

# PBC (Project Ballot Creator)

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**Abstract**—Creating a ballot is what users do to prepare for voting. Before people can vote a ballot must be created. Prime III, a voting software, needs certain information from a ballot for the software to work properly. Prime III is a developing third generation voting software, and ballots are needed for the software. How can we get the information from users easy and quick as possible?

**Keywords**—voting, ballots, navigation.

## I. INTRODUCTION

Project Ballot Creator was given as a project this summer. The project was based off Prime III. Prime III is a third generation voting software. It allows disable people and people that speak different languages to vote. Anyone could vote with comfort with Prime III software. Created in 2005, Prime III came to development in the Human Centered Computing Lab. The ability to vote using both voice and touch. Prime III is on the rise for voting. Project ballot creator was designed to create a website that allowed people to create ballots. The project focused on helping user enter information with ease. Ballots are what people use for voting. With Prime III software, ballots are needed for it. Ballots that need more information than a normal ballot would need. Prime III needs more information from users, information that includes how to pronounce certain words. The website will also allow people who just want to create a ballot for a school election do so. The ballot creator website will to play a key role in the Prime III process.

## II. DATA COLLECTED

Before creating a website, there is information that needs to be gathered. What information is needed for a ballot creator website? How can user enter information with ease? What type of users would use the website? What do users want in a website? With these question, information was gathered from people and online sources.

A. *The Prime III voting software required the following information in a javascript file in order to function properly.*

Ballot ID, Ballot name, number of contests, number of parties, number of propositions/amendments, party name, party label; contest name, pronunciation, number of candidates, number of candidates can a voter select (example: representatives, you can vote for more than one candidate); Candidates name, pronunciation, choose party, photo; Propositions/Amendments name, pronunciation, type of question (yes-no, accept-reject), text of proposition/amendments.

The information from what is needed for a ballot creator website and what users need in a website obtained led to the first website wireframe. The first wireframe included all the right information needed for creating a ballot. Ballot name and id, contents, parties, etc., but not a good navigation and clear website. The idea of having dynamic features in the website was a great idea. With the first wireframe, Users tested it and gave feedback. The feedback from users were couldn't navigate through the website, no color, page not lined up correctly, and not enough help.

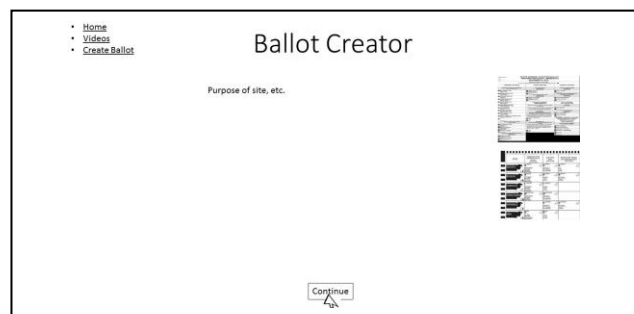


Figure 1. Homepage First Wireframe

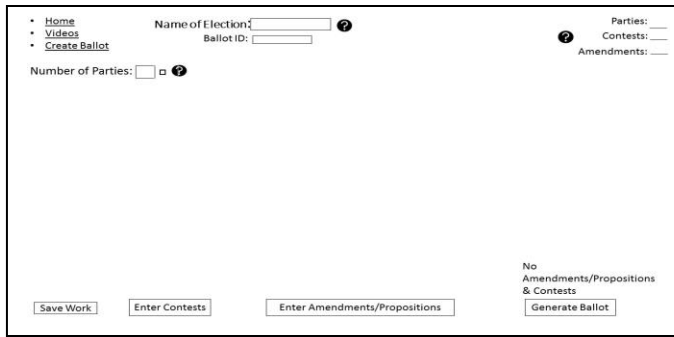


Figure 2. Enter Parties Information Wireframe

The photos above is the first wireframe. The content was off and had no color. The information was hard to enter and users didn't interact well with it.

The feedback led to creating a second design for the ballot creator website. With the user feedback, the website improved dramatically. Every change leading to the final design was tested by Grad students. After enough feedback was gathered, the final wireframe included color, better navigation, information could be entered with ease, and had every help possible when going through the website. The final wireframe was tested on users and they loved it. They loved the improvements and how they could go through the website with ease.



Figure 3. Homepage Second Wireframe

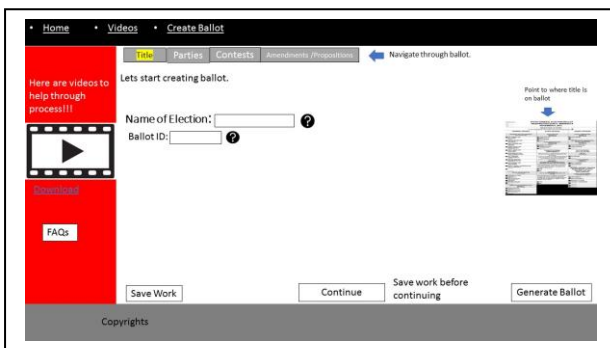


Figure 4. Title Page Second Wireframe

The photos above show the transactions from first wireframe to second wireframe. The second wireframe was developed through the feedback given.

### III. OVERVIEW

Information that was taking in with creating a website, navigation is key, never know who might need help, and trial and error. The process took working with as many users as possible. The users are a major factor in this process. Without the users, there is no feedback to improve the ideas. The combined idea is now in development with other workers. Coming up with the combined idea was more of what was good features to use. So, all ideas were taking into consideration and the combined wire frame was in development. The wireframe that was used consisted of at least one feature from every coworker. The features that was used from my wireframe were navigation, the way a user enter in information and having assistance for the user. People loved the idea of having a pop up menu for entering the information needed. The ballot creator website was finalized.

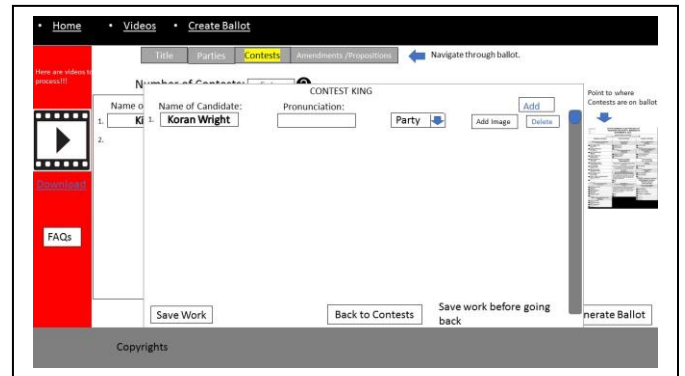


Figure 4. Pop up menu Second Wireframe

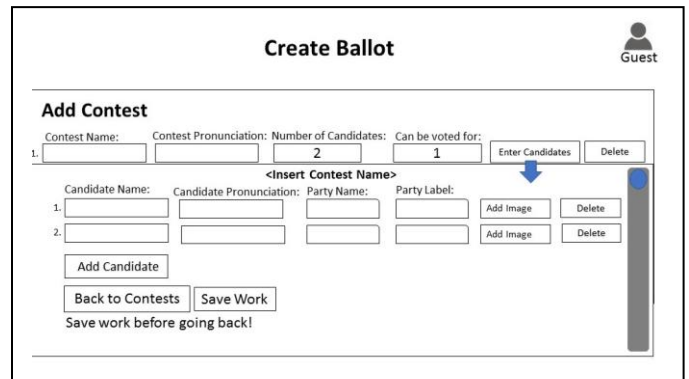


Figure 5. Combine Idea pop up menu

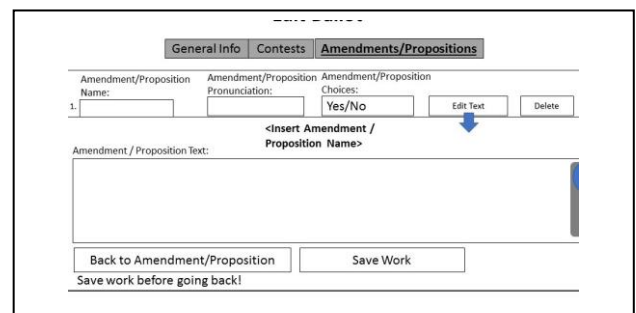


Figure 6. Combine Idea Navigation

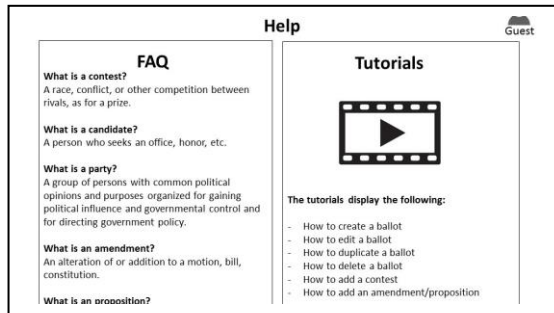


Figure 7. Combine Idea Help Page

The photos above show the combine idea that came from my idea. People needed help with going through the website and didn't know what certain things were. So, the help page is developed for the users. The website, that is already made, wasn't an effective way to enter in information. So, the pop up menu is developed as a modern way to enter information. The navigation through the ballot creator is included, because people like to be in control of what they do. So, the navigation allows them to go through the ballot how they want to. The pop up menu, how the user enters in information, navigation, and help for the user.

#### IV. CONCLUSION

Prime III is still in development, along with the project ballot creator. The project started with gathering information and turning the information into a great prototype. The first wireframe started with less knowledge on designing, but as users tested the first wireframe, my knowledge expanded on designing. The more and more feedback from users testing led to a better design. Development took some time, because of not knowing how to do certain things and put certain things in place. But after a while it became easier with the resources being put in tack. Even with designing, there is no stately design. There are always things needed to be edited and changed. The project is still not completed. The website

still needs to be implemented and put out. In the future, hopefully, the website will be used by others and a help to others.

#### ACKNOWLEDGES

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#### Remarks

It was exciting seeing people test my prototype and give feedback. The researched required a lot of trial and error. Coming up with an idea and seeing how people react to it was great. There was some feedback that wasn't to excite, but it helps with making the prototype better. It's fun working with other people and it opens to better ideas. The first wireframe wasn't bad but it could have been better. With designing, there is always room for innovative ideas and constantly changing. There is no just one stately design. Creating a ballot creator website was exciting. Hopefully in the future, I can see my idea get implemented in the website.

#### REFERENCES

- [1] J.E.: Lets Vote: Multimodal Electronic Voting System. 11th International Conference on Human-Computer Interaction, Las Vegas, Nevada CD\_ROM (2005 - Act" - 2006)
- [2] Robertson, S. A user-centered approach to the design of electronic voting systems. Human Computer Interaction Consortium (HCIC) (2003).
- [3] "Prime III", Verified Voting, 2017. [Online]. Available: <https://www.verifiedvoting.org/one4all/>. [Accessed: 02- Aug- 2017].
- [4] Cross, E. Vincent, et al. "1 Prime III: One Machine, One Vote for Everyone." (2007).
- [5] Cross II, E. Vincent, et al. "Prime III: A user centered voting system." CHI'07 Extended Abstracts on Human Factors in Computing Systems. ACM, 2007.
- [6] Dawkins, Shaneé, et al. "Prime III: an innovative electronic voting interface." Proceedings of the 14th international conference on Intelligent user interfaces. ACM, 2009.