

Team Guns of Patriots

Assignment 3 - Milestone 3.2 Report

John Tran, Victor Yang, Nelson Safo

We implemented the GUI to be able to connect between two players over the internet. The game now starts with a menu asking to choose “Start Game” or “Play Online”. Choosing “Start Game” starts the single player mode, while choosing “Play Online” opens up the online menu. So far we have a “Host Game” and a “Join Game” button, as well as other buttons we used for debugging. The “Host Game” button makes the machine on which the button is clicked the server, and the “Join Game” button tries to find a host on the same port. Our connection establishment procedure currently features the host broadcasting an invitation to the broadcast IP 255.255.255.255 to the default port, and if our client finds this invitation, it will accept and start the multiplayer game mode. We hope to improve this connection method to be less sketchy.

Our multiplayer game mode features the passing of paddle movement, paddle rotation, ball position, ball velocity, and game reset state over the internet. Paddle and ball values are sent every 60 frames (for now) over UDP, and the game reset state is sent on CEGUI button input to reset the game. Our 2nd player paddle rotation is bugged because we have not yet updated the rotation restrictions for it. We did not complete the protocol to send paddle rotation yet, only the client sends its orientation to the server.

The single player game mode is broken because we accidentally edited the single player game loop instead of the multi player game loop in several occasions. We believe we can fix it quickly by reverting to old code for the multiplayer game loop.

We still need to send score across computers and update the game to match real ping pong rules. We plan to be able to do this, but if we somehow become tight on time, we will reduce the amount of rules we are implementing. We also hope to improve the connection setup process so that it is less sketchy and allow the user to try again without having to restart the application. For now, sometimes the connection problem can mess up and the best way to try again is to restart the application. Overall, we’ve gotten a lot done, but a lot of small things have to be changed for the game experience to feel stable.