### Heuristic Evaluation Review:

<table>
<thead>
<tr>
<th>Original Panel</th>
<th>Issue &amp; Violation</th>
<th>Changes</th>
<th>Changed Panel</th>
</tr>
</thead>
</table>
| ![Original Panel](image1.png) | Confusion about like/dislike function. Does it remove the specific article, or does it stop showing topic overall? Violation: Match between system and the real world | Removed binary like/dislike function. Added a dropdown icon with new settings on each post.  
- Show more posts like this.  
- Show less posts like this.  
- Unfollow news outlet.  
- Unfollow topic  
- Hide this article | ![Changed Panel](image2.png) |
| ![Original Panel](image3.png) | No confirmation/next button on sign up/log in screen. Violation: User control and freedom | Add a button to advance to the next screen (confirming sign up / log in) | ![Changed Panel](image4.png) |
| ![Original Panel](image5.png) | No confirmation/next button on “share” pop up. Violation: User control and freedom | Add a button to confirm sending/posting. | ![Changed Panel](image6.png) |
First Usability Test:

Our first usability testing participant was a male undergraduate student. We chose him as our participant because he is a member of our intended target audience, that is, a college student who is interested in reading political news, but views this activity as being extremely time intensive. The usability test took place in a “collaboration space” within the Paul G. Allen Center for Computer Science & Engineering. Although this space was not a private room, it was still an appropriate environment for our usability test because our test took place on Veteran’s Day and the building was virtually empty due to the holiday. The collaboration space in which the usability test took place included a table that was more than large enough for our individual laptops and paper prototype to comfortably fit. Kiyana filled the role of facilitator, Janet played the part of the computer, and Ian and Kim served as the observers/notetakers. Janet took on the role of the computer because she felt as if she was familiar with the branching logic inherent to our smartphone app and that she would be able to quickly rearrange flashcards as our evaluator interacted with our paper prototype. Kiyana took on the role of facilitator because she had read the Snyder’s “Introduction to Usability Test Facilitation” before the usability test took place. This was the first time Kiyana had ever facilitated a usability test, so it was very fortunate that the usability test participant did not need to be reminded to think aloud. Kiyana made sure to ask open-ended questions like “What did you expect would happen when ___?” and “How do you define ___?” Kiyana tried as much as possible to maintain objectivity as she prompted the participant to take specific actions within the smartphone app. It became evident that in certain instances it was difficult to phrase questions that could inadvertently introduce bias. As a team, we also learned to avoid giving away clues about the purpose or function of a button on the screen. This participant, in particular, was eager to ask questions about where to click next or what a button would do. Kiyana made sure to respond with a question, allowing Kim and Ian to take notes on how the participant interpreted different functions within the app. The practice from this first test will undoubtedly make future testing sessions much better.
First Usability Test Results:

<table>
<thead>
<tr>
<th>Image of relevant portion of prototype:</th>
<th>Description of Incident and Explanation of Changes:</th>
<th>Image of revisions implemented as a result:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Prototype Image 1" /></td>
<td>Our participant was unsure of how to move between the “Topics” and “News Outlets” on the onboarding screens. They were also unsure of when the onboarding process ended.</td>
<td><img src="image2.png" alt="Revisions Image 1" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Prototype Image 2" /></td>
<td><img src="image4.png" alt="Revisions Image 2" /></td>
<td></td>
</tr>
</tbody>
</table>

Severity of issue: 2

Explanation of changes: We’ve added a “back” button and “next/finish” button at the bottom of the screen to allow users to go back to the “Topics” or “News Topics” screen. Additionally, we’ve added a “Congratulations” pop up that gives users a way to know they are done with the onboarding process.
| When reading an article and clicking the down arrow menu button in the upper right hand corner, our participant was uncertain why the button at the bottom of the pop up said “OK”. Our participant expected the options to include checkboxes or radio buttons in order to make his selections; he expected some sort of feedback in order to indicate which options he has chosen.

Severity of issue: 2

Explanation of changes: Selecting one of the commands will immediately change the newsfeed. We decided to change “OK” to “Cancel” which allows the user to leave the pop up if they decide that they do not want to use any of the commands. |
Our participant expected that selecting the “See More Posts Like This” option would immediately redirect him to a page (or a dynamically updated News Feed) with similar articles.

Severity of issue: 2

Explanation of changes: We have updated the terminology of the “Show More Posts Like This” option to reflect the fact that selecting this option does not immediately redirect the user to similar articles. Instead, selecting this option merely alerts the app to the fact that the user would like articles of this nature to appear more frequently in his News Feed in the future. We have included a “sub-header” that explains this concept in further detail.

The participant expected to see a “Similar Articles” suggestion after scrolling to the bottom of an article.

Severity of issue: 3

Explanation of changes: We included a section of the bottom of an article that provides the user with links to similar articles.
When we asked our participant to filter his News Feed in order to find articles related to a specific topic he follows, he became confused because he did not understand the way in which we were using the word “filter.” We intended the term “filter” to mean “refining News Feed results; taking a big set of articles and narrowing it down to a smaller set of articles, as specified by the search term.”

Severity of issue: 1

Explanation of changes: We changed the terminology of the input prompt text to reflect our intended use of the search bar (that is, “taking a big set of articles and narrowing it down to a smaller set of articles, as specified by the search term”). We’ve changed the text to “Search Your News Feed.”

The participant was unsure of where articles his friends shared would appear. He was confused because he did not notice that the “Home Screen” (formerly known as the “Dashboard”) included a tab of both a “News Feed” tab as well as a “Friends Activity” tab.

Severity of issue: 3

Explanation of changes: This may have been due to the quality of our paper prototype drawings. We’ve addressed this by adding a shadow and curve to the tab, to make it more apparent that “News Feed” and “Friend Activity” are distinct tabs.
Our participant was confused that he had to click “Manage” twice in order to remove friends (clicking “Manage Friends” on the “Settings” page, and then clicking on the “Manage” button on the “Friend’s List” page). Our participant expected the red subtraction sign icons to automatically pop up when he clicked the “Manage Friends” in the settings menu.

Severity of issue (if negative): 3

Explanation of changes: We wanted to address our participant’s desire to minimize the number of steps necessary in order to remove friends, however, we are concerned that this change could potentially cause error prevention issues; a user could accidentally remove friends that he did not intend to remove. The error prevention heuristic states that a “careful design which prevents a problem from occurring in the first place” is ideal. We decided to provide our users with a way to quickly select multiple friends to remove, via checkboxes, but in order to “unfollow” multiple people at once the user must click the “unfollow” button and a pop-up will appear asking the user to confirm this decision.

Our participant did not understand that “Dashboard” was a blanket term for the page that included the “News Feed” and “Friend Activity” tabs. He expected that clicking “Dashboard” would redirect him to a page akin to Apple’s “Launchpad,” that is, an overview page of sorts.

Severity of issue: 1

Explanation of changes: We changed the “Dashboard” button to an icon meant to represent the “Home Screen.” Clicking the “Home Screen” button directs the user to the page that includes both the “News Feed” and “Friend Activity” tabs. We also decided to include quick access to the “Settings” page via the navigation bar.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Severity</th>
<th>Explanation of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sharing article via email expected</td>
<td>1</td>
<td>To fix this issue, we included providing the user with the option to share an article via email once they click on the “Share” button.</td>
</tr>
<tr>
<td>2</td>
<td>Confused about “friend” term</td>
<td>2</td>
<td>Changing name. We decided to use a more universal word (“users”) instead of “friends.”</td>
</tr>
</tbody>
</table>
Overview of paper prototype:

Close up of each part:
Onboarding:
Account Management:
Friends:
Dashboard:
Two Primary Tasks:
1. Personalization of News Consumption
2. Socializing w/ Friends, Both Online and Offline

Personalization of News Consumption:
3C: Usability Testing Check In
Poliscope - Janet Gao, Kim Le, Kiyana Salkeld, Ian Turner
Socializing w/ Friends, Both Online and Offline:
Reflection & Future Tests:

We intend on conducting our remaining usability tests with individuals who fit the description of our intended target audience members, that is, college students who are interested in reading political news, but find the process tedious. Due to the fact that we had a positive experience in the Paul G. Allen Center “collaboration space,” we will likely conduct future usability tests here. If the space is unavailable, we will conduct our usability tests in the Research Commons because this is also a designated campus collaboration space. If the Research Commons are also unavailable, we will conduct our usability tests in the MHCID Studio, located in Loew Hall. This studio has ample space for conducting a usability test, and it is private because it is only accessible to MHCID graduate students. In our upcoming usability tests, Kiyana will continue to serve as the facilitator, Janet will take on the role of the computer, and Kim and Ian will observe and take notes. As we continue usability testing, we would like to allow general exploration of our app before asking participants to perform specific tasks. During this time, we will also continue to encourage thinking aloud. Our goal for our upcoming usability test is to determine whether or not the revised terminology used within our app is clear; vague or ambiguous terminology was a major obstacle for our first usability participant to overcome. We would also like to determine whether or not our usability participants perceive our app as being “incomplete,” that is, we would like to identify any functions or actions that our participants would like to perform that are not currently supported by our application.