

SmartVault

SmartVault is a project consisting of the idea and the drive to allow a user to wirelessly connect to a vault, and be able to open and close it at will via a Android mobile app. The project will utilize the hardware use of a Raspberry Pi Zero W, a standard breadboard, diodes, TIP120 transistors, and 330K resistors, and a power supply supplying 12V. On the software side, the project will utilize Flask to handle the HTTP requests from the Android application, and the SmartVaultApp will utilize the Java language and its various libraries to create a fluid and intuitive GUI for users. The user will simply just need to open the Android application and sign into their account with their username and password, and once granted access, provide the vault's IP address in order to connect to it, and the vault's specific password. Once the user has given the correct password, the user can open and close the vault with a push of a button. This project is expected and hoping to implement a treasure hunt game using Google Vision API, as well as other features that allow the user various methods of password protection (passphrase, scroll-key lock, etc), as well as other convenient options.