Spring 2018 | Final Projects

User Interface (UI)

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Motivation/Abstract

Our team has designed and engineered a working user interface (UI) to be used in conjunction with our classes blockchain voting system. As our class worked towards modernizing the voting system, we needed a UI that was easy to use and understand for the everyday people that would be using it. Not only was this made to be easy to use, it is was made and designed to reduce the amount of labor and time required for every election since every election is done through paper ballots.

Background

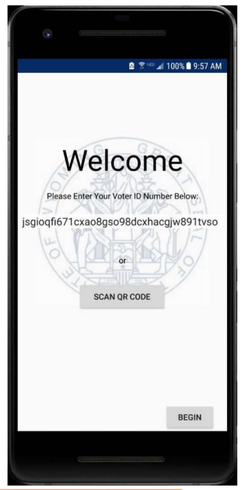
Current voting systems are becoming old and outdated. The current system does not have any methods in place that allow voters to confirm that their vote was counted/registered nor do they have a very efficient system. While it is impossible to stop fraud entirely significant inroads have been made. Even with current technology, there have been 44(1) documented cases of voter fraud since the 2000 elections. Adding new technology will continue to reduce these numbers as well as improving public perception of the problem. Since the process of voting is done entirely by paper ballots, the system is inefficient and wasteful of not only material resources but for time and energy as well.

http://amppob.com/results-arkansas-poll-finds-shifts-in-economy-health-care/

Project Summary & Major Tasks

We wanted our voting system to not only be easy to use, but practical enough that it would survive in the real world and be accessible to as many people as possible. Our voting system will allow voters to not only be confident that their votes were counted, but they can also be confident that their votes are counted correctly. For our piece of the project we had four main goals/tasks:

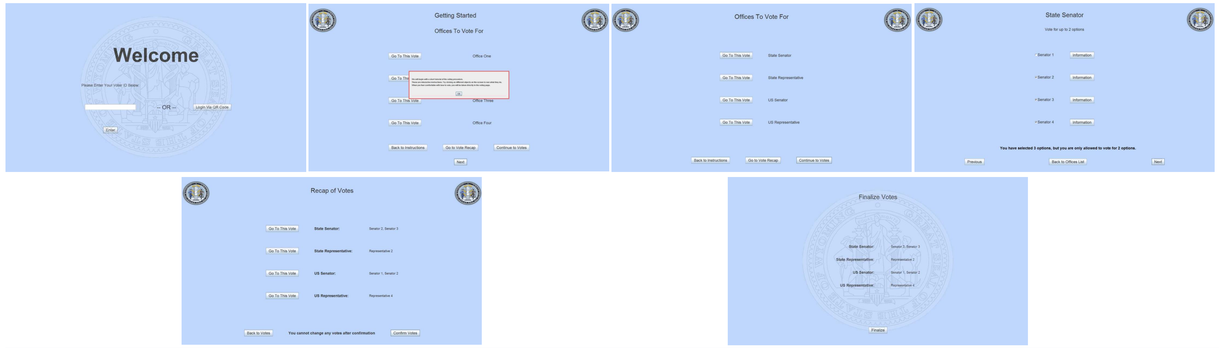
- Voting Application
- Mobile Application
- Administration Application



Limitations & Challenges

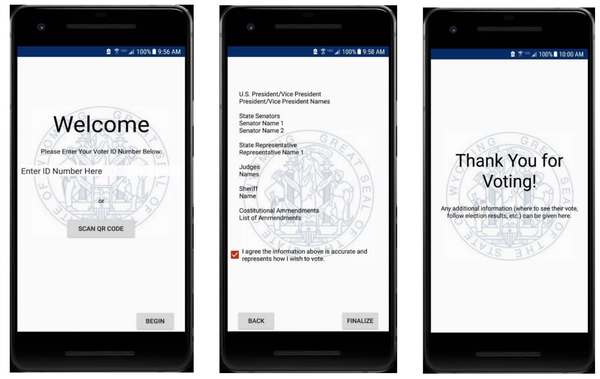
- Aesthetics
  - Not as perfect as we hoped, but still looks good.
  - Had to prioritize functionality
- API
  - Compatible naming
  - Modular representation of each back end
- Multiple Stakeholders
  - Accounting for disparate needs from different groups and organizations.
- Mobile challenge
  - Recycler view
  - Limited time

Deliverables



Mobile App

Everyone has a cellphone in this day and age, so in order to help move the voting system into modern times we needed a voting mobile app in addition to our desktop app. Our app allows voters to send a vote from anywhere with their phones as long they have internet access. Voters will be able to participate in their states voting even if they are not currently physically within the state, which could improve voter turnouts.

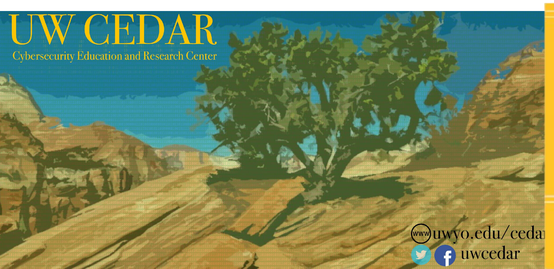


Conclusions & Future Work

Our future plans for the UI would be to implement a more robust system that could be used for county elections all the way up to presidential elections as well as make it more aesthetically pleasing. The hope is to have the system implemented country wide so that voting can be accomplished easier and quicker by more people. For the admin app, we would want to have a fully functioning admin app with real data, and make it more aesthetically pleasing.

References

(1) PBS.Org - http://www.pbs.org/weta/washingtonweek/blog-post/numbers-voter-fraud



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Shout out to Mikey B. (Mark Blockchain)

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