About:

EZ Ballot is a prototype application built for simplifying the voting process. Current voting machines require many voters with visual, cognitive and dexterity limitations to vote with assistance. To answer this problem a universal designed ballot app was designed and built that enables people with disabilities to vote. To streamline the voting process the design has a simple and consistent linear structure.

Design concept: simple interface with multimodal inputs and outputs.

To simplify the experience EZ Ballot breaks down the voting process into a series of simple yes or no questions. The ballot structure works same way for all inputs and outputs regardless of modality. To provide flexibility for people with impairments, EZ Ballot allows inputs through voice, touch and physical buttons and output via visual, auditory and tactile feedback.

Wireframes and Flow Diagram:

Prototype:

I worked on prototyping of the application. The application was developed for Windows 8 tablet. Regular user studies were conducted to evaluate the design. Based on the feedback the prototype was modified to incorporate additional features or to remove redundant ones.

User Testing and Evaluation

The final prototype was tested with 16 participants with vision, cognition and dexterity impairment. The feedback was quite positive. The research team is continuing another round of iteration based on the results.