right2vote

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VALUE PROPOSITION

Incentivize young voters to make informed decisions by matching their views with candidates'.

PROBLEM AND SOLUTION OVERVIEW

In 2012, only thirty-eight percent of 18 to 24 year olds in the United States voted in the presidential election. Young voters have consistently voted at lower rates than other age groups, a discrepancy harmful to both the young voters and the country. Contrary to some beliefs, younger voters' votes do affect elections (as seen in Barack Obama's reelection in 2012). Furthermore, the younger generations should play an active role in voting because many of these issues will define their future. However, raising voting rates of the youngest sector should be coupled with education of current events and issues. Ultimately, increasing awareness about events and issues will lead to higher voting rates and more educated votes, especially among the youngest voting generation.

CONTEXTUAL INQUIRY CUSTOMERS

Interviewee 1: C.T.

The first interview participant, C.T., is a nineteen-year-old sophomore undergraduate student at Stanford University majoring in political science. The participant was chosen based on her known interest and involvement in politics. C.T. is from San Diego, California and has an extensive background in law, politics, and public speaking. Her outside interests include sports (football and field hockey) and food. We observed C.T. at her desk in her bedroom at her dorm (*see Figure 1*).

Under the master-apprentice model, we asked C.T. to demonstrate her process in deciding which candidate to vote for (*see Figure 2*). C.T. walked us through the process by Google searching potential candidates for the 2016 presidential election, scrolling and guiding us through her preferred website (Politics1.com), talking us through her thought process, researching individual candidates further, and giving her impression on each candidate as she read about their credentials and platforms. She also explained how she watches all presidential debates and listens to conventions live. As the apprentice, we observed, asked questions about choices and thought process, and clarified assertions. C.T. also demonstrated exactly how she researches current events and issues and guided us through how she reads news five or six times every week. She reads the news through many sources, including New York Times, Washington Post, Wall Street Journal, Flipboard, Huffington Post, Buzzfeed, and The Onion. C.T. embodies an outlier customer of our product, as she does have extensive interest in politics, but is in need of a more streamlined process of voting.

Figure 1: C.T. under the Master-apprentice model

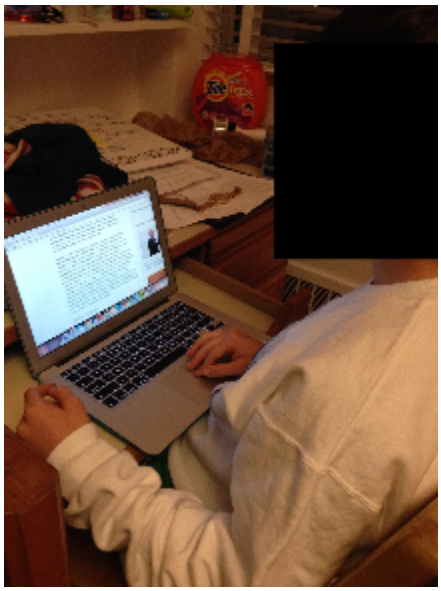


Figure 2: C.T.'s workspace

Interviewee 2: B.S.

The second interview participant, B.S., is a twenty-eight year old graduate student studying public policy. He completed coterminal degrees at Stanford in 2009, earning an undergraduate degree in Human Biology, and a Masters in Psychology. After graduating, he worked for startups and data consultancy services for four years, before returning to school to complete his master's degree. He also used to teach public speaking and debate to high school students. He lives in off-campus housing. The participant was chosen because he is not a Stanford undergraduate student and

therefore represents a different sector of our user base. B.S. has voted in every election since he was eligible to vote, and is planning to vote in all the upcoming elections. Using the master-apprentice model, we observed B.S. completing a task where he was asked to map out his voting process. We observed his work at an off-campus dining venue (*see Figure 3*). During this process, we asked B.S. open-ended questions to guide his thought process, and to clarify points.

Figure 3: B.S. under master-apprentice model

Interviewee 3: A.G.

The third interview participant A.G., is a 20-year-old undergraduate student studying mechanical engineering. A.G. is not interested in politics and has little civic involvement; we chose this young adult to gain perspective about our target customer: a college student who lacks the political motivation to participate in elections. A.G. has been registered to vote since September 2014, but has yet to vote in any elections. She said that she generally votes along the same party lines as her parents. Using the master-apprentice model, AG walked us through the process that shes uses to choose who she would vote for in an election (*see Figure 5*). In this method, A.G. traced out a flow chart of her process of voting for a candidate (*see Figure 4*).

Figure 4: Flowchart of A.G.'s her voting process

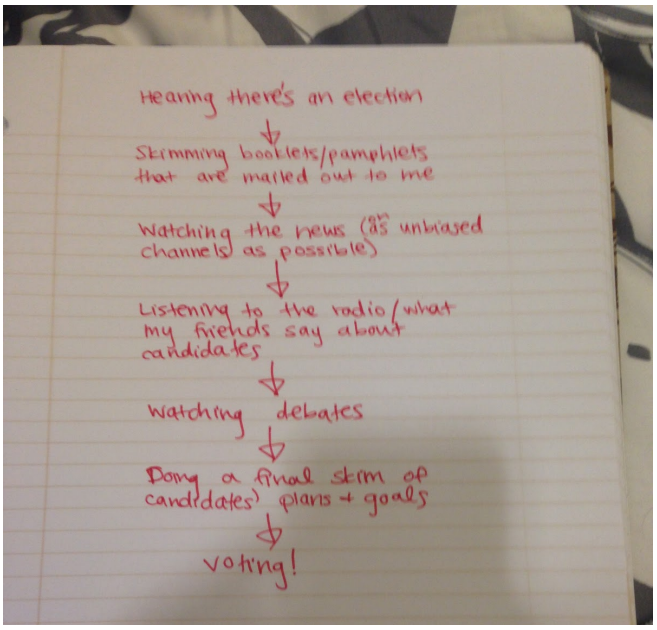


Figure 5: A.G.'s flowchart of her voting process

Since A.G. was not entirely familiar or comfortable with the process of voting, we conducted the master-apprentice model in her on-campus housing in order to provide a natural feel to the interview. Unlike other participants that we interviewed, A.G. had a unique perspective because she does not actively seek political information or participation. She only reads the news one to two times a week and generally from sources that have condensed the news into quick blurbs or summaries. This means that she gravitates towards sources such as The Skim or headlines on Yahoo! news.

CONTEXTUAL INQUIRY RESULTS

High Level Activities, Tasks, and Themes

The overarching theme from all interviews revealed the extent to which our target age group relies on technology and media to gain information about upcoming elections and candidates. All three customers rely on specific news sources to provide information. B.S. reads the news constantly through Yahoo! News aggregator, but doesn't believe anything he reads until he verifies it through a second source. He defers to news sources like Reuters, AP, the New York Times, and the LA Times. C.T. reads the news on New York Times, Washington Post, Wall Street Journal, and Flipboard. A.G. also said she gets news primarily in the form of headlines or condensed articles from online news sources. All three customers read the news online, on laptops or smart phones.

All three customers also emphasized the importance of ranking issues they are passionate about and using these rankings to guide their ultimate decisions. For example, C.T. researches all candidates and chooses her preferred candidate based on who she is most aligned with on what she calls the "big three," that is the three issues the candidate is most passionate about (*see Figure 6*). C.T. believes candidates are unlikely to achieve much beyond their big three issues, and therefore she bases her choice off of these issues. Currently, C.T.'s personal big three issues are foreign policy, education, and domestic crime. B.S. also listed some issues that are important to him in choosing a candidate to vote for. He caveats this by noting that different issues are important to the context of a particular election. His first priority issue is social justice and equity. He hopes to elect politicians who want to raise up the poorest. He cares about ensuring libertarian rights but not to the point where he would sacrifice social welfare. He also cares a lot about a candidate's economic platform, and comments "as long as you don't support trickle down, you're good." A.G. also spoke about the specific issues she cares about, including domestic issues, foreign policy, the environment and finance. The customers all discussed finding candidates whose views aligned with their own.

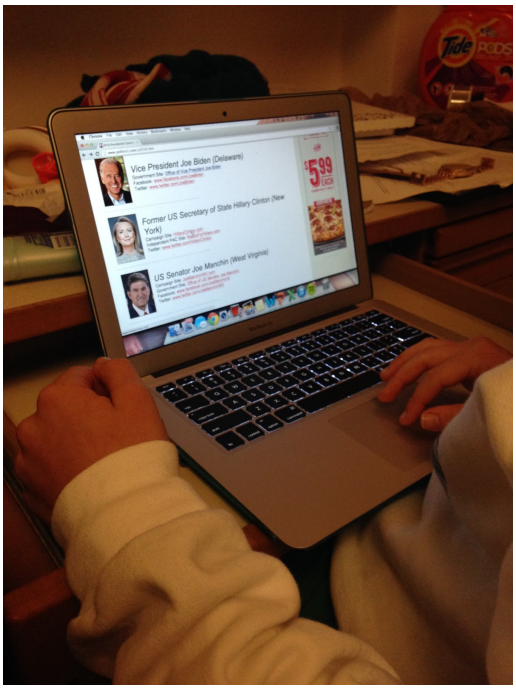


Figure 6: C.T. researching candidates

Unique Thoughts

C.T.

Although extremely interested and involved in politics, C.T. is still unsure of whether or not she will vote in the upcoming 2014 elections. C.T. became eligible to vote last September, but she is very adamant that her vote be an informed vote. In her words, “when I feel I am ready to make an intelligent contribution to society, I will do so. Until then, I will not mess it up.”

C.T. also shared her unique perspective on why voting rates among the youngest age bracket remain so low: she believes that voting and politics have lost its charm over the years, as the private sector (especially social entrepreneurship) has drawn in the younger generations. Voting used to be a privilege, a ceremony, a true showing of patriotism and government. However, now, politics and older politicians are out of touch with the youngest generation, the youngest generation is therefore not involved, preventing the politicians from hearing and responding to the youngest sector’s views and needs. Therefore, C.T. believes we are stuck in a vicious cycle where there is a dangerous disconnect between politics and the youngest voting generation.

B.S.

B.S. mapped his process out his voting process into five steps:

1) Find out who is running in an election
2) Guess which candidate he is going to vote for
3) Research the candidates in "some superficial way"
4) Double check, by asking people he trusts, whether or not they are going to vote for the same person
5) Vote

He spent a significant amount of time discussing his research process as well. He is a vote-by-mail voter, and reads the provided campaign literature. He reads the news constantly and confirms all headlines with major news sources, such as New York Times, AP, and Reuters. He ignores any campaign emails he receives.

B.S. holds a unique view on specificities. He says he doesn't care about state's rights because he thinks the states will handle this issue, and his vote won't make a difference. He doesn't trust politician's rhetoric about war because historically, presidents always diverge from their rhetoric in actual war scenarios. He also values a politician's ability to create consensus. Interestingly, he said he doesn't always vote for his favorite candidate, he says he will vote for a candidate he thinks can win, even if this means voting for a Democrat he prefers less over a better independent candidate.

A.G.

While interviewing A.G., it was insightful to get the perspective of an extremely educated student that has little to no interest in politics. One theme that was apparent throughout the interview was that A.G. was not concerned with developing her own political agenda or opinions. She definitely knew what topics mattered to her and why, but did not see the importance of devoting time and energy into researching these topics on her own. Instead of using news to inform her opinions on political issues, she cares more about the influence of personal connections and experiences. She said that issues that she cared about where the topics that affected her directly or that she has personal connection with. For example, she cares more about gay-marriage legislation than tax reform because she doesn't have to pay taxes whereas she is has friends who identify as LGBTQ. However, she stated that she "anticipates a shift in [her] interests as [she] participates more in civic duties like paying taxes or working for pay."

She also had an interesting perspective on what sources are credible sources to get news. She said that she gets news primarily in the form of headlines or condensed articles from online news sources. A.G. says that she subscribes to email news briefs that she reads on a consistent basis, but only reads the news 1-2 times in depth every week. Throughout the interview she stressed the importance of ensuring that when she does get news, it is as unbiased as possible. She gave the example of Facebook and

said that Facebook “gives multiple sides of an issue and when you keep a balance it can lend an interesting perspective.”

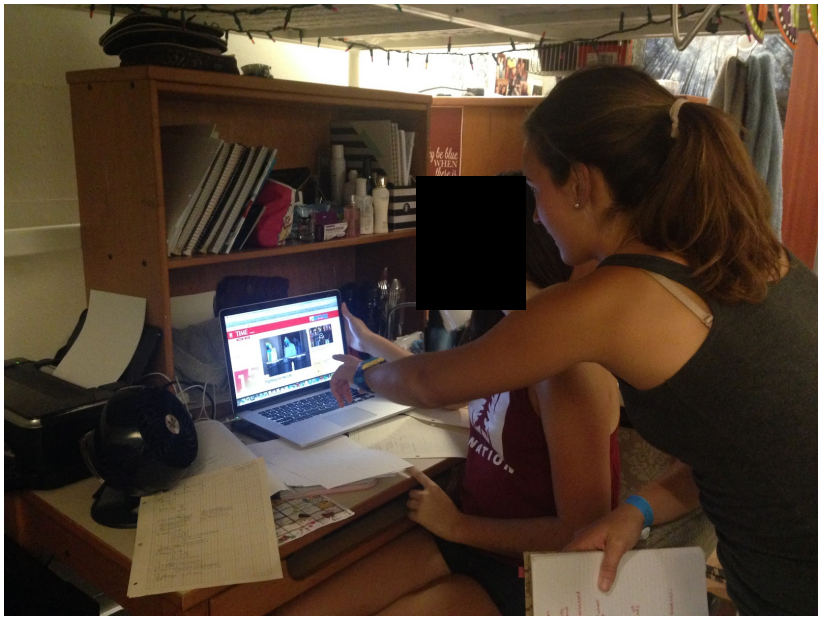


Figure 7: A.G. demonstrating her use of online resources

TASK ANALYSIS QUESTIONS & ANSWERS

[Who is going to use the system?] Our system will be used by all, voter-eligible, undergraduate students in the United States. The system will have an entry barrier low enough to entice politically uninterested students but enough customizable ‘advanced’ features to entice the politically savvy. We have no intention of crafting our system towards any political ideology.

[What tasks do they now perform?] The main tasks they perform are candidate / issue research and voting. They perform these tasks in a variety of different ways. B.S. gets their candidate and issue information through Yahoo News Aggregator and online publications like the New York Times. A.G., on the other hand, relies on news briefs via email and discovering articles through Facebook. The subjects also mentioned they relied on in-person discussion to affect their opinions. They used the internet to gain a knowledge base and then tested it by discussing and listening to friends. Voting is simpler and is performed either by going to polling locations or via mail.

[What tasks are desired?] The desired task is to be able to cast an informed vote in a manner that is not arduous and boring. We aim to fulfill this desire. When tested users have such variety in task performance it indicates a missing uniform, effective solution. Stated differently, there is a missing tool from the citizen toolbox. The tool we craft will address the difficulty of staying informed about candidates and their issues but not the difficulty of the voting process. The later is not a practical problem to solve as it has such high emphasis on security (voter fraud prevention and detection) rather than user interface design.

[How are the tasks learned?] We must look at our two central tasks separately — research and voting. The first task, voting, is learned through either parents or someone within the education system. A majority of United States citizens are told how to claim the right vote (become eligible), the restrictions on that right (age, non-felon status in some states), and the basics of how to enact that right (go to the polls!). It is necessary and possible to help voters be more aware of election times and polling locations but not basic voting right information. Research on candidates and issues is learned in a much less straight forward way. None of our interviewees were clear on how they developed their own methodologies. For instance, A.G. suggested she developed her own system based on the principle of 'unbiased news'. B.S. looks at standard news sites and aggregators. Though both of these subjects showed a personally created system, it was unclear from whom and how these systems were determined.

[Where are the tasks performed?] Lets look at the main tasks separately:
First, voting. This task is completed at local polls or via the mail for absentee ballots.
Second, candidate / issue research. This task is performed everywhere from living rooms to bedrooms (when watching debates or doing online research) to anywhere one has a conversation. Since mediums to gain knowledge, such as a computer or book, are not tied to a physical location, these category of tasks can be performed essentially anywhere (within reason).

[What is the relationship between customer & data?] The relationship between the customer and date is quite personal. When strong, emotional belief comes into play, the customer will have a strong reaction to any opposing view or data. C.T. had a strong belief on foreign policy, education, and domestic crime. She suggested these were her deciding factors in candidate choice. Thus here, her personal preference for one kind of data (candidate stance on a few issue) blinded her to certain data points (those on any other issues).

This customer-data relationship becomes more convoluted if we consider the case of A.G. This participant emphasized their effort to attain unbiased news. The data for the task of candidate research is highly biased. Thus, at least some customers, have a mistrust of any single data point and must find opposite viewpoint data to form their own opinion.

[What other tools does the customer have?] For voting, the customer has no other tools besides polls or absentee ballots. For research the customer has a slew including social networks, professional networks, blogs, candidate websites, news aggregators... We did notice, however, that the subjects we tested used these tools to discover candidates and then look up their views. Our goal is to flip this model and create tools to enable customers to find the viewpoints they support first and then the candidate who has them. We believe the current order leads to biasing based on irrelevant details such as looks or charisma.

[How do users communicate with each other?] Users communicate with each other directly through conversations and indirectly through internet links. One of our subjects, B.S., picks a candidate to vote for (from little information) and then follows through if his friends make the same choice. Both of the other interviewees also suggested a portion of their political knowledge and motivation to action comes from their peers groups. The second way mentioned above is indirectly through links. These are links to articles through facebook, articles that have been curated by blogs or aggregator sites. Thus, the modern political conversation has a piece in the digital world.

[How often are the tasks performed?] The tasks are performed on a varying basis correlated with the user's political interest and proximity to highly publicized elections. Those who care deeply about politic, C.T. for instance, check a source of a news or information on a candidate at least once a day. Less interested candidates, like A.G, only read the news in-depth 1-2 times a week. We posit A.G. also is on the highly involved end of the spectrum of those who are uninvolved. Secondly, the tasks are performed far more frequently when there is a highly publicized election. When an election becomes a large part of the public discourse, there is a huge increase in candidate research and voting. There are myriad reasons for the popularity of such elections—high drama, a captivating story...

[What are the time constraints on the task?] The time constraint varies with the task. Lets examine three of the main tasks: 1) Voting 2) Issue Research 3) Candidate Research.

The first task, voting, is constrained primarily by the intersection of user's time and his or her competing tasks and the election time. The second task, issue research is constrained by the user's interest and their competing tasks. Issue research can be done anytime and anywhere a user has access to the internet, books, or other people. The only preventative factor are other tasks—writing a paper, the desire to relax etc... The final task, candidate research is constrained by the same factors as voting, except that the time frame is slightly wider. As soon as the user is aware of the candidate, they can research him or her up to the time of the election.

[What happens when things go wrong?] When things going wrong, we have a large loss situation that creates a negative cycle. The user either votes for a candidate that does not actually support his or her beliefs, or the user does not vote. When the user supports a candidate with views opposing his or her own, the voter becomes sad and likely disillusioned with the system. He or she will feel tricked or betrayed not realizing the mistake was caused by their own failure to remain informed. This will convince them to be less active in the future. When a voter decides to not vote, he or she misses out understanding the power of democracy and of a vote. In this case, he or she is also unlikely to continue contributing to the political process.

Application Tasks

Our application will support issue research, candidate research, and voting.

The voting task is very simple. It is largely straightforward to leave one's house and go to a polling location or else submit an absentee ballot. However, there is some friction when there are so many elections and polling locations are so hard to find. Thus, our application seeks to find elections with relevant issues for the user and help him or her find the correct polling location or procedure for submitting a mail ballot.

The issue research task is moderate. There is some difficulty in picking sources to examine an issue and, more importantly, which issues to care about. Our subjects showed a diverse set of ways to accomplish this task. Some used social media and friends, others used well known news sources. Our application will make this easy by utilizing good design to help the user understand what issues they care about and then suggest quality articles to gain more knowledge.

The candidate research is a relatively complex task as users have to navigate information and marketing from candidates. They also have to manage their own emotional attachment to a candidate (his or her looks, personal background,

personality). Thus this task requires understanding and bringing together of many factors. Our application will help this task by focusing the user on issues and then utilize these preferences to suggest candidates.

We chose the above three tasks because together they represent the full set of actions from learning how to vote in a specific election to actually voting. Issue research motivates personal belief. Candidate belief matches one's personal belief with available candidates. And, of course, voting determines outcome.

THREE BEST APPLICATION IDEAS

Idea 1: Issue Priority Ranking

This three stage process would guide votes through understanding their political views and matching those views with candidates. During the first stage, the user would be presented with cards with quotations or ideas written on them stating some political view. The user would agree or disagree with the idea or statement. Each card would also have an option to learn more about that subject with a menu of news articles on the topic Once the user completed this deck of cards, he or she would be guided the second stage, which would have a menu of issues, and would display where the user would fall on the spectrum of this issue. He or she would then be asked to rank the level of importance of each issue. Once complete, the user would be guided to the third stage, where there would be a menu of candidates. When clicked on, the user would be able to see a visualization of the candidate's political positions overlaid with his or her own. They would also be able to click on news articles relating to this candidate.

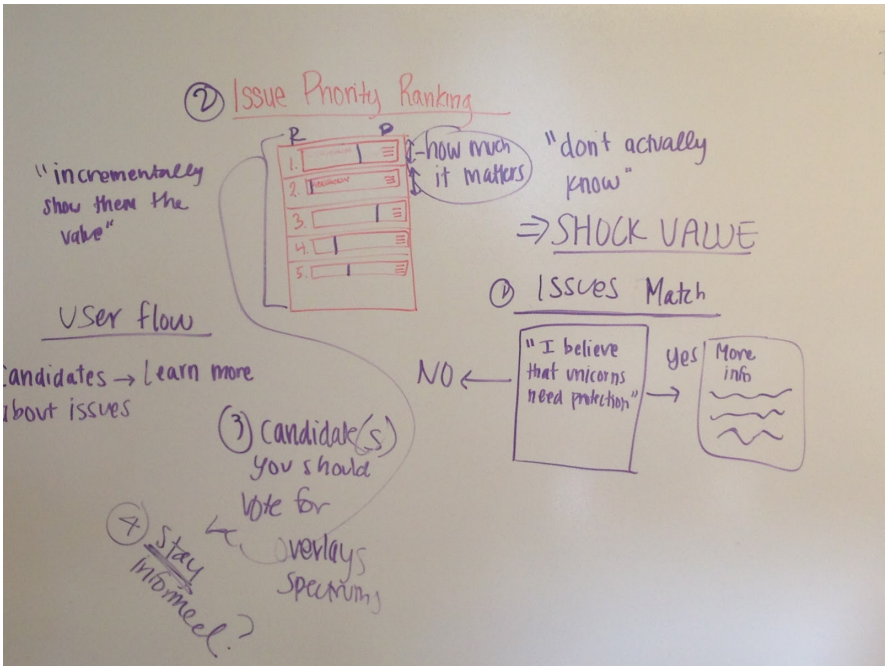


Figure 8: Brainstorming Issue Priority Ranking idea

Idea 2: News Feed

This process would allow users to stay informed on issues and current events that are important to them. On the first screen, the user could search and select their favorite topics of news. An example of a topic would be “Feminism” or “Environment.” After the user selects the topic, they could enter a stream of news articles, blog posts, tweets, and other sources of information pertaining to the topic. There would be the option to upvote or downvote each article. Also, in order to link social media with our application, there would be the possibility of sharing the article to Facebook or Twitter.

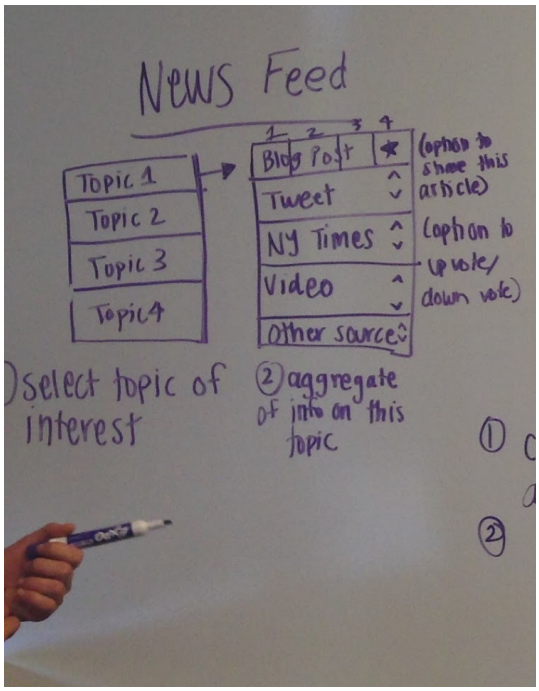


Figure 9: Brainstorming of the News Feed

Idea 3: Election Aid

This process would allow the user to keep up to date with politics he or she is interested in. The first stage is sign-on. Once a user has signed-up, his or her browser history is parsed to figure out issues he or she cares about. The user will confirm these (allowed to change as well). Next time an election where this issue is relevant approaches, the user will get an email showing the election (hyperlink to more information), a spectrum showing the candidates position on the relevant issue (pdf in the email with links to their platforms), and a link to the closest polling location.

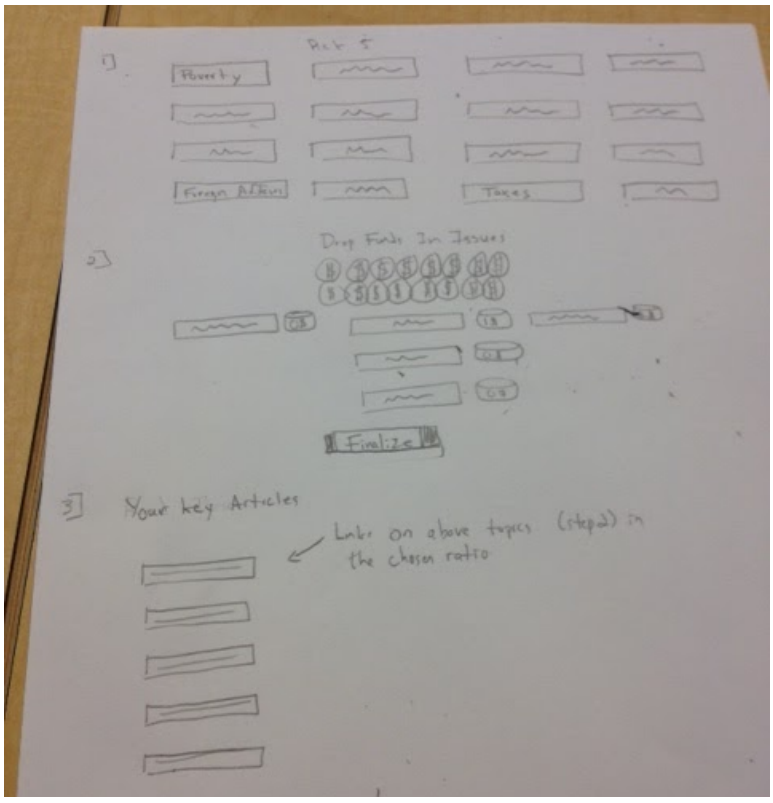
Analyzing Significance, Feasibility, Interest

	Significance	Feasibility	Interest
Issue Priority Ranking	yes	yes	yes
News Feed	no	yes	no
Election Aid	yes	no	yes

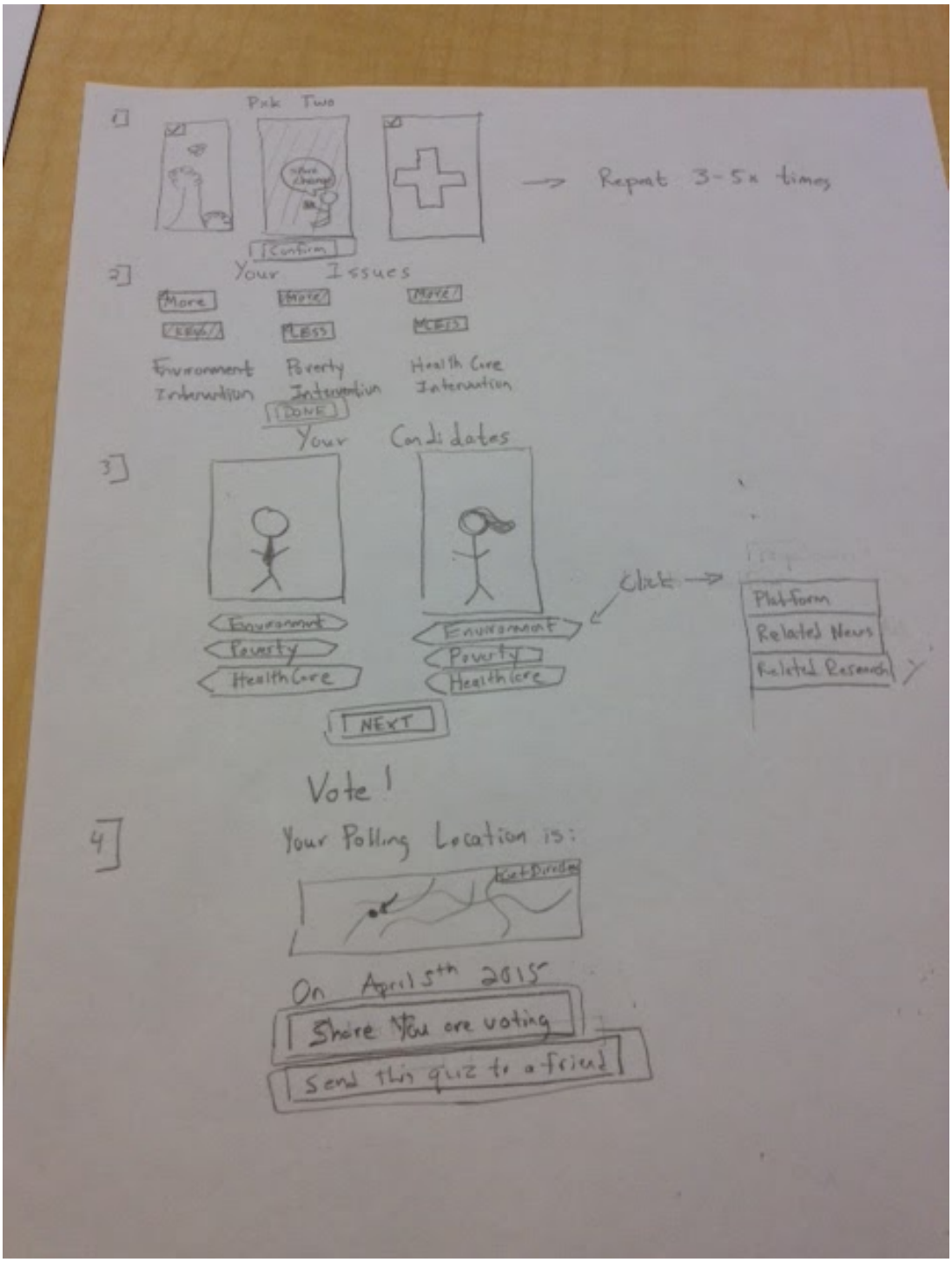
We chose the ‘issue priority ranking’ idea for two reasons. Firstly, this idea met all conditions of the table above. The multi-stage progression of this app proves both interesting and significant. The implementation of this idea’s design and user interface is also feasible. Secondly, this idea addresses multiple tasks and issues associated with our problem. The ranking system allows for young voters to learn more about their own views in comparison to candidates’, and incorporation of news articles allows for more informed votes among the youngest sector, our ultimate goal.

SKETCHES

Design 1: Heads Up Issue Comparison

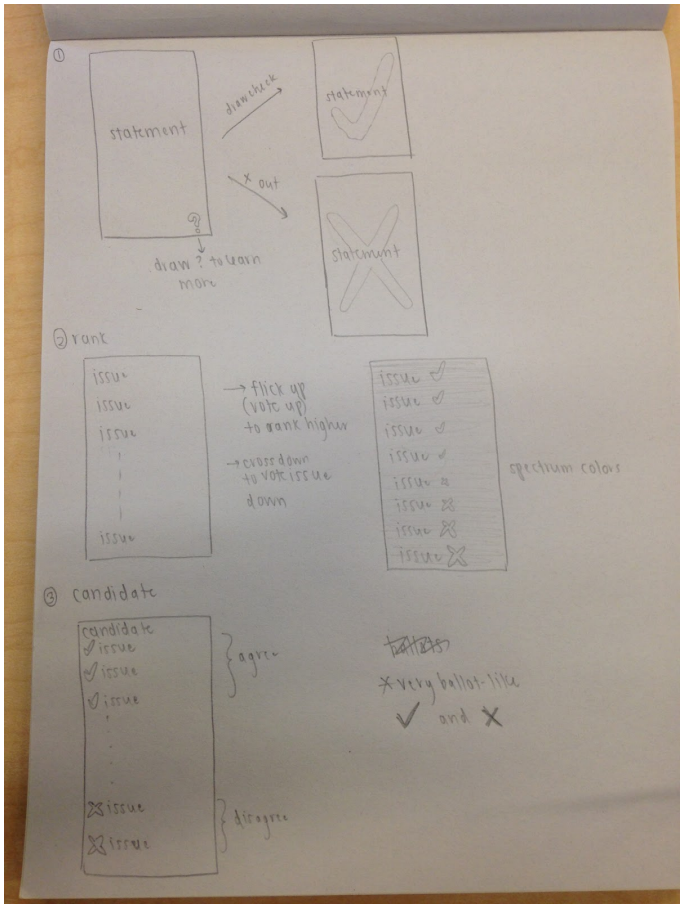


Sketch by Devon Hinton. The user selects five issues they care about and ranks them by placing money in coffers representing the issues. We use the ratio of money:coffers to select important articles.

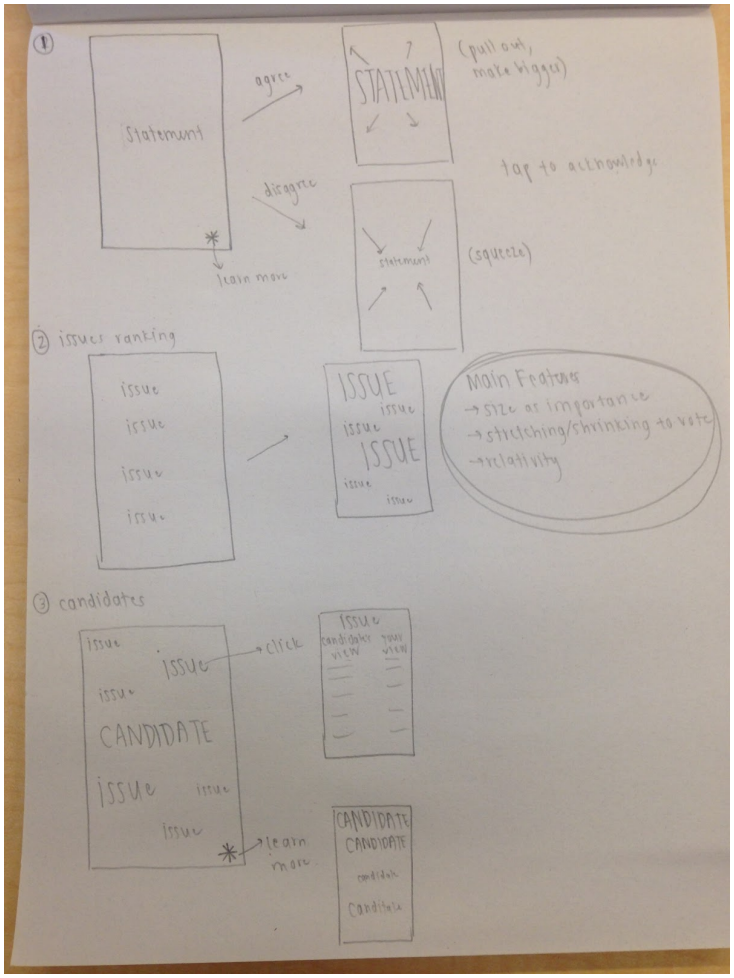


Sketch by Devon Hinton. The user is given a series of pick 2-3 issues to find their highest priority issues. Then they select more or less government intervention for each issue. Next, the user is shown two candidates in an election where the issues chosen are relevant. Finally, the user is given information how to vote.

Design Idea 2: Finger Gestures

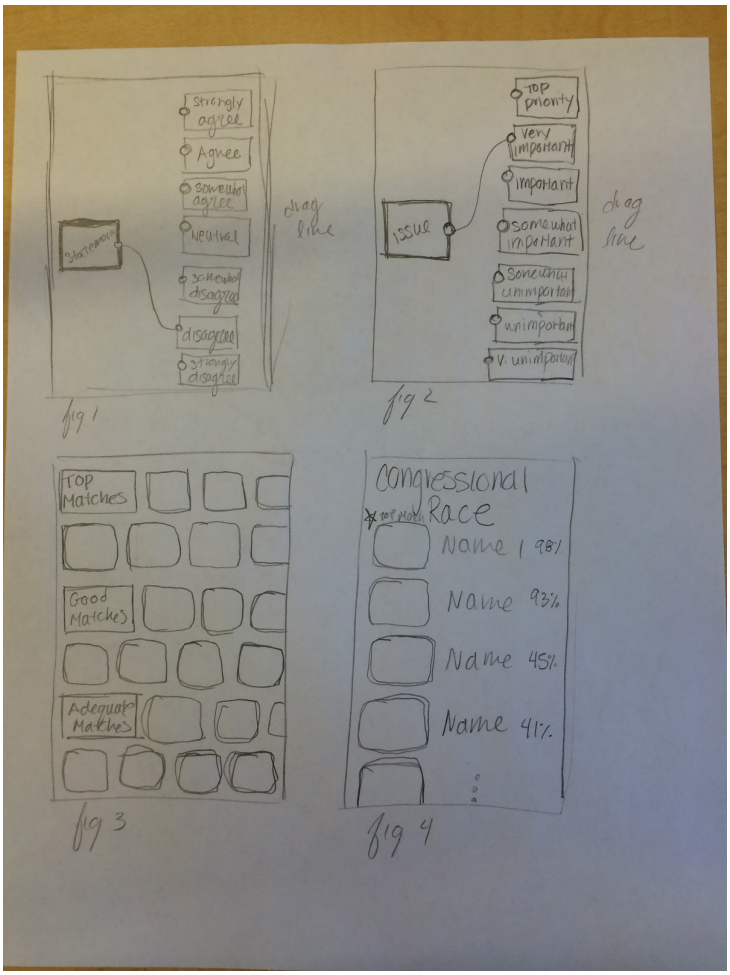


Sketch by Maya Israni. This design allows the user to draw a “check” or “X” to agree or disagree with an issue. To rank the issues, the user flicks up to vote up an issue, and vice versa to vote down. The matched candidate is the final screen, where a list of checked/agreed upon issues and “x”ed/disagreed upon issues is below.



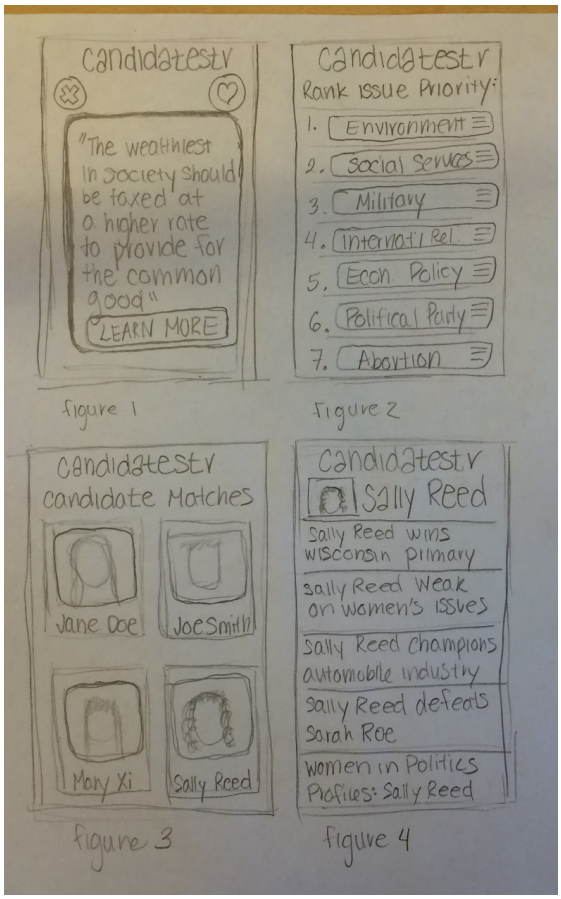
Sketch by Maya Israni. This design uses stretching/squeeze finger motions to detect agreement or disagreement on an issue. To rank issues, the user stretches her/her most important issues out the most and squeeze the least important ones in smaller. The candidate is portrayed on the final screen; the larger issues are the ones that are agreed upon the most, and the disagreed ones are smaller. Users can click on each issue to learn more.

Design Idea 3: Icons + Graphics



Sketch by Christina Gilbert
Key Design Features:
Large icons
Drawing connections
Candidate match scores

Figure 1. User drags the line from the statement to his/her level of agreement/disagreement, and swipes right on the icon with the statement to load the next statement.
Figure 2. Same as statements, but with the importance of issues
Figure 3. Candidates are sorted into categories based on how closely they align with one's voting preferences
Figure 4. For a given race (congressional, presidential, local, etc. the application would show you a ranking of all the candidates with a "match score" of how closely they align with your positions



Sketch by Christina Gilbert

Key design features:
Swiping
Rounded Edges
Large, visible text

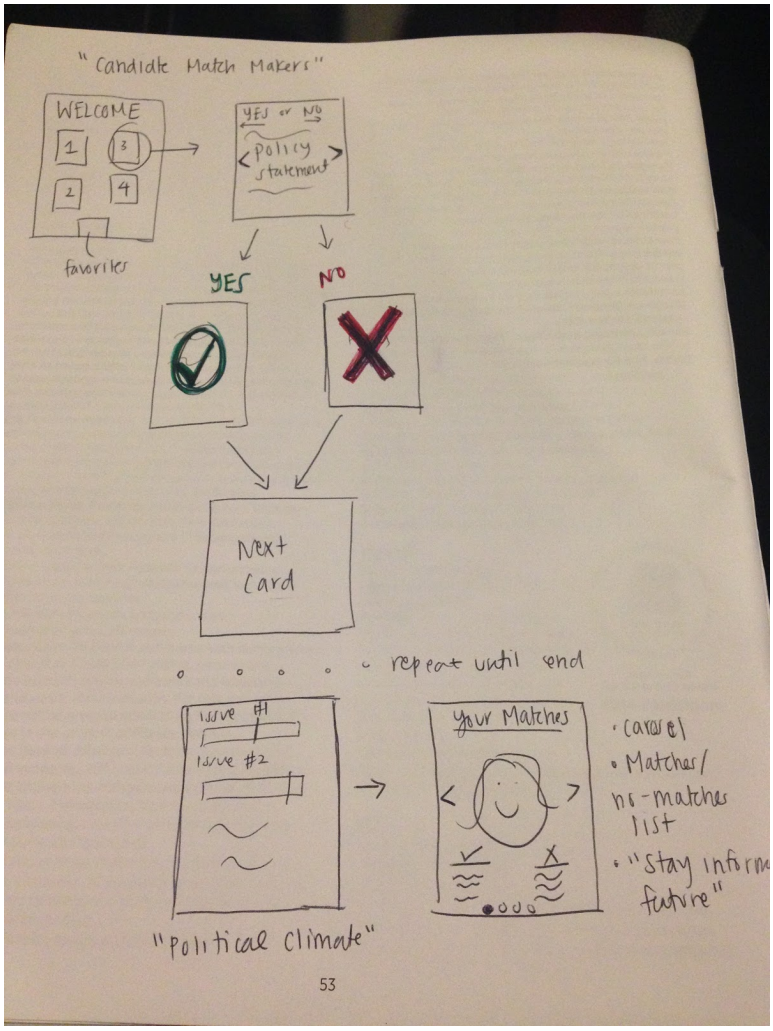
Figure 1. Each card would have a statement, with which the user could agree with by swiping right or pressing the heart, or disagree with by swiping left or pressing the x.

Figure 2. Users rank the priority by dragging issues up and down into the various ranked slots.

Figure 3. Candidates who match well with the user's preferences

Figure 4. News feed of articles about selected candidate

Design Idea 4: Flow Chart



Sketch by Marina Elmore. This sketch details the flowchart and progression of the candidate matchmaker process. The first step is that the user chooses a task, then they swipe left (no) or right (yes) on a series of cards with policy statements, and there are animations for each. Finally, the user is shown their political leaning on a certain issue and matched with the candidate that best fits their traits given.