Progress summary #1 - Orion Gonzales

From completing the goal of attempting to gather information on the network's security and additionally the best possible security, more progress was made from that point. Beginning this semester, I decided to organize and make visual quality-of-life changes such as redesigning the wifi connection prefabs to have a pillar that changes size based on the signal strength, to have a dynamic range of color based on the signal strength rather than being a static red, yellow, or green, and finally added a symbol to represent the security on top of the prefab that displays the connection information. These changes allow both the user and me when debugging to visualize the basic details from afar rather than having to come up close to each one. Additionally, I adjusted some code to increase the rate that the wifi prefrabs are instantiating which used to be six seconds but now is three. With the prefabs, I created a small object that the user could touch to delete the prefab if they want to rescan that particular spot.

A new screen display has been created so that the information layout is more organized for the user and an additional screen to keep track of a database I'm creating. So far the database which is supposed to save the program-mapped information of networks later on, is currently just dictionaries doing the work. Currently, the information is saved by switching between networks within one session of the application. For example, the database will keep track of how many times there has been an excellent, bad, none, vulnerable, or secure connection within the secondary screen and the mapped-out layout of the current objects and each of the information within those prefabs. This will allow the user to switch between multiple networks and keep the mapped-out area saved if they wish to return to another network. Finally, a BSSID prefab was just created to allow the user to have it mapped out if they are within the same network but a different access point, this prefab will display information about which network and the BSSID of the previous and current area.

For my goals, the next progress report is to bug-check the scripts to be able to add Data Receive speed and transmit speed for the current network location. Also, create a code that will spawn the BSSID prefabs since the script isn't completed yet. A better clearing, overwrite, and delete system has been implemented already through ideation which will be buttons on the already-made control panel that follows the user. After each small task has been finished, the next

large goal to tackle is the creation of a shadow IT function, which will begin by creating a script to detect all the SSIDs within the area so that later it could be chosen by the user if the network of the following is either white listed or black listed. If there is a detection of a new SSID network within the area, an AR popup window will appear for the user to use. The outcome will also be saved into the database for further development. Finally, within time a new plugin will be looked into for an anchor point function which is called ARCORE XR which is both supported by VR headsets and Unity functions. This will aid this project both by allowing the user more control to choose which anchor point they want to use within a room and for saving or exporting functions later on.