

CS147: Digital Democracy Studio

Lo-fi Prototype & Pilot Usability Testing

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Value Proposition

See the change, be the change.

Mission Statement

Our goal is to help people harness the activation energy from reading and sharing news into getting involved with political issues in their own communities.

Problem & Solution

Online communities and discourse divide and isolate people, leaving them feeling hopeless and unenergized to participate in politics. We provide a platform for people to rally around stories they care about, see people like them, and get off the app—involving themselves in political conversation and action in their communities. In Sharewaves, you can see change happening and contribute to it with a no-frills layer on top of your normal news-reading experience.

Sketches



Figure 1. **AR/VR idea** exploring linking physical locations with political news/events.

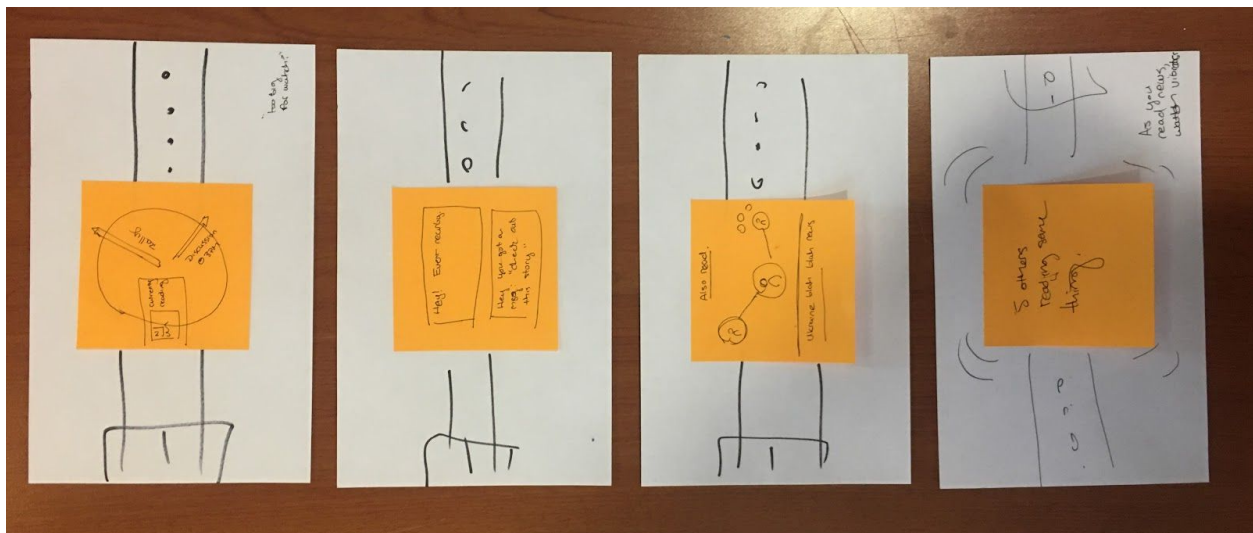


Figure 2. **Smartwatch idea** exploring flagging opportunities for political engagement (e.g. participation in political engagements) as one encounters them.

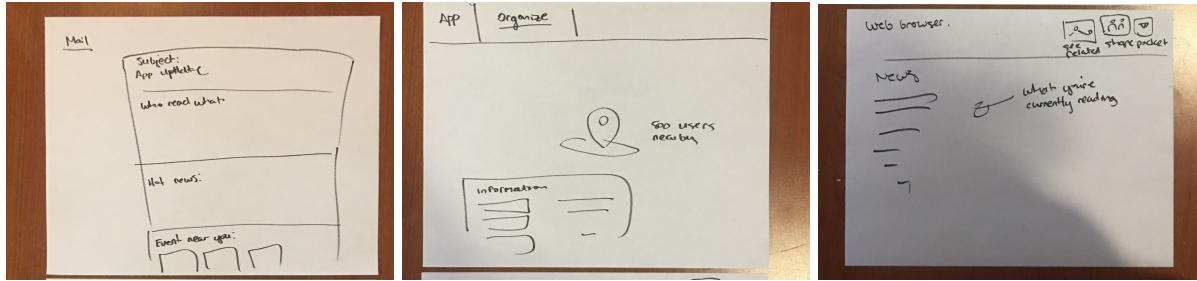


Figure 3. **Web app** exploring creating networks of nearby users who could share news, engage in conversation, and organize political events.

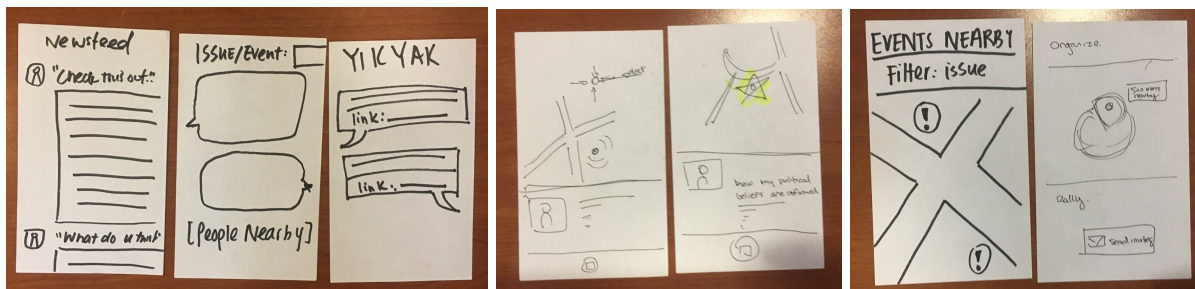


Figure 4. **Mobile design idea #1**, similar to web app design, exploring creating networks of nearby users who could share news, engage in conversation, and organize political events.

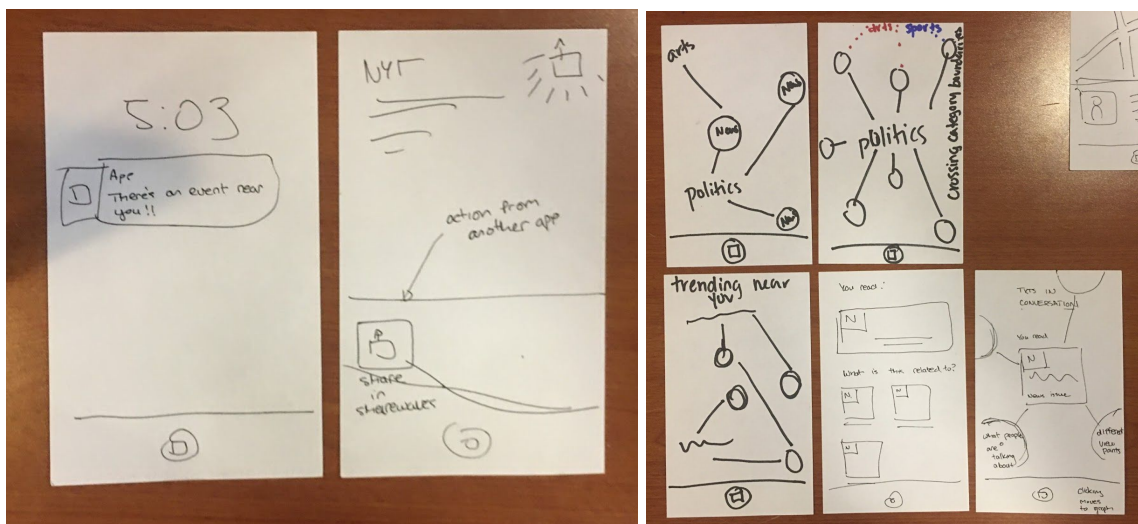


Figure 5. **Mobile design idea #2**, exploring allowing users to create and explore 'clusters' of linked news stories and themes.

Top Two and Storyboards / Task Flows

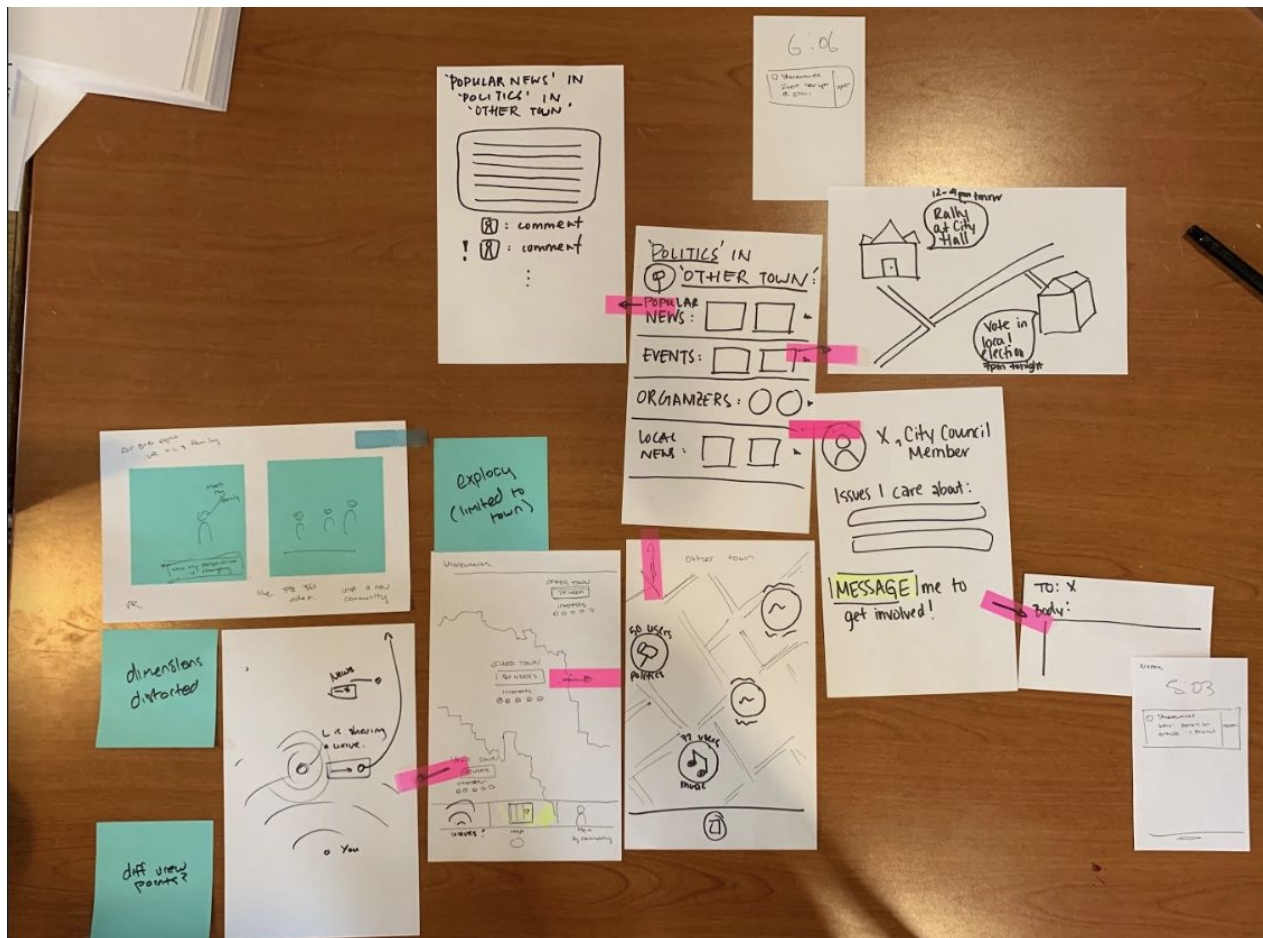


Figure 6. Geographic storyboard centered around allowing users to explore nearby communities, news, and political events. We sketched ways for users to learn about and interact with other people nearby, explore news related to specific themes, and also share/view videos related to political news or events.

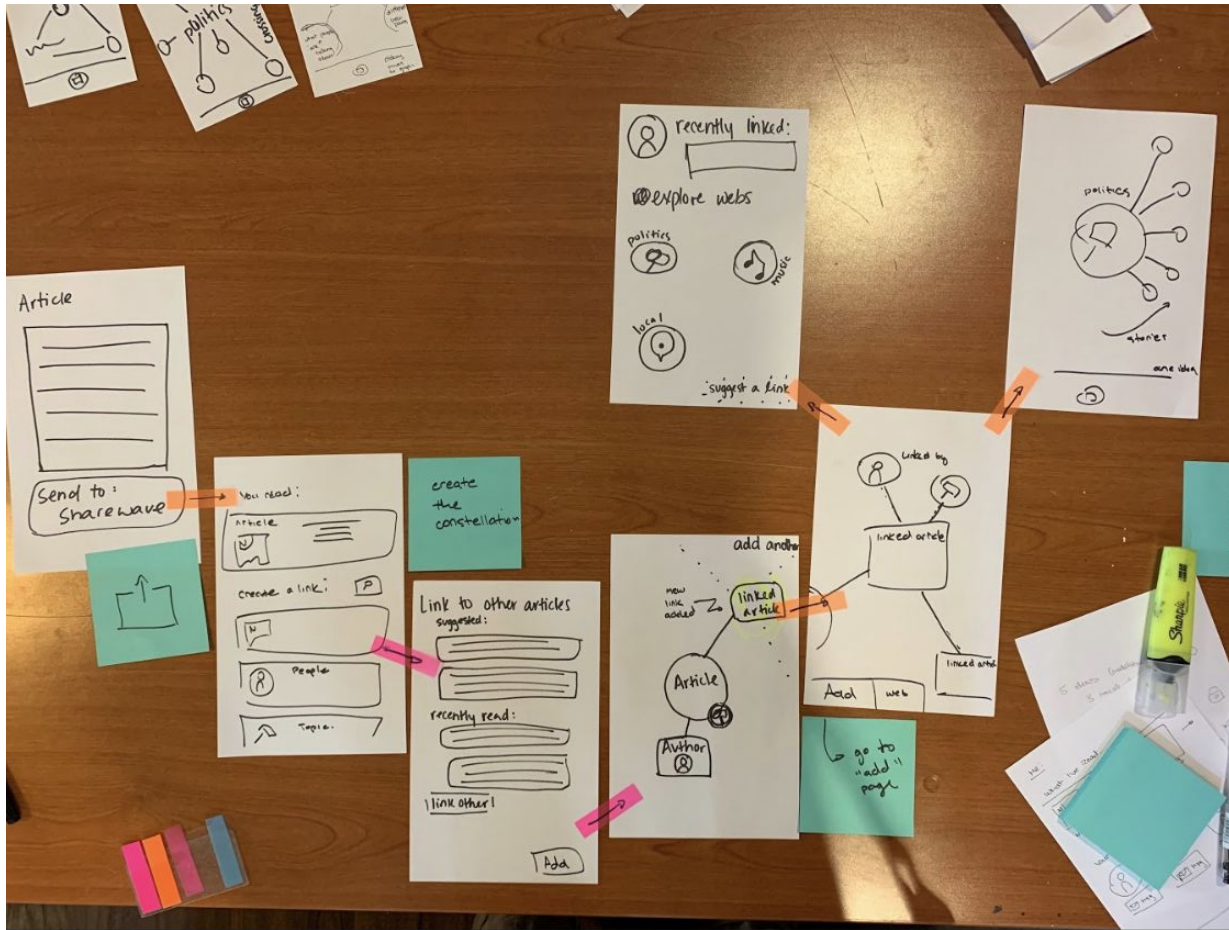


Figure 7. Constellation storyboard centered around allowing users to build links between different news stories. We envisioned an interconnected network of news stories curated by users, exposing people to new ideas and perspectives.

Selected interface design

| Geographic | |
|---|---|
| Pros | Cons |
| <ul style="list-style-type: none"> + design lent itself well to our three tasks, especially organizing + video element of the interface integrated a story-sharing idea we sketched for AR/VR | <ul style="list-style-type: none"> - interface design becoming too complicated with many potential tasks, menus, and flows - geographic proximity could reinforce echo chambers |

| Constellation | |
|--|---|
| Pros | Cons |
| <ul style="list-style-type: none"> + real users contributing made the news consumption experience personalized + visually interesting and unique | <ul style="list-style-type: none"> - did not lend itself well to some of our tasks, particularly the task of organizing - not sure the interface would encourage any political engagement beyond reading the news - wary of personal networks strengthening echo chambers - confusing to navigate graph space |

We decided to move forward with the Geographic UI.

Detailed UI Storyboard / Task Flows

While creating more task flows, we responded to feedback collected from the last two weeks to hone the design:

| | |
|--|--|
| Focus the problem and solution overview | We revised the problem and solution overview to be more specific, made EP to test new assumptions (see Appendix) |
| Link the third task to the previous two | We refined and modified the third task; reading news builds “pressure” to participate in the third task |
| Differentiate the solution from existing platforms | We refined the problem statement to suggest what existing platforms were doing wrong |

We additionally wanted to bring the design back to core tasks that aligned with the solution goals. We storyboarded three new tasks we based off from our original ones—discovering nearby stories, sharing a story, and sparking offline activity.

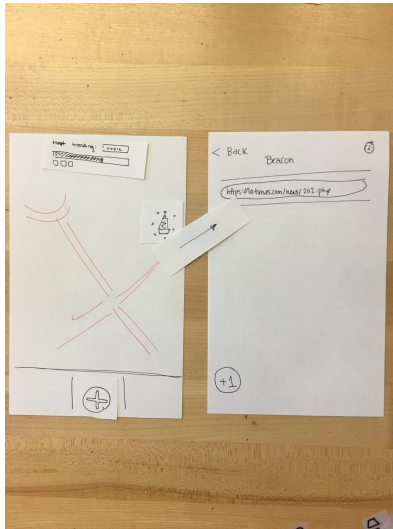


Figure 8: Discovering nearby stories

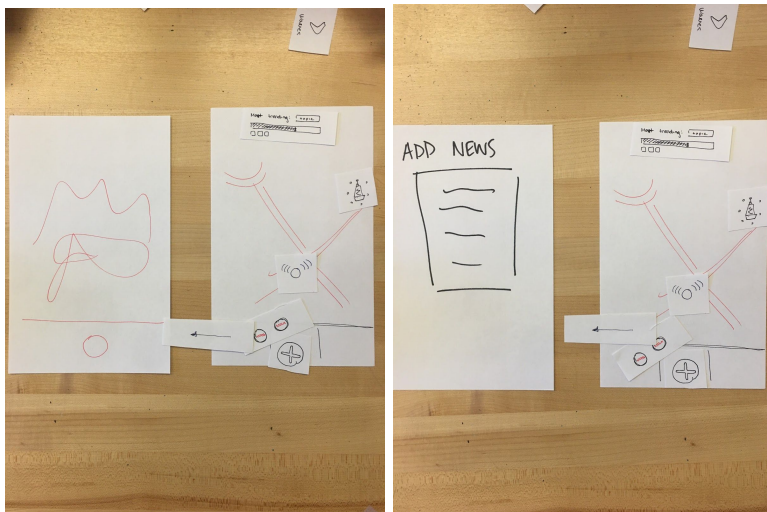


Figure 9. Sharing a story

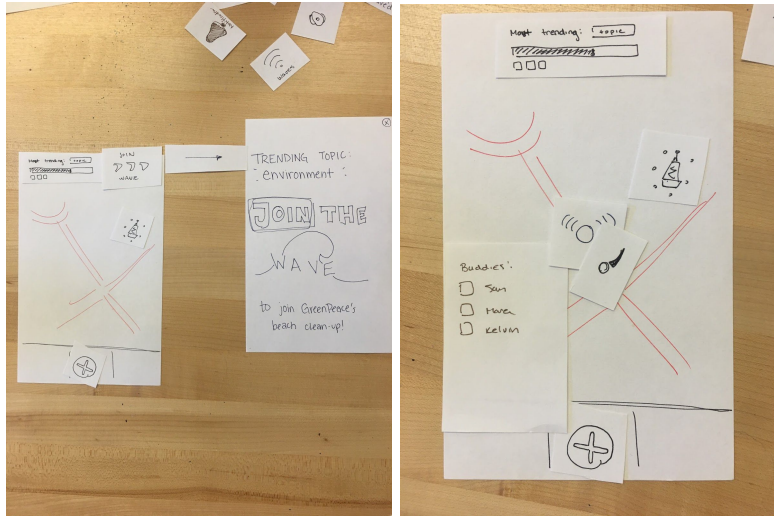


Figure 10: Sparking offline activity (anonymous buddies that share news with you, trending news generates a “wave” of activities users can join):

Low-fi Prototype

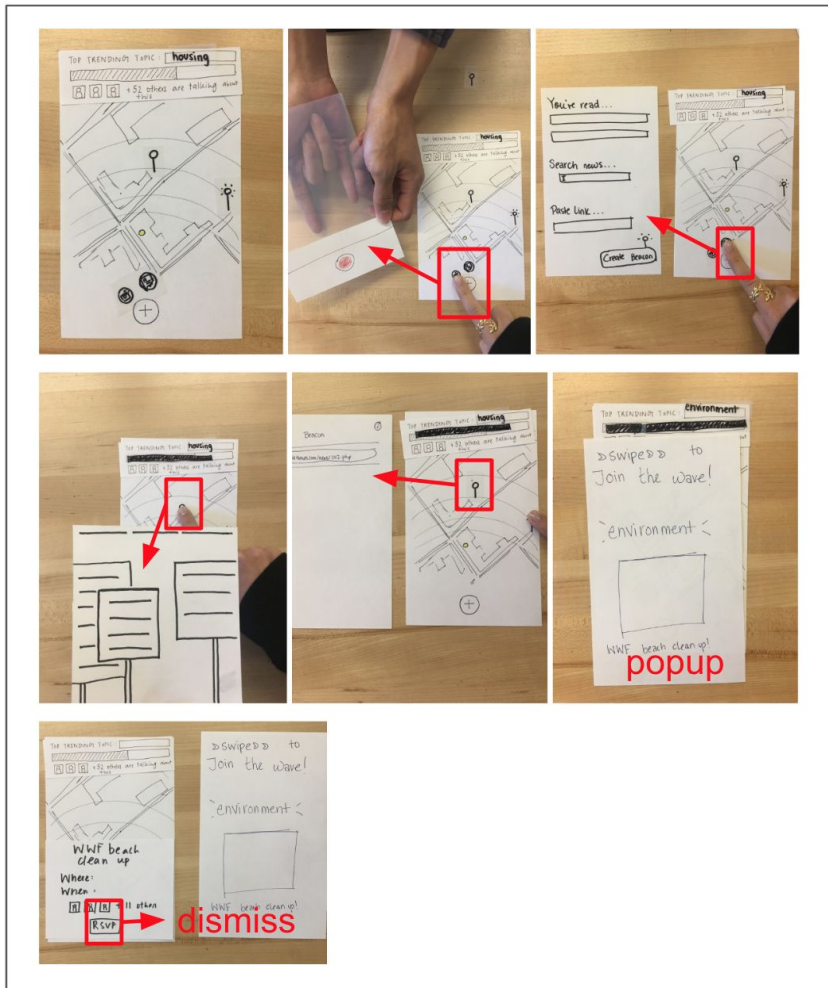


Figure 11: All screens

Figure 13. **Sharing a story:** The main add button has two modes, news and story. Videos use the camera; for new stories, users can choose from things they have previously viewed or search/paste a link.

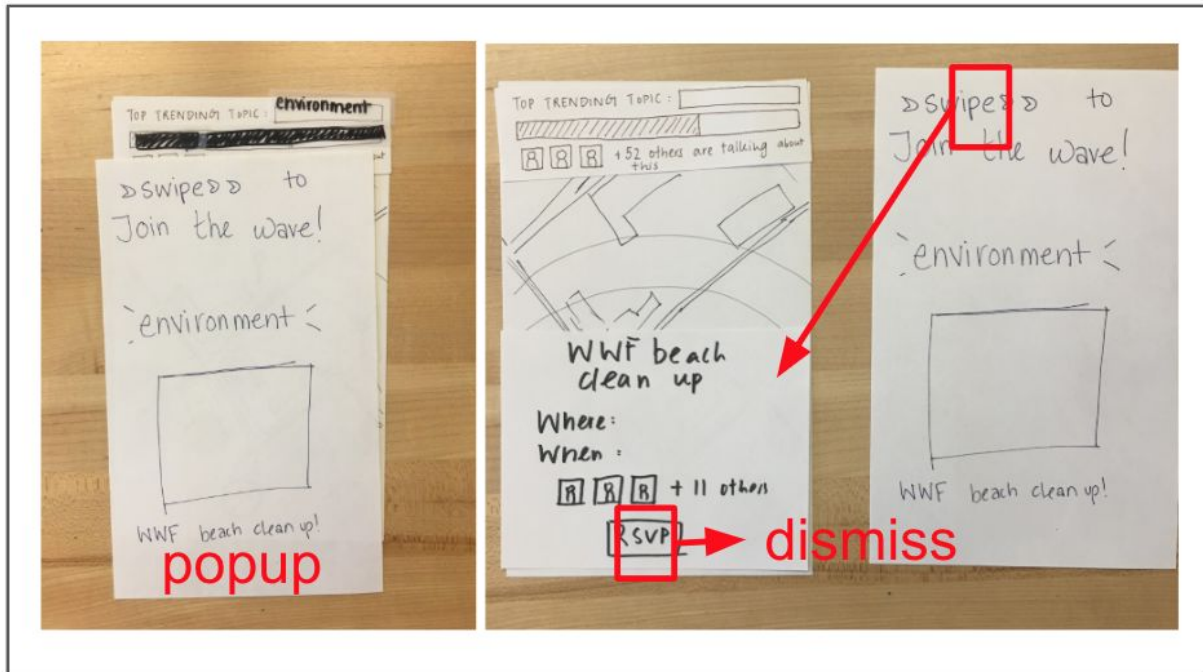


Figure 14. **Sparking offline activity:** when an event or news story is trending, a new window will pop up and invite users to get involved in related events.

1. **Discover nearby stories:** click on the nearby beacon
2. **Share your stories:** click on the plus button and post a video or a link to a news article
3. **Spark offline activity:** join an offline political event by swiping on pop-up and clicking RSVP

Procedures

We started with demographic questions and transitioned into the prototype. We experimented giving a more detailed overview of the application versus allowing the tester to explore and discover functionality. We also tested different icons for the 'beacon': a buoy (connected to the aquatic theme) and a more generic pin.

As we moved through the test, we allowed the user to explore which task they wanted to engage in first: discovering nearby stories or sharing a story. After completing both, we would "fill" the trending meter and show, a screen to invite the user to an offline community event.

We asked the participant to articulate the perceived purpose of the component after they touched any component. If the component didn't exist as a feature, we asked them what they expected would happen and why. At the end, we also asked what they believed the purpose of the app was.

Test Measures

The primary metrics we used were:

1. **Number of UI components correctly articulated:** we tested this by asking the participant what they believed that component did or represented. If there was a disconnect, we wrote it down with a description of which component and the perceived purpose.
2. **Number of components pressed which were not developed into features**

We wanted to match the more qualitative measure (Metric #1) with a quantitative measure (Metric #2) to ensure that we understood the impulse and reason for the results.

Roles

Grace: observer, Garrick: computer, Gen: facilitator.

Results

There were three aspects of the UI flow that caused confusion for participants: **the progress bar, the buoy beacon icon, and the offline event pop-up.**

Folks were really intrigued by the progress bar. Interpretations ranged from upload/download completion, funding progress, or level progress (i.e. the app was a game). When the bar was filled, some participants expected a reward beyond the suggested offline event. Some participants expected to click the bar and pop up more information about the current trending topic or swap the topic out.

The pin was seen as a clearer indicator of a story or a marker at a location. While the buoy was perceived as interesting and visually appealing, it cluttered the meaning of “a story was dropped here!”

Our initial three tests gave consistent feedback that the ‘Join the wave!’ page felt like a pop-up ad and aroused suspicion towards the sponsored event. In the fourth test, we created a small feed of 3-4 local offline events to offer to the user. We got better feedback on this one, but there was confusion over swiping versus pressing buttons.

Discussion

The progress bar presents an interesting challenge; our initial purpose for the progress bar was not communicated, and participants’ responses suggested a gamification angle we weren’t intending. Moving forward, we need to find a way to communicate the trending concept in a cleaner way, with more context or with a different representation.

We learned beacon representations we had been considering (i.e. buoy) were confusing to users. For future iterations, we play with a simpler icon design (with radiating dots to indicate popularity).

We learned the offline event screen was too similar to a pop-up advertisement and didn't allow for varying levels of engagement. Our new screen works better, but there are two conflicting interactions (swiping versus tapping) we need to clarify in the design.

While we were able to test the majority of our core assumptions in this low-fi prototype, we were unable to test a few assumptions:

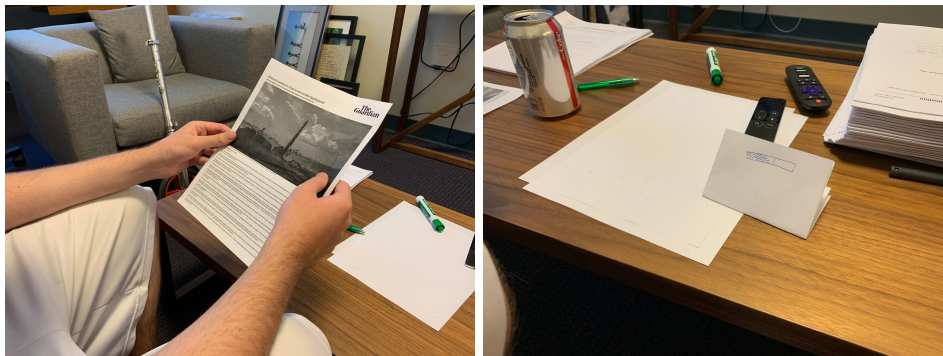
- Whether or not the beacons on the map should relate to the displayed trending topic.
- If more than one trending topic should be displayed.
- If users would go beyond RSVP-ing and actually attend an offline political engagement. We attempted to query this through follow up questions and the EP4 test, but saying you'll go and going are two different things!

Appendix

Low-fi Test Results

| Participant # | Number of components correctly described | Number of components pressed which were not developed into features |
|---------------|--|---|
| 1 | 5 | 3 |
| 2 | 6 | 4 |
| 3 | 5 | 2 |
| 4 | 6 | 2 |

EP Additional Tests



We made some new assumptions about the map interfaces that we wanted to test, so we tried a new EP4 (codename Map 2) with one participant involved with Map 1. We tested the following assumption:

- Discovering local news and seeing activity around motivates you to become more involved

Our method was:

- Providing a news article to read (this one was about the Amazon burning) and asking how they felt about it
- Showing (without too much UI) that others were reading the story too and “pressure” was building on the issue

- Presenting an event they could go to that addressed the issue, and asking if they'd be willing to go
- Read a story and see if they want to get involved in an organized event. What changes if there are other people (friends) going? What if those people are nearby, and you can see that?

Our results were overall positive. Some results and further thoughts:

- Seeing a number of people reading an article wasn't as informative as seeing who wanted to do something about the issue, but reading the article gave energy to do something about it, and EP provided a way to channel that
- What can people do in a community to organize? Our participant suggested contacting local officials or representatives and putting pressure on them
- One worry with a news platform is being agnostic to all causes. People could use the platform to promote things we as the creators don't agree with

Geographic Storyboard: Description of Functions

| Function | Method |
|---|--|
| Read local news | Click on news icons on the map interface, and explore news. |
| Explore other news feeds | Explore different locations and be able to view popular news in that location. |
| Share and view live videos | Click 'waves' icon in menu bar to share or view live videos. |
| View organizer profile and send message | View organizers by themes (e.g. politics), and be able to send messages from their profiles. |