlists and smarter, more appealing headlines.

The story map also highlighted the importance of social interaction in news consumption, with users feeling a social pressure to read and share articles. Features facilitating social connectivity, such as seeing what friends are reading and suggesting articles for sharing, were identified as essential. Moreover, users expressed a need for a balance between engaging and informative content, with a preference for quick learning without feeling overwhelmed. This could involve integrating humor or making content more entertaining, indicating a potential for a gamified approach to news reading.

Insights from the bubble map highlight users' desire for personalized content curation, streamlined notification systems, and a balance between engaging and informative content. Social interaction is seen as crucial, with users expressing a preference for features that facilitate sharing and connecting with peers. Additionally, there's a need for features that promote mental well-being, such as mood tracking to suggest

content based on current sentiment. These insights have informed the development of MVP features aimed at addressing these user needs, ultimately aiming to create a more enriching and supportive news consumption experience.

The development process of the news reading app's MVPs was driven by a deep understanding of user behavior and needs, which were gleaned through interviews and the creation of user personas. By mapping out the entire journey of a user's interaction with news, from initial discovery to social media sharing, the team identified specific pain points at each stage. These pain points, such as the difficulty in finding relevant articles and a lack of engagement in sharing and receiving content, served as focal points for setting goals aimed at addressing them.

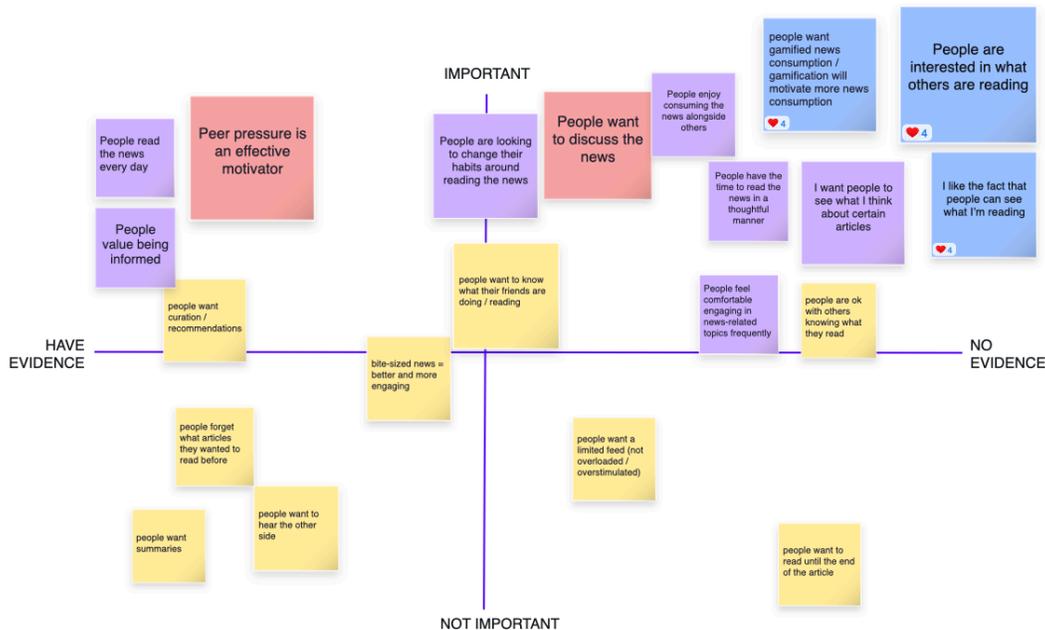
The goals were designed to provide solutions to the identified pain points while aligning with the overall user experience objectives. For example, if a common pain point was the tedious process of finding news, a corresponding goal might be to "make discovering relevant news effortless and enjoyable." From these goals, specific features were conceptualized to directly target each pain point and achieve the corresponding goal. For instance, to alleviate the chore-like feeling of finding articles, an intelligent content curation system was proposed, which would personalize the news feed based on the user's preferences and interests.

Lastly, users expressed a tension between staying informed and avoiding the negative psychological impact of news consumption. This underscored the need for features that allow users to filter out less desirable content, such as mood tracking to suggest content based on the user's current sentiment or avoiding certain topics at specific times of the day.

In summary, these insights informed the development of MVP features that prioritize content personalization, efficient and enjoyable learning, social sharing, and mental well-being in news consumption. The MVP features include a curated news playlist, sharing functions, executive summaries, a personalization algorithm, intelligent notifications, interactivity, streaks, and mood tracking. The system path, exemplified by the Avid Reader persona called Bisa, illustrates various interactions with the MVP, focusing on reading articles, providing feedback, and engaging in social sharing, with additional features ideated for further user engagement.

Assumption Testing

Assumption Map



Assumption Testing

Above, we created an assumption map that plotted key assumptions for our solutions to function properly. We plotted them across two axes: (1) Important/Not Important and (2) Have Evidence/No Evidence. We selected three insights that we found to be most important and that we did not have evidence for, and hope to test these in an experience prototype. The three assumptions are:

1. People want gamified news consumption / gamification will motivate more news consumption
2. People are interested in what others are reading
3. I like the fact that people can see what I'm reading

Regarding the first assumption, we hope to incorporate a game-like component into our MVP to motivate users to engage in our desired behavior. We made this feature decision based on other products in the media space that leverage social pressure and gamified components to engage users. We believe that news has not been packaged in this way, and so if our assumption is correct, could pose an effective way to position current events.

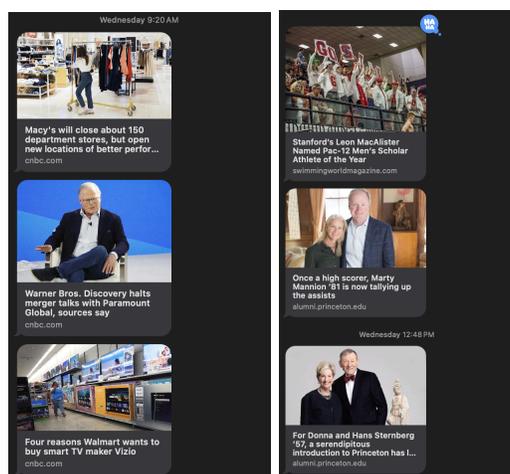
Regarding the second assumption, we hope to use social elements throughout our MVP to encourage individuals to read and engage more deeply with the news. A core aspect of this would be a feature that

showed users what their friends were reading in a real-time or delayed feed. While we believe that individuals would be motivated to read and engage more if they saw their friends' activity, this is an assumption that we do not have evidence for at the moment.

Regarding the third assumption, this is another flavor of the second assumption outlined above. Sharing of data must be mutual – in other words, if users are able to see what their friends read, their friends must be able to see that user's data as well. This assumption touches more on a privacy aspect of our MVP, and in order to build an ethically responsible product, we feel that this is a crucial component to test.

Now, we will delve into how we tested each of these assumptions and the results of our study.

We tested Assumption One through a News Reading Challenge over a set period, where participants track and submit the number of articles they read. The winner receives coffee from the Naked Mole Rats team. We tested this with two pairs of friends, and received mixed results. One group did not send any articles. Another group had one person who sent over 30 articles, while the other person sent five. We could guess that in order for users to engage in the “competition” there had to be one highly motivated player. By their action, they would encourage the other participant to engage. More broadly, some users may be highly motivated by competition and social sharing, while others may find them unappealing or demotivating. The results from this assumption test revealed that while our gamification elements were attractive to a subset of our users, they were not attractive to all. Thus, we decided to make our gamified elements less of the star of our low-fi and med-fi/clickable prototypes.



We tested our second assumption (Curiosity About Others' Reading Habits) by testing which type of article recommendation is more compelling: personalized curation based on the user's interests or articles recommended by friends. Each participant received two article options daily: one article is presented as hand-selected for the user based on their past reading behavior and stated preferences; the other is presented as an article that a friend has read and thought the user might find interesting. Over the course of the experiment, track which articles are chosen each day by the participants—whether they consistently choose the personalized article or the friend-recommended one. This approach will provide insight into user preferences for article selection, allowing us to understand the relative weight of personalization

algorithms versus social recommendations in the reading choices of users. Our results are captured in the table below:

Time	Participant 1	Participant 2	Participant 3
Morning	Rec.	Neither	Rec.
Night	Rec.	Friend	Rec.

As one can observe, our participants often chose the recommended article. When we asked them why this was the case, they attributed it to the fact that they felt that these articles were more personalized to their preferences, and they cared about this more than the source of the recommendation. As a result, we decided to incorporate a recommendation feed into our MVP. We also decided to include a feature where friends could share articles to one another – however, this took a backseat to a larger recommendation feed.

Lastly, we tested our third assumption along with the first. Our objective was to assess users' comfort with their reading list being visible to friends and the platform. When we set up the competition between pairs of friends, we asked them to either send articles in a group chat with their competitor, or directly to our team. We noted that either method would not affect the results of the competition. We observed that people were far more likely to send articles to our team directly, versus to a group chat where their activity would be more visible. They would occasionally send articles, but more so when they pertained to the groups' interests. We realized that without clear instruction, users would opt toward sending their article reading behaviors in a more private manner. However, when we interviewed our participants about this phenomenon, they revealed that they found the instructions to be unclear. They also said that they would be willing to sacrifice their own privacy to gain access to what their friends were reading.

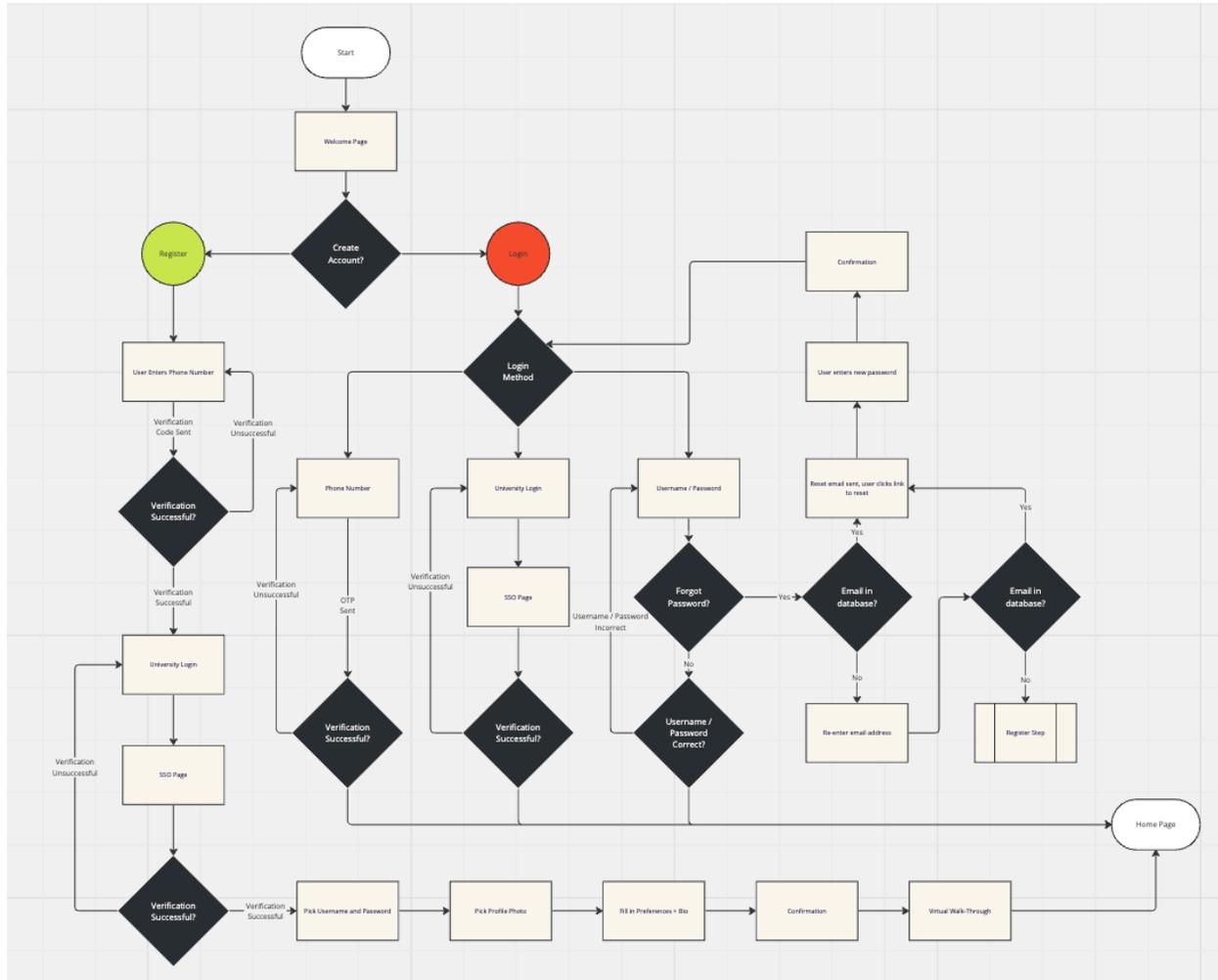
Reflection

There were some assumptions that we did not get to test that concern users' ability and desire to discuss the news in a meaningful and productive way. This is a core component of our product, which uses social motivators to encourage more thoughtful consumption of the news.

While there were few flaws in our study, we should have more rigorously tested our third assumption regarding user privacy. We found it difficult to replicate the “tracking” environment that we hope to have in our final product without being too intrusive. However, we could have been more creative in trying to come up with clearer solutions to test this assumption.

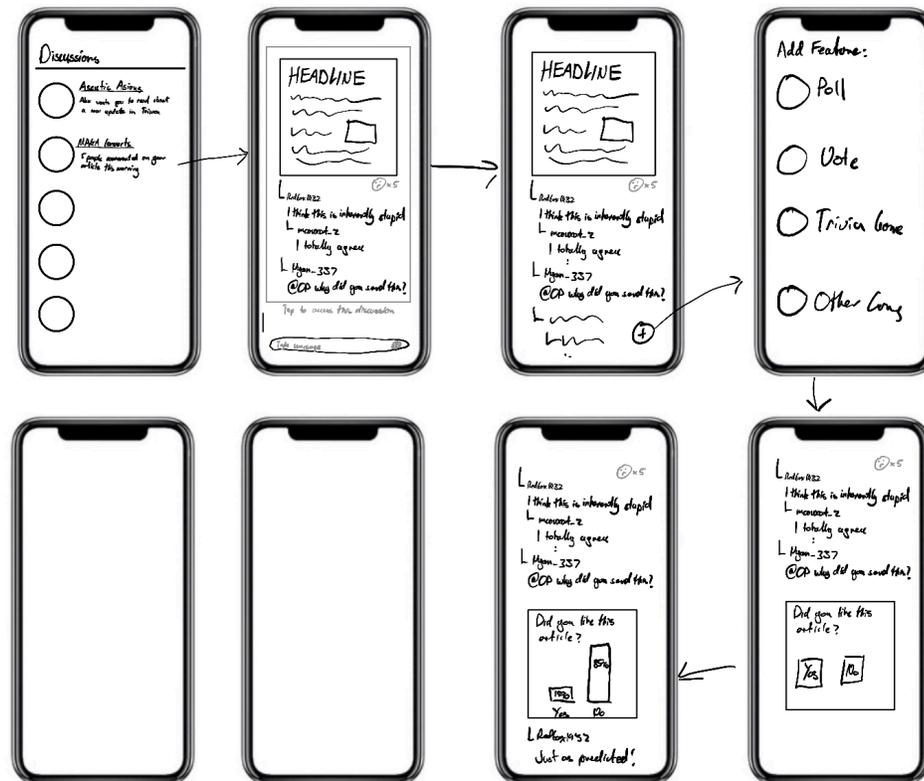
Low-Fi Prototype

Wireflows

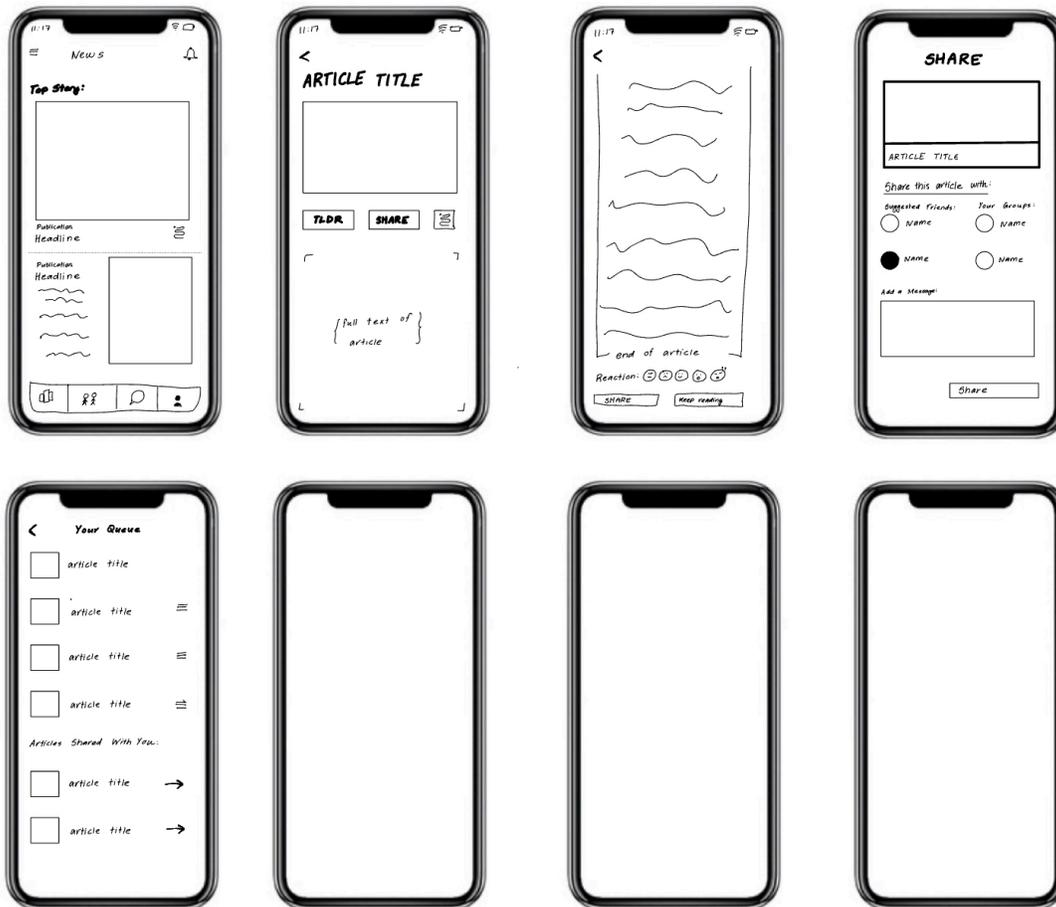


This wireflow pictures our first ideas for our Onboarding task flow. Our happy path for a new user is reflected in the flow that begins with Register and leads to the Home Page. We thought that our Onboarding flow should include verifications, such as phone number and University login verification in order to interact with the user, and offer them news articles that they can access based on their student subscriptions. Problems could occur if verifications were unsuccessful, which is why we eventually made a design decision to include these as optional, as opposed to required, parts of the user experience.

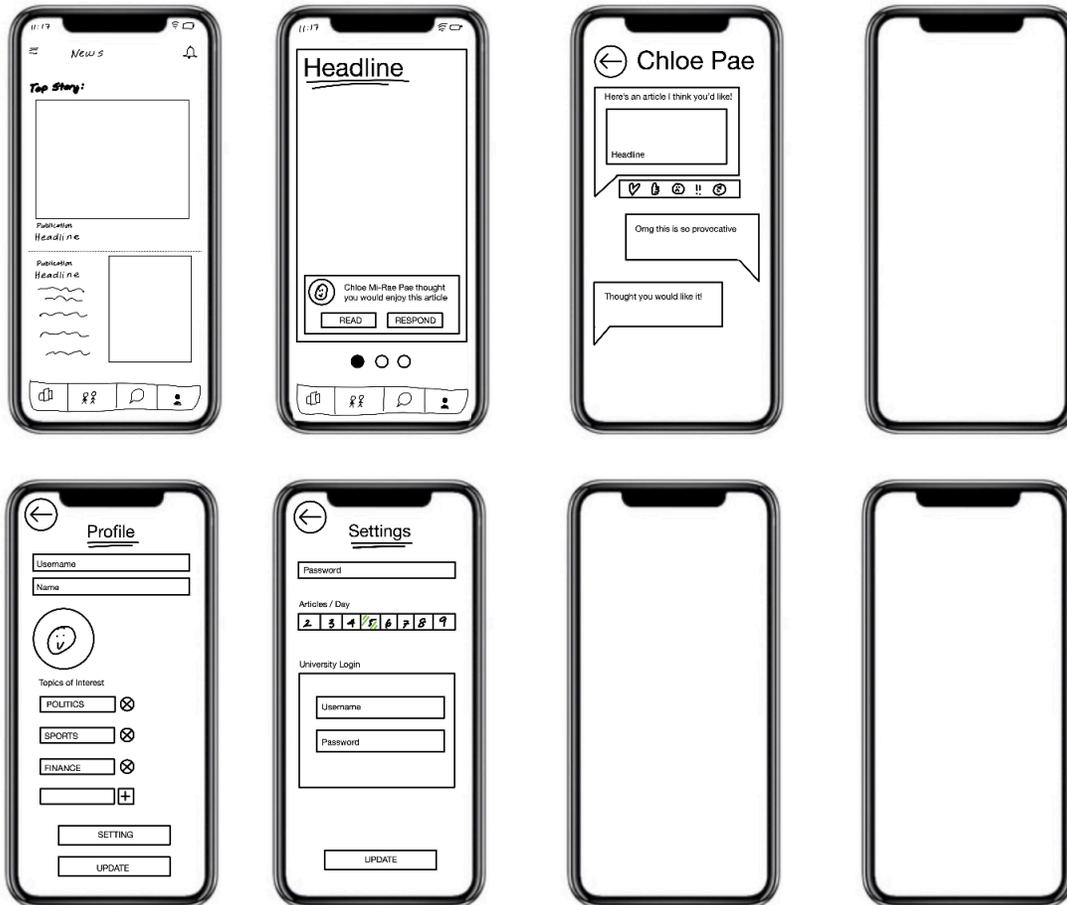
Sketchy Screens



Leon: My sketchy screens aimed to demonstrate some features that would promote discussions between users about articles, topics and issues. In the first screen we see that a user will have access to multiple discussion groups, which can be curated based on similar interests or manually like group chats on iMessage. Within these chats people can either send in articles, or an article can be suggested to a group to read and discuss. For each article we see the article and discussion below in a section which can be opened to enter the discussion. Here you can comment, and add certain features such as polls e.g. “Do you think what Ethan said was stupid?”. These polls, as detailed in the final two screens, operate like polls seen on Instagram stories and are designed for further engagement with discussions. Overall my screens aim to show different ideas surrounding how we could promote discussions between users in the hopes of increasing general informed discussion.



Chloe: My sketchy screens captured the news home page and how users could additionally interact with the articles by sharing or queuing them. The primary feedback that my group provided me was on making the Home Page look more unique than a traditional publication's news feed. My group thought that this could lead to a loss of value proposition and decreased user engagement due to having to scroll to find an article. My group appreciated the different ways that one could interact with different articles, but also thought that these different forms of interaction could be redesigned to be more accessible from the home screen, or more obvious on a given article's page.



Ethan: My sketchy screens focused on two main aspects: the onboarding experience and customization options. For onboarding, I explored how users might discover interesting content right away through a personalized homepage feed and by connecting with friends. The goal was to prioritize content discovery. I also showcased a simple interaction between friends within the app. For customization, I delved into how users could tailor their experience through the Profile and Settings pages, such as changing their username, interests, and controlling the number of daily articles. The main feedback from my group was that the social component needed rethinking, and the news feed lacked differentiation from other news apps. They also found the separation of options across the Profile and Settings pages confusing, suggesting that this aspect required further refinement to improve clarity and user experience. However, the customizability of the number of articles per day was seen as a useful and strong addition to the user experience that should be further explored in subsequent iterations.

Medium-Fi Prototype

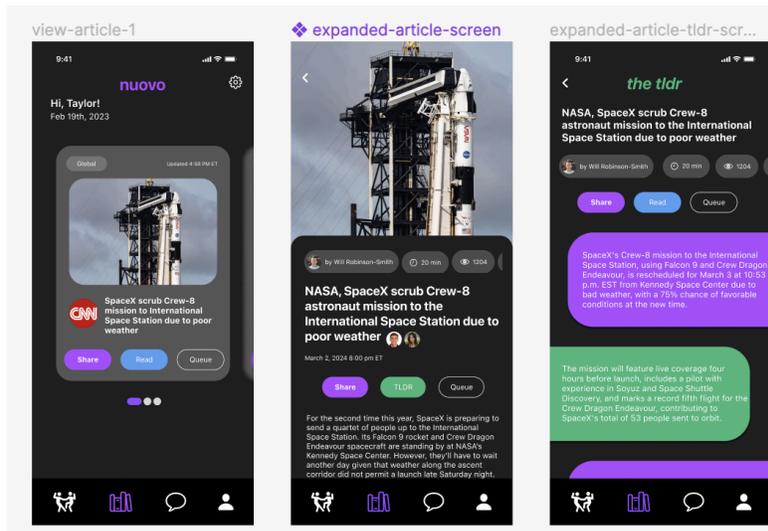
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<https://www.figma.com/file/fkgOK8ex4UHLjfhN5UdLZf/Clickable-Prototype?type=design&node-id=0-1&mode=design&t=ZnsR0zbxzHAoJmok-0>

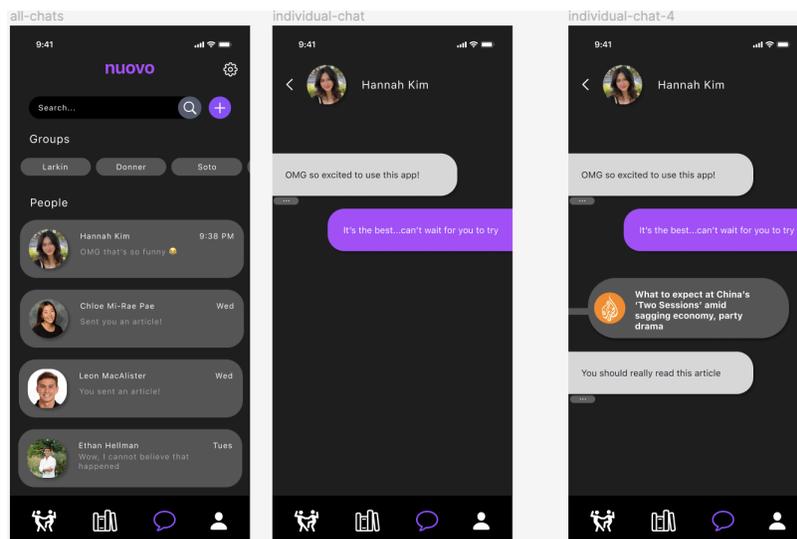
Flows

1. Navigate to/Interact with personalized news feed

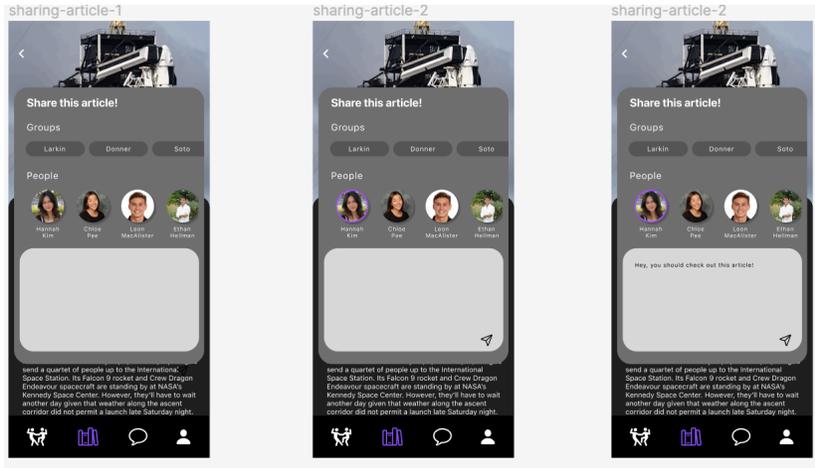
We wanted to create a news feed that leveraged the feedback we had received from needfinding



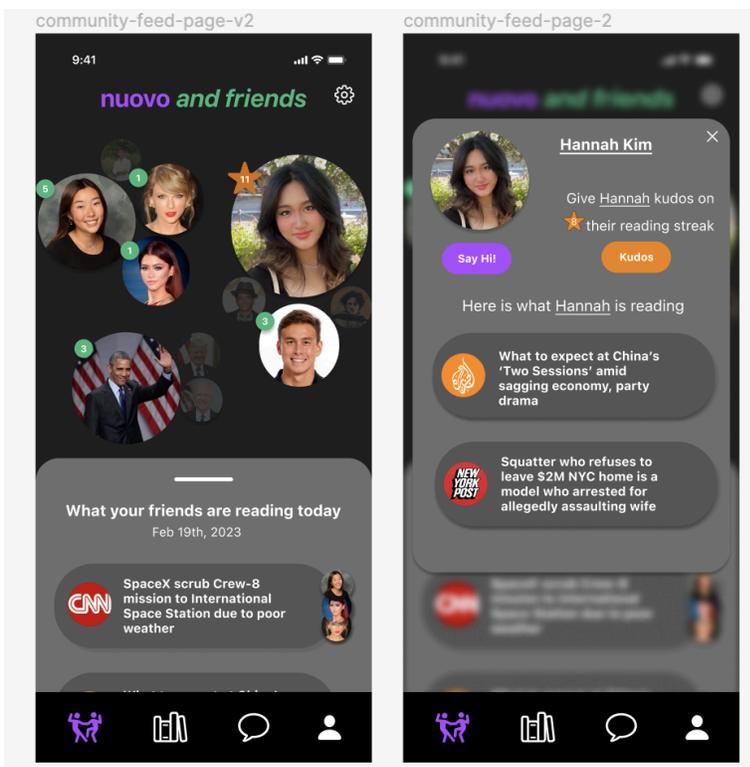
2. Interact with friends (Share articles and chat)



We wanted to design a chat function for our app that was its own individual page. We felt that this design choice emphasized how important the social interaction piece of our app was.

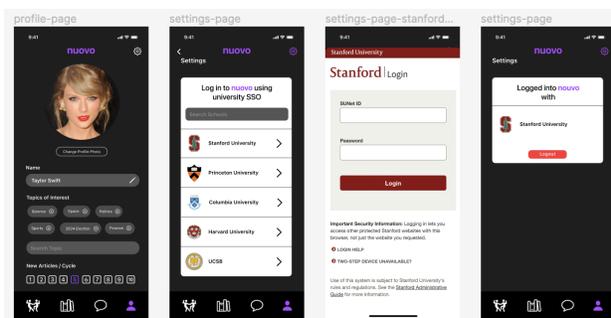


We also wanted it to be very simple for users to be able to share articles with their friends, so we created a button for them to do so directly from any article page.



Additionally, we really wanted the community aspect of our product to be at the forefront of our app, to reinforce our mission and utilize social cues to encourage our desired behavior. Thus, our home page is a community page of sorts, where you are able to view different circles of friends, and directly interact with them (“Say hi” and “Kudos” buttons) or more passively view friends’ activity.

3. Change settings on profile



For the profile page, we wanted users to be able to customize a few aspects of their profile, including areas of interest (which would be projected publicly to their friends) and how many articles they wanted per day (to mitigate a feeling of overwhelm that many complained about with traditional news sources). Additionally, we know

that existing news sources usually include a paid subscription to access, which some universities cover for their students. Therefore, we also wanted to introduce an ability to login via SSO to access the subscriptions ones has from their university. This also reinforces that our audience is college students.

Usability Test

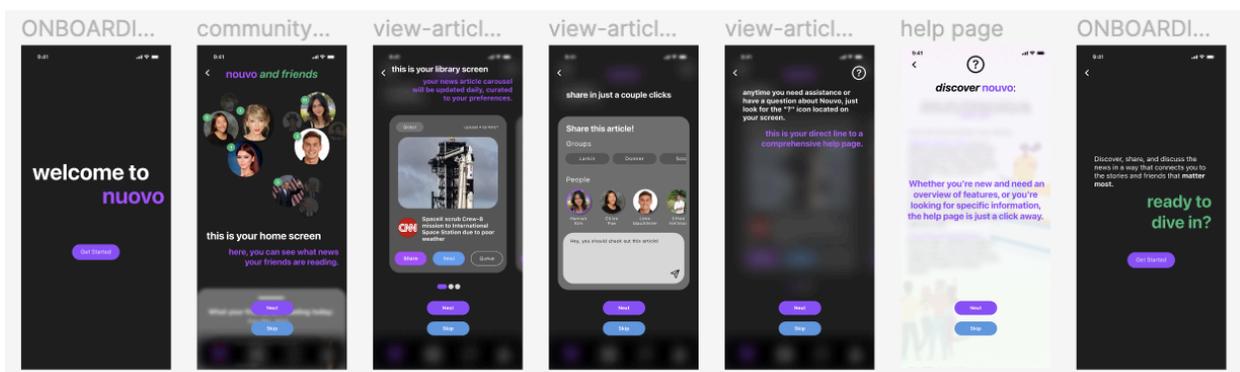
Task Design

The three tasks we wanted our users to accomplish were: (1) Navigate to/Interact with personalized news feed; (2) Interact with friends (Share articles and chat); (3) Change settings on profile.

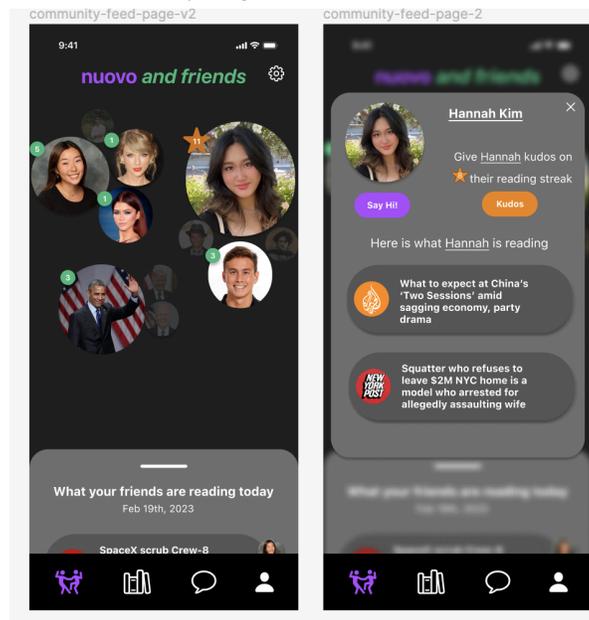
Results

We instituted three major changes based on the feedback from our Usability Test.

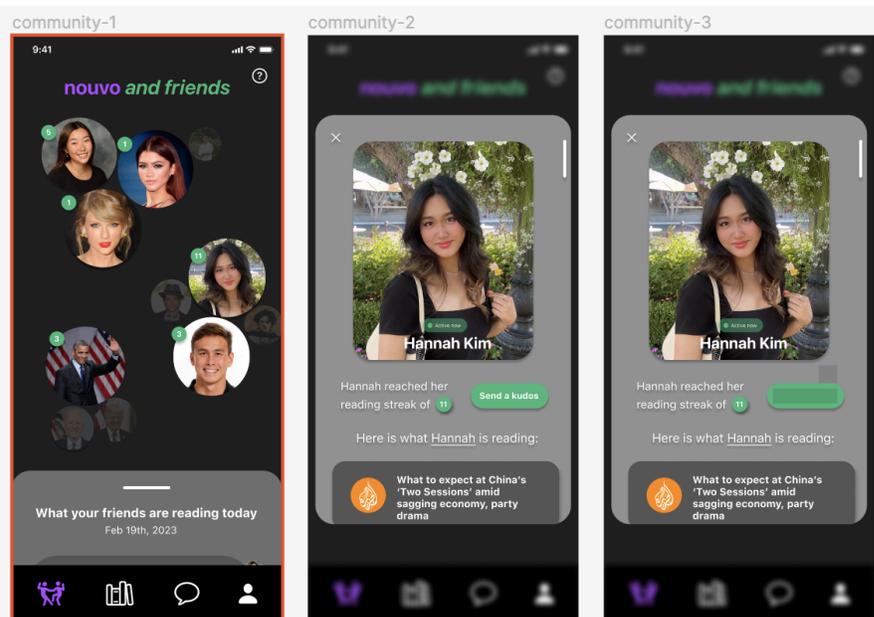
First was creating an onboarding task flow. We thought that this would be important to introduce users to the key functionalities and value propositions in our app. Upon first iteration, we received feedback from our classmates that our onboarding was too long. We decided to change it to include three main functionalities that we hope all our users engage with. As visualized below, our final onboarding includes an orientation to the Home Screen (which is our Community Page), our Library Screen, and how users can share articles with their friends. By keeping this simple, we think that users will feel less overwhelmed with the app. Finally, we also thought that introducing users to our help button in the top right corner would also help users as they navigated the app. See our final onboarding flow below:



Second we updated our Community Page, which is our Home Screen.

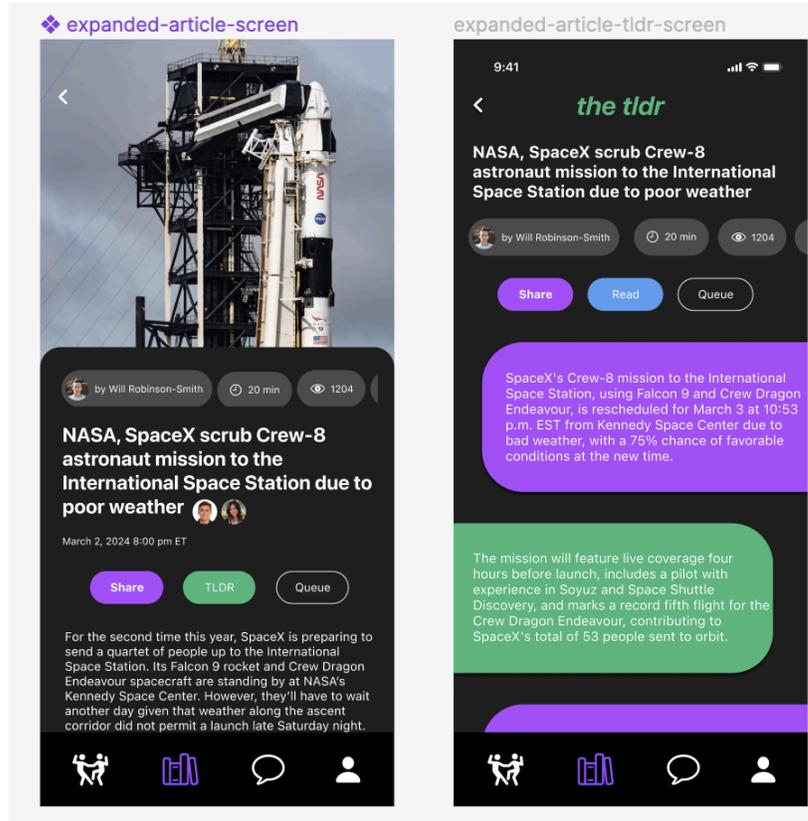


Above is our initial Community Page. We included features like streaks (seen in orange), the ability to interact with users, and the ability to see what different friends were reading. We also increased the size of a given users' circle depending on how many articles they read. We got feedback from our class that this was too confusing and users could not intuitively understand how to interact with the app.

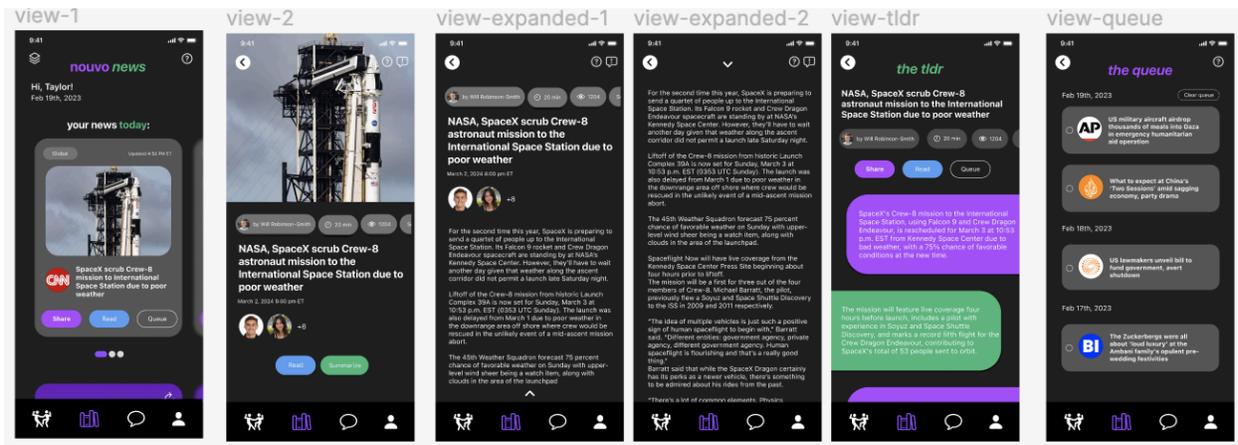


We made our community page much more simplified. Now, there is only one type of metric for each friend (streaks), and circles are all the same size. Additionally, when you click on a user profile, you can send one type of communication (Kudos). You can also view when users are active. We also have our help button clearly visible on the top right so that users have a way to seek additional help if needed.

Our third and final major change was our article page. In our initial prototype (see below), we had three interaction buttons that were accessible from each individual articles' page. Classmates found the wording and functionality of each of the buttons unclear. Classmates also thought that the buttons on the TLDR page were confusing.



We sought to simplify these pages further.



As pictured above, our final version of the news flow has more text on the home screen to indicate why users are viewing specific articles. Additionally, the buttons are simplified to “Read” and “Summarize”, with share and queue functionality separated. We received positive feedback from classmates that these design changes and language clarifications helped them find the functionalities more intuitive to use.

Reflection

When considering what other changes we could make if we want to move forward, two ideas come to mind.

First, we would want to make the experience more customizable. Ideally, we would provide more information about how users' personal data is being used and how they could tailor the articles in their feed to their preferences. Almost all of this component was visualized through Wizard of Oz techniques. Ideally, we would have wanted to institute more features to showcase customization options.

Second, we also hoped to introduce features to encourage positive discussions. In an ideal world, we would highlight potential biases from news publications or the articles themselves, so that users would be more aware of the nature of the content they were reading. We would also have wanted to introduce additional features to foster constructive dialogues.

7. Final Prototype

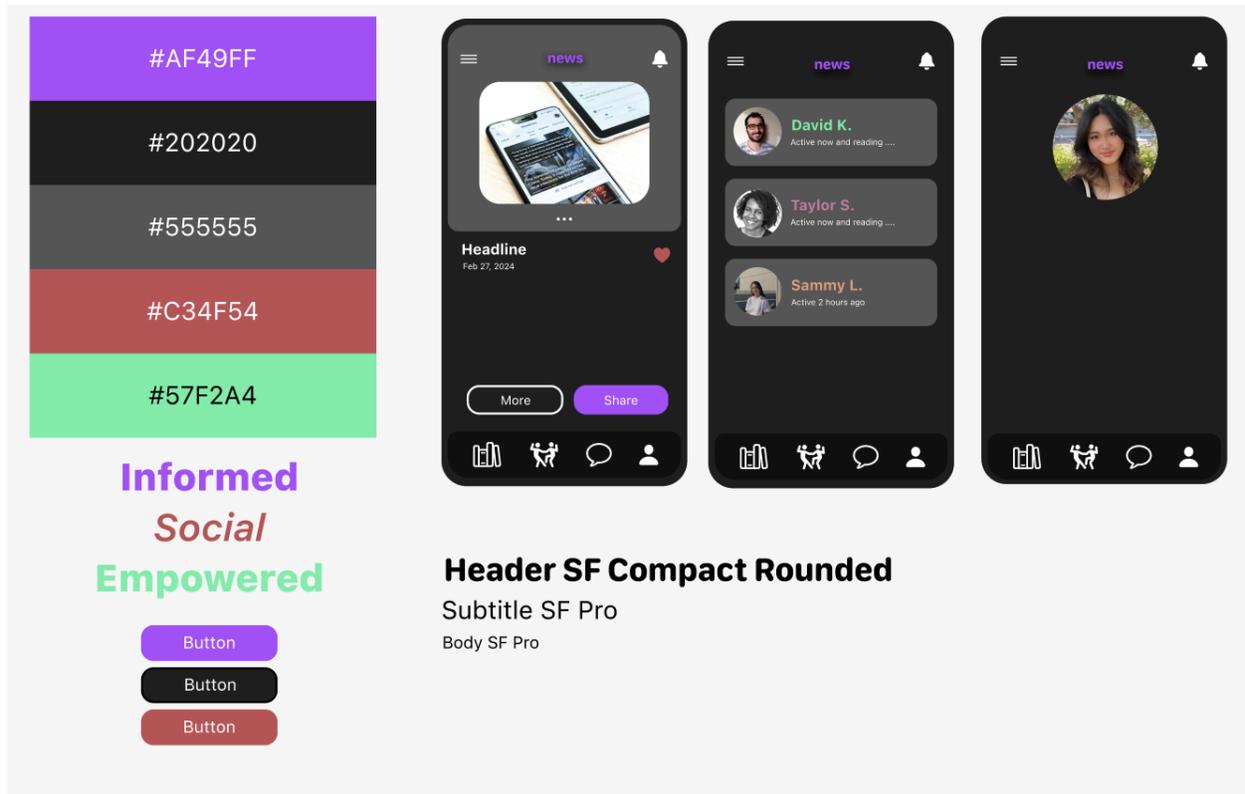
Branding

Mood Board



The moodboard for Nuovo exudes a personality of connectivity, enlightenment, and intellectual empowerment. It aims to elicit feelings of community, curiosity, and the joy of learning. By blending traditional elements like newspapers and books with the sociable aspect of games and discussion, it invites users to engage deeply with the content and each other. Nuovo encourages users to stay informed on current events while enjoying a communal sense of togetherness and informed debate. Ultimately, it strives to make the consumption of news and information a more interactive and shared experience.

Style Tile



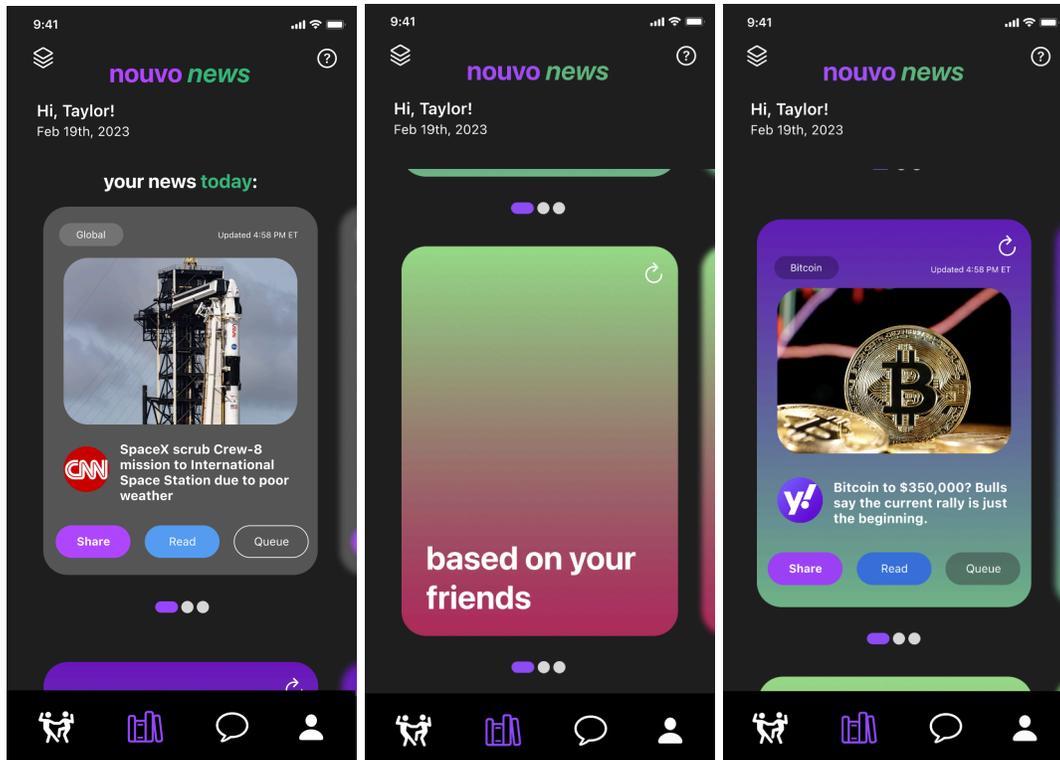
Hi-fidelity prototype

Link:

<https://www.figma.com/file/fkgOK8ex4UHLjfhN5UdLZf/Clickable-Prototype?type=design&node-id=457%3A1497&mode=design&t=ZnsR0zbxzHAoJmok-1>

Flows

Our flows remained relatively the same between the usability test and the hi-fidelity prototype. However, we have detailed our largest scale change below:



Navigate to/Interact with personalized news feed:

The most significant change from our med-fi to the final prototype was the personalized news feed. Now during this flow, users will be able to scroll downwards to see suggested articles based on what friends read and wild card articles that lie outside of what a user typically reads. As a result we have enhanced the user experience, ensuring that users are exposed to articles not just based on their own historical data in the hopes of broadening their news reading. Just like in the original flows, users can tap on these new article cards to read, share and queue them.

As you can see in the next page to assist users with this task flow and the heatmap. We also added a help window where users can see an explanation of the personalized news feed in response to feedback during our usability testing. The News circle heatmap is also explained in this window.

9:41 📶 🔋

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discover nouvo:

Discover, share, and discuss the news in a way that connects you to the stories and friends that **matter most.**

How We Personalize Your News

Tailored Just For You: Nouvo's algorithm curates news articles based on your reading habits, interests, and the feedback you provide. By learning what interests you, we ensure that your news feed is always *relevant and engaging*.

The Wildcard Factor: Nouvo introduces "Wildcard" articles - unexpected topics outside your usual interests. These are designed to broaden your horizons and introduce you to new subjects, keeping your news experience fresh.

Friend Recommendations: Discover what's catching the attention of your friends. Nouvo recommends articles based on what your network is reading, allowing you to stay connected and share thoughts on common interests.

Nouvo and Friends

Your News Circle: Nouvo's community page is where your news experience becomes social. Track your reading streaks, see what friends are reading in real-time, and view clusters of friends with similar reading interests.

Our Mission at Nouvo

We are a community that motivates daily news reading, sharing, and discussion. Our mission is to make news reading a social and rewarding experience, helping you to not only stay **informed** but also **connect** with friends over shared interests and discoveries.

Ready to dive in?

If you're new to Nouvo or need a refresher on how everything works, our onboarding section is here to help you step-by-step through the app's features.

[Onboarding](#)

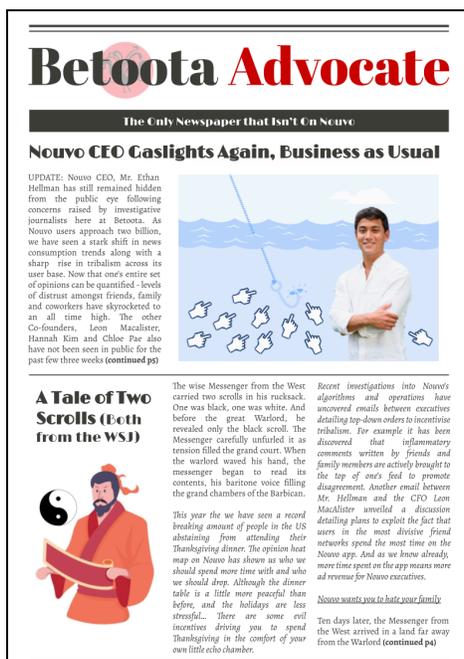
8. Conclusion

Final Ethics Project

Betoota Advocate Newspaper

In this design fiction we explored several ethical concerns surrounding the Nouvo platform. Indeed, we focused mostly on the opinion heat map - a novel feature where people can compare opinions and read history with their friends. Ultimately people can see who they align with the most and the least. This in combination with our article suggestion algorithm could potentially exacerbate echo chambers to an extreme degree. Therefore it was natural for us to explore the idea of echo chambers at its most extreme in our fiction - users completely exclude others with different opinions from their lives such that they are almost unaware of people that have different opinions. Another interesting scenario we hypothesized was how news outlets would adapt to the fact that Nouvo users only receive content based on their own interests/opinions and the interests of their friends. Just so, we predicted that news outlets may problematically publish different versions of the same article to maximize the number of subscribers. In terms of form, we thought that it would be meta to make our design fiction a newspaper. We included several different styles of articles ranging from editorials, blog-like opinion pieces to simple news. To increase engagement we also included games like crosswords, wordsearch and cryptograms that all relate to Nouvo and its broader negative effects. We have also dropped hints of a broader narrative of Betoota being acquired by a Nouvo owned company. This alludes to antitrust issues that already plagues journalism, a problem that we believe will be accentuated if there was a centralized news platform.

<https://docs.google.com/presentation/d/1GYo86A-tqOUwLmDoAAx1ZoYjZg3gd007aBhgnUOKI4c/edit?usp=sharing>



Front page of our newspaper - The Betoota Advocate

Reflection

Overall our project was an insightful foray into the world of behavior change. Indeed, we were exposed to several different behavioral phenomena and techniques to promote good habits. In the context of our project, we utilized techniques detailed above to incentivise people to engage with the news and engage others in informed discussions. Overall techniques based in psychology to “hack” one’s habits were quite straightforward. Nevertheless we found discussions relating to the ethics of behavior change were much more pertinent.. This may be due to the fact that our group was quite adept on determining how to incentivize increased engagement with the news. However we found ourselves questioning whether or not reading more curated news would actually be a good thing or not. This was explored heavily in our design fiction.

We were also blessed with the fact that our group worked very well together over the entire quarter. When it came to the mid quarter checkpoints, we were great at splitting up work and completing tasks before deadlines. Furthermore we were able to cultivate a light-hearted safespace for ideation. We found that brainstorming sessions were always productive, and people weren't afraid to critique ideas. Compounding this, there was never any conflict when prioritizing feedback through our intervention study and iterating on our final prototype on figma.

Our group has agreed that the main takeaways from this class is that designing for behavior change puts developers in a position of power. Ethical or unethical, in this we are essentially determining what is good for someone and what isn't. And taking advantage of someone’s psychological ‘hacks’ can also impede on free-will. Therefore next time we believe it will be crucial that we flesh out whether or not a certain habit is ethical and ultimately for the good of users and broader society before traversing further into the design process. On top of this I think we would spend more time on needfinding through conducting more interviews and researching the general market landscape.