Group Project Outline

CSCI 4628

Java Secure Voting System Outline

**Abstract:** We intend to develop a secure United States Presidential voting system. To accomplish this we will develop a Java application that provides a GUI for the user to choose from a list of candidates as well as write in a candidate that is not listed. Upon submitting, the user’s vote will be kept track in a MySQL database. This application will emphasize strong defensive programming to ensure as little tampering as possible. We intend to develop in a windows environment. ChatGPT will be used to expedite the development with the Professor’s permission.

* User Input Validation and Security - Thomas and Noah
  + User input will need to be validated
    - Prevent Buffer Overflow
    - Sanitization to remove harmful scripts
    - Input Filtering
  + Error messaging
* GUI - Ricky
  + Proper GUI Assembly
  + Secure UI First, Friendly UI Second
* Database - Jalen
  + MySQL Database
    - Takes in input
    - Takes in user and password
  + Parameterized Queries
* Backend - Lee
  + Secure Connection to database
* Tools
  + Java
  + Windows Environment
  + MySQL
  + Apache
  + ChatGPT