To,

Mr. Joseph Kiniry, Daniel Zimmerman and Joey Dodds

Free & Fair

Dear Mr. Kiniry, Zimmerman, Dodds,

The majority of our voters have been questioning the voting system as they don't truly trust that the elections have been done fairly over the years. Whether this is due to mis-counting, fraud or manipulation, the system has been questioned by a majority of voters, who are looking for a new and secure way to vote. Because the delegation of trust to both people and computers, voters have little basis beyond blind faith upon which to trust that their personal vote was actually counted, let alone counted correctly.

The requirement needed to win over the trust of our voters is where we come in by creating a smart ballot box. This smart ballot box will help answer voter's questions by providing the correct count of legitimate votes, securing against tampering, affordable, trustworthy, that way the election's results will not be called into question and our democracy will not be at risk. This box will allow voters to either cast or spoil their ballot, securely recording the choices they make.

This box is to be composed of rescuing a variety of components from miscellaneous commercial-off-the-shelf (COTS) hardware such as file cabinets, printer lids, and arduino uno. Using the arduino uno will allow us to insert the bitstream Free & Fair created directly into the system, rather than creating our own. For the software requirements we just have to make sure to have the I/O setup properly, and make some edits to the firewall code already present as well as SBB which is linked to the free RTOS to work with our system. For the parts Free & Fair won't allow us to access outside the office, we will be working in their work environment.

We would like to go off the resources provided from your first prototype and make it more cost beneficial for voters everywhere which includes using the design and software already created, These will be modified to the parts we select. The goal is to provide you with a fully functional, low-cost and secure system featuring all the deliverables stated above by June 3rd.

Sincerely,

Ali Saad, Jonathan Christian, Jiaqi Liu, Nick Long
Electrical and Computer Engineering Students at Portland State University