

Project Proposal:

I will make an airplane shooting game that two players can play together and can use their hand to interact missile and airplane instead of just using keyboards. For my project, I will make use of Pygame, Open CV, and Multi Socket.

My first problem would be to make an airplane game playable solely on the Pygame. To solve this problem, I will study Lukas's blog so that I can understand what Pygame is in fully. This problem is composed of making my airplane, enemy airplanes, missiles, and to control background images. As an algorithm for this, I will make each class on different py files so that the code seems organized.

My next problem would be to make use of Open CV so that user can use their hands to play with other than using keyboards. To solve this problem, I will look up Github and study some codes that are related to Open CV. For this part, I have to first make my computer to understand my hand motion that will work as my airplane. Also it has to recognize a specific hand gesture so that the airplane shoots a missile.

Another problem would be to make use of multi socket so that two players can play together. To solve this problem, I will study the concept of Multi Socketing. In specific, one player would become a server and the other player will be a client. And two players would communicate each other by means of multiple layers of network protocol such as TCP/IP.