VOTR

Voting made easy.

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CONTRIBUTION

Sally Wei   40%, created the storyboards, contributed to paragraphs, turned in assignment.

Graham McCoy   30%, reviewed/contributed to paragraphs.

Ryan Fok   10%, contributed to edits in *Proposed Sketch Designs*.

Billy Wu   20%, reviewed/contributed to a few sections.

Team

Sally Wei   Storyboarder, writer, researcher

Graham McCoy   Researcher, designer

Billy Wu   Ideation, design

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Problem and Solution Overview

Our problem is improving voting among low income citizens. In order to solve this we will design a small, handheld device that allows users to quickly and simply vote from anywhere with an internet connection. It will also allow users to access crucial information about the issues they are voting on. By making the voting process more convenient and providing the necessary information to make an informed vote readily available, we will increase the number of low income citizens with the time and knowledge to vote.

Design Research Goals, Stakeholders, and Participants

For our research, we chose to use interviews. Observational methods were not very good for us because voting is not a common task, and we don't have significant control over when it happens. This was a problem given the time constraints on our project. Interviews on the other hand are much more flexible in terms of when they happen, while still allowing us to interact with the participants and make sure we receive as much relevant information as possible. We chose our participants to be low income citizens who were eligible to vote, as those are the people that we hope to target with our design. For our research, we interviewed three participants:

Interviewee 1 is a middle-aged man who has lived in Seattle his whole life. He is a registered voter, and he does vote, but not in every election. He did not encounter any problems with the voting process, but he did say it was difficult to find information on smaller issues. For higher profile issues, he felt that he could make an informed decision. Other than voting, he is not involved in any type of political activity, because he has other priorities that take his time. When asked what he thinks would be the best way to increase political participation, he suggested highlighting the importance of voting. He gets his news from newspapers (The Seattle Times is what he reads most often) as well as some from television.

Interviewee 2 is a woman between the age of 30 – 50. She's an immigrant, having come to the United States back in 2002. She lives in Seattle and is a mother of two children. She is deaf.

She earns slightly above minimum wage, and lives in a government-funded home. She works long hours, and her work can be very exhausting.

So far, she has not participated in any elections. When asked why, she said it was because she had no interest, mainly because she had no time to keep up with politics. After work, she comes home to take care of her young children. Through this, it's not possible she'll be able to contribute a chunk of her time to studying potential election candidates or bills. Our interviewee thought that a good way to increase voter turnout in America would be to see more voting encouragement taking place. Usually in the media, the people would just tell you to vote, but there's not enough motivation in their talk to truly encourage you to do so. Rather than saying, "Your vote matters!", show them why it matters. Actions speak louder than words.

She stays up to date on any political issues through CNN, or from any news app on her phone. However, these weren't enough to get her interested in politics. However, she said that if she were involved in politics, she'd be really open to the idea of voting through a political website. This is because, since she's so busy, she doesn't have the time to run to a polling booth. Having a website that she can pull up in a few seconds, and then take another few seconds to make her choice and submit, would be very convenient. Another suggestion was to receive a ballot through the mail in which she can fill and send out.

Interviewee 3 is a middle aged woman between the ages of 30 and 40. She is from Boise, Idaho and moved to Seattle. She works at McDonald's as a cashier. She has a four-year-old and lives in an apartment. She doesn't have a car, so it is tough for her to get her child to school and also to get to work.

She has not participated in elections, mostly because her son has recently been in the hospital. With all the mail that she gets (mostly bills), her ballot gets lost in the pile, and seems mostly low-priority in her life. She says that because there is so much going on in her life, especially during the time of elections, she has not much time for political participation. She gets most of her news from social media. Additionally, she feels that she is not informed enough, and thus mostly disconnected from political issues. On top of that, she also believes that her one vote doesn't matter.

Interviewee 3 believes that a good way to increase voter turnout is to hold voting day in a more accessible way. Currently, it's 2nd tuesday after the 1st monday of november, so because it's a weekday, it's hard to physically get to voting booths in between work and taking care of her kid. Voting booths are also long lines that take a while to get through. She says that ideally, she would be able to vote online or on her phone; mostly from her home.

She thinks the ideal way to be informed is to watch a variety of news sources. Currently she mostly just sees political posts from social media and sometimes overhears her coworkers talk about candidates. She wants voting to be an easier process, so that when there's a lot going on in her life, it's not too much of a burden. She thought that the ballot was very official business, and didn't want to screw it up by not spending enough time on it.

Design Research Results and Themes

In our research, we found that people don't vote because they don't consider it to be of a high priority. This may be attributed to the fact that they feel like voting isn't that important, and simply because they have too much going on in their lives that it's hard to find time to study potential candidates before an election. It seems common that our participants attained their political news through the web or newspapers. Interviewee 2 stated that she had no time to keep up with politics due to work, which closely echoed the results of a study mentioned in the Huffington Post about reasons why low-income citizens tended not to vote.

Both interviewee 2 and 3 mentioned voting from the web; it would be easier and more convenient. This makes sense, since they not only have children to tend to, but they also have so much going on in their lives that they don't have the time to fill out and mail anything, or make a trip down to a poll center.

These results led us to conclude that when designing our product, we need to make something that is convenient - a product that you'd be able to carry anywhere (e.g. purse or pocket). Our product would also need to be able to provide them with information relating to the most relevant election. The information can't be too long, because it might detract them from voting since many of these people seem not to have a lot of time on their hands. Instead, the information should be succinct, and enough to allow them to make an informed decision when voting.

Answers to Task Analysis Questions

Task Analysis

1. **Who is going to use the design?**

   Low-income voters. We defined "low-income" based on the chart provided here:
   https://www.dshs.wa.gov/esa/eligibility-z-manual-ea-z/state-median-income-chart

2. **What tasks do they now perform?**

   Voting registration can be done either online or at the driver licensing office. Voting is usually done through a ballot sent in the mail that can be returned through the mail or at designated locations. There are special locations that will accommodate the voting needs of those with disabilities. Participation in this task is inconsistent: some perform it regularly while others don't at all. To obtain information on the current election, they read the newspaper, watch the news, and read articles online, such as from different websites and phone/tablet apps. Which method a person uses may vary.

3. **What tasks are desired?**

   The primary goal is to get our clients to regularly vote with confidence. By confidence, we mean that they are well-informed about the current election and can make an informed decision. We will do this by providing them with accessible, easy-to-understand information.

   A secondary goal is to encourage our clients to be more active in the world of politics. Mostly all of the people we interviewed were not engaged because they found it either boring, or just didn't have the time to participate. We hope that through some of the features offered on our device, such as searching for nearby political events/groups or a political alignment test, our users will be more engaged and find some interest in politics, thus increasing the motivation to vote at every election.

4. **How are the tasks learned?**

We hope to provide easy instructions, perhaps offered in a few different languages so that not just English-speakers can use the device, so that first-time or regular voters will be able to vote with ease using our product.

5. **Where are the tasks performed?**

Preferably anywhere that is of convenience for said voter. For example, if the voter is at home or maybe visiting family in another state, these would be viable places to vote. If they are in another country, they also have the option of voting.

6. **What is the relationship between the person and data?**

All voting data should be private. It won't be shared in any way without their permission so that clients of our product may vote with ease.

7. **What other tools does the person have?**

Our design would enable the client to search up relating political news about the current election at hand. These would be an aggregate of information obtained from newspapers, social media, or any other trusted news source.

8. **How do people communicate with each other?**

Users of our product may communicate with each other in person (provided that they know each other), through social media - we are thinking about having an option in our design that allows for communication with likeminded people - and through the participation of any potential campaigns taking place at the time of the election.

9. **How often are the tasks performed?**

Voting is preferably done at every election, though for a large portion of the low income population this does not happen. Registration is only required once, except in certain circumstances, such as after being imprisoned for a felony. Watching/reading the news can occur with high variance per person. Some seek it out daily, some will only be aware of the most high profile incidents. Naturally, we will focus more on those who perform the tasks least when designing our project.

10. **What are the time constraints on the tasks?**

Registration usually has to be done around a month before election day. As long as you are eligible to vote, there are no further time constraints. There is an 18 day period ending on election day to cast your vote. You must be informed before voting if it is going to have any effect. While some information will be available long before election day, some might not be available until close to that time, so closer to voting, the more effective it will be.

11. **What happens when things go wrong?**

When things go wrong, people either do not vote, or vote against their own interests due to a lack of information. This means their issues are often ignored, or not given very high priority by the government. Also, if they don't carefully secure their information so that it is only them who can unlock the device, someone else may log on and vote for them - something we do not want to happen.
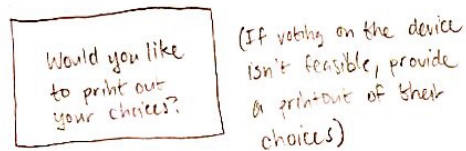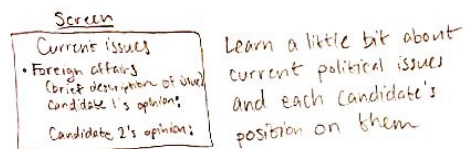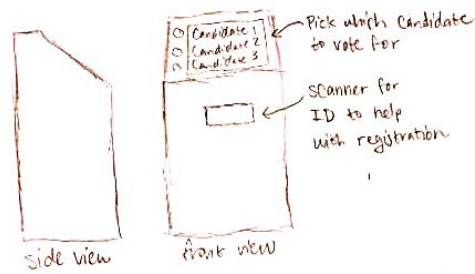
Proposed Design Sketches

Sketch 1
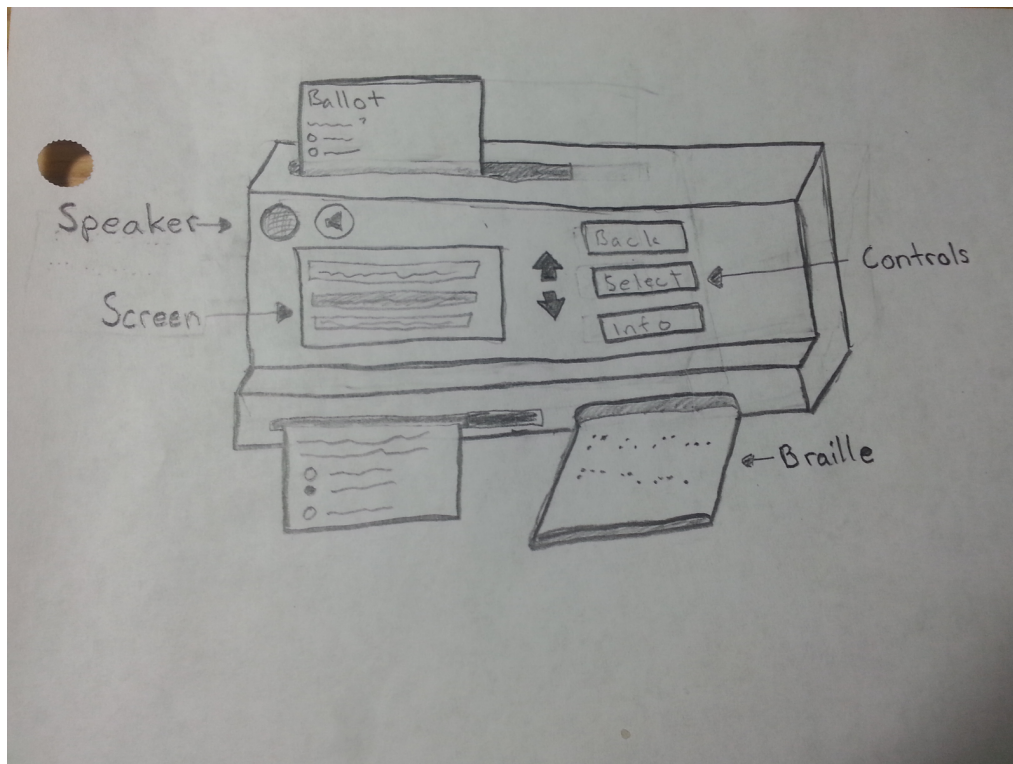
This device would support the tasks of voting on the machine, voting more easily, learning about issues, and incentivizing voting. It allows voting from the machine by feeding your ballot through the machine, and entering your choices on the screen. The machine then fills in the corresponding choices on the ballot. To make voting easier, it provides an easy to use interface, and features such as the ability to listen to the options for those who are unable for some reason to read the ballot or fill it out by hand. It is also portable, allowing users to take advantage of these features from their home. For each option the users can press the info button, allowing them to learn more about the issue selected. After voting, the machine provides proof of voting as a way to create social pressure to vote.

Sketch 2

ballots

WA King County Elections   John Smith / voter profile

Timeline

Your Ballot

- February general election
- April primary election
- August special election
- November special election

1. ~~~~~   70% aligned   Research
2. ~~~~~   40% aligned   Research
3.

voter webapp

Easy as 1..2..3!

1 register for a voting account
2 inform yourself
3 vote in an election

voter account login

registration (similar to existing online registration)

1. qualification → 2. identification → 3. personal info → 4. declaration → 5. confirmation

are you a U.S. citizen?
o yes
o no

Research

1. Proposition No. XYZ

+ explanatory
+ in favor
+ in opposition
+ requirements

70% alignment

why?

You agree with
~~~~

you disagree with
~~~~

voter profile

John Smith
registered since 1997

You are...

~~~~~
~~~~~
~~~~~
~~~~~

retake alignment assessment
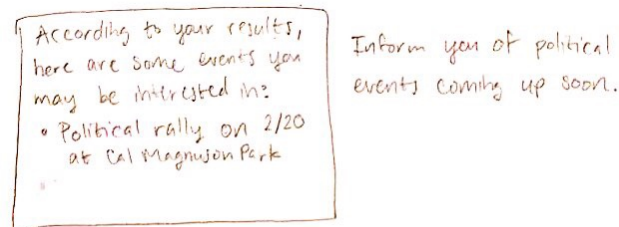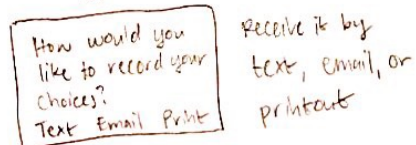
Political Alignment Chart

Voter registration happens on the website online just as many areas have already implement (like King County). However, registration will include a user account to access the voting website. Within this website, there is a timeline of the voting cycles, showing the user the current one that is happening. There will be a ballot, with political alignment scores next to each choice, and a voter's guide. The user has options to do more research on each issue. The user can use their profile, which includes a political alignment assessment results to summarize their core values and beliefs that influence political alignment scores.

Sketch 3

Side view   Front view

- Pick which candidate to vote for
  - Candidate 1
  - Candidate 2
  - Candidate 3
- Scanner for ID to help with registration

Screen
Current issues
- Foreign affairs
  (brief description of each candidate 1's opinion:
  Candidate 2's opinion:

Learn a little bit about current political issues and each candidate's position on them

Would you like to print out your choices?

(If voting on the device isn't feasible, provide a printout of their choices)

Or

How would you like to record your choices?
Text Email Print

Receive it by text, email, or printout

According to your results, here are some events you may be interested in:
- Political rally on 2/20 at Cal Magnuson Park

Inform you of political events coming up soon.

This device is a sort of electronic voting kiosk that may be used as an alternative to ballot booths at polling places. Since it takes a long time to vote and lines tend to be long at polling places, this would streamline the process of voting and hopefully keep lines shorter. If voters are still unregistered, the kiosk has a scanner for identification, and would therefore allow people to register immediately before they vote. Alternatively, if the voter is already registered, the scanner would be used to verify their identity. From there, people can inform themselves with brief descriptions and explanations of political issues being discussed in the current election, along with each candidate's opinions of them. Once they're satisfied with what they know, they can go ahead to vote for their candidates. After they finish voting, the kiosk will display a list of upcoming political events that they may be interested in, depending on the candidates they chose. This list may be printed, emailed, or texted to them so they won't forget. As an alternative, if voting on this device isn't possible, the voter may inform themselves and still choose candidates. However, instead of actually voting, they would be able to have their chosen candidates printed, emailed, or texted to them. This would allow them to vote faster once they have a ballot in front of them since it will eliminate any thinking time when they get to the polling booths.

Written Scenarios

Figure A illustrates a man of low-income background who is unable to vote because he gets off work too late. As a result, he misses the hours of operations of the polling booths and is unable to vote, even though he would like to. Thankfully, there is now a solution to his problem! By filling out a form given out by the government, he is able to request VOTR, a voting device that connects to the internet and makes voting easier. The device will be sent free-of-charge to him, provided he qualifies as low income. Once he receives the device, he can read the provided instructions to learn how it works. The device will ask for his social security number to make sure he is who he says he is. If he isn't a registered user, he may register through it. In order to prevent others from using the device and making a vote for him, he may lock it with his fingerprint. When voting starts, he is able to vote at any time before the deadline - location does not matter, including the country. After he has voted, he doesn't need to return the device. Instead, he may keep it until the next election, where the device will be updated so that it reflects it. No longer does the man need to worry about getting over to a polling booth to vote. Instead, he can do it in the palm of his hand, and now has some extra time on his hands to take care of any other things on his plate.

Figure B illustrates a woman who wants to inform herself on political issues; it is nearing the voting deadline, but she is very busy because she is a single parent. She must take care of her son with the little free time that she has. Thankfully, there is brief and descriptive information for each option and issue on the ballot. With so many potential choices, she is delighted that she can simply take a political alignment questionnaire on the voting device to see how much she aligns with each option on the ballot. That narrows down her scope of research to between 1-2 candidates or choices (with the highest alignment percentage), as opposed to having to look up and research every single option. The quick research links on the side of those 1-2 options offers her extra reading material from different views to better inform her of which option best represents her interest, if she happens to have the time to do extra research. If not, then her best bet is to simply pick the one with the highest alignment percentage. She can retake the alignment survey at her whim, whenever she feels that her values or positions on political issues has changed. Now she is more confident that she is making an informed decision when voting on the ballot.

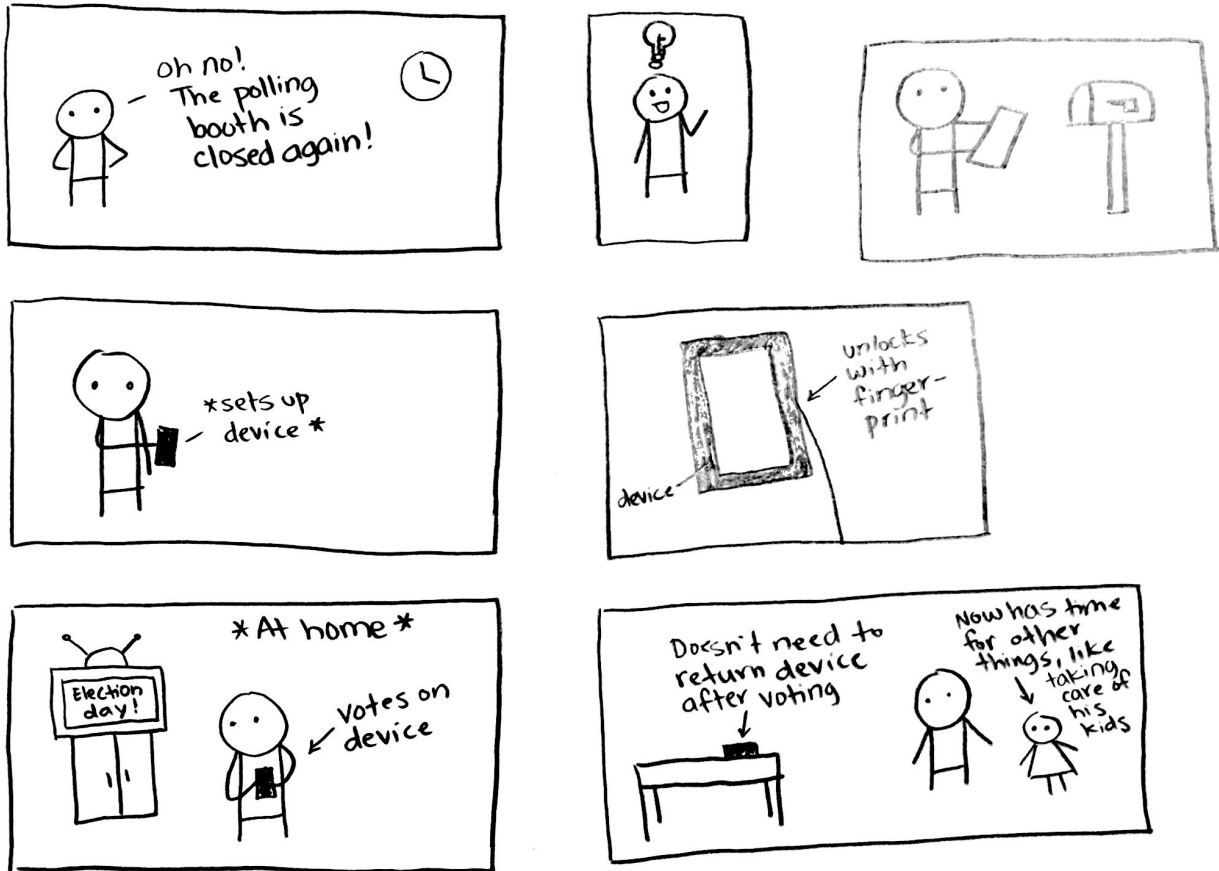## Storyboards of the Selected Design

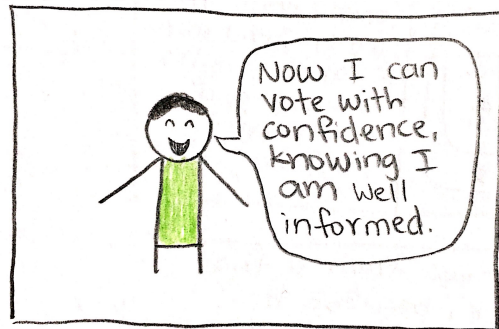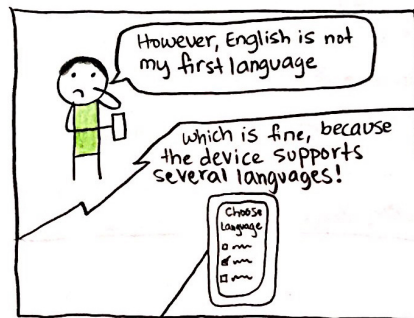**Figure A**: Voting from the device in a location that is not a polling booth and is before the voting deadline.
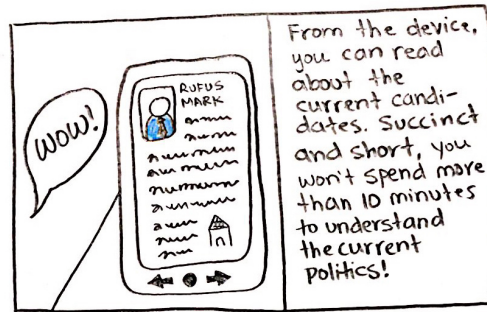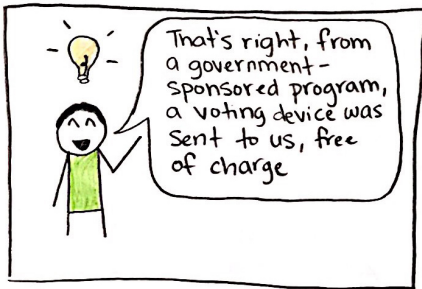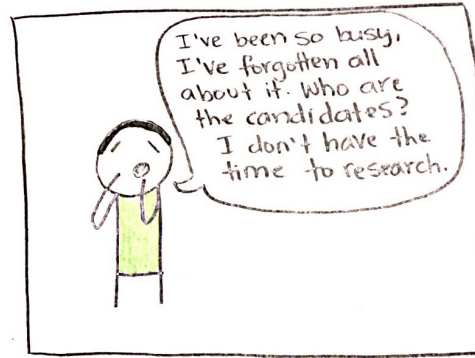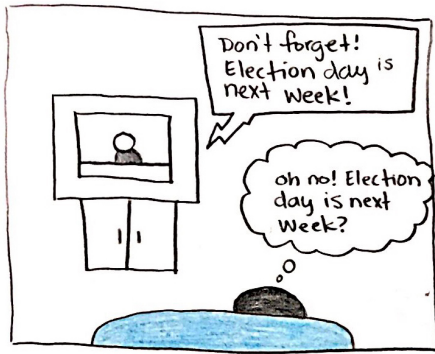
Figure B: Succinct information concerning the current election.