

This IoT-Controller prototype is scripted in Python and meant to be ran on Linux and MacOS machines. Certain modules might not be interpreted by Windows machines.

- In order to run the prototype:
 - Install the cryptography.io library tools.
- Start the IoT device software in /IoT/IoT.py in terminal:
 - `$python IoT.py [port number] [secret key]`
 - Port number is the port you are running it on.
 - Secret key is any string used for the private key when using AES128/256 within the program.
- Start the controller software controller.py in terminal:
 - `$python controller.py [cipher] [secret key]`
 - Cipher is what is used for the encryption between tunnel between controller and IoT device (either aes128, aes256 or null cipher encryption)
 - Hence type in: aes128 or aes256 or null.
 - Null cipher is simply no encryption.
 - Secret key must be the same as the one used for the IoT device.
- Follow the terminal instructions of the controller to log in, update the currently connected IoT device or read in personal information from it.
- Note: To reinitialize set username and password via the controller, you must delete hashfile.txt