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Checklist

1) a) My input queue is in the InputQueue folder
   On my client side the only thing that goes into my input queue is player 2 input message.
   On my host side I send just about everything through my input queue. GameState, FencesHit,
   Player Input, GameOver(made this before I realized I could have just used GameState), rotation,
   missile and mine messages
   b) I have a single output queue and it is the output queue folder

   c) Only place that data is sent or received is from the queue.

   d) Created 6 additional data messages on top of the ones that were in the updated demo.

   e) Updated the Game Manager to handle all the changes to data flow. Serializing and
   Deserializing the data was no issue, and I feel the input/output queue is pretty straight forward.
   My struggles lied elsewhere.

2) a) Yes my Lobby is working
   a. My screen cycles from the selection to the lobby, on game over the cycle back to the
      home screen, but if I hit the space bar on my client side it goes back to the lobby and
      says im connected, but the host goes directly into the new game if they are already
      connected from the previous game.

   b. I have the local host IP saved as default, but on client startup the command line asks for
      a specific IP, if entered it will use that one, otherwise it runs locally. The port is hard set.
   c. External machine IP is stored in the myclient file and is a member variable.

   d. Created the lobby, and ability to set external ip address, I tested the functionality
      between my desktop and laptop and everything worked as well is it did locally.

   e. The lobby was pretty straight forward after we went over it in class. I tried for a while to
      use sprite fonts and somehow get input on the Lobby screen itself instead of it being
      input at the command window on startup but I was unable to figure this out.
3) a) For my ship I send an inputMessage to the server from the client that tells of movement
   intent, missile or bomb useage, then an updateMessage back to the client that lists the ships
   position, I also sent a rotationMessage that the server sends to the client so that they don't have
   to do any physics based operations for the ships location.

   The bombs are dropped when a return message from the server is received. I combined my
   missile and bomb message and the only info used by the bomb is that the ship should drop it.

Missiles I had a lot of trouble with and could not get them to full work. They also are sent from the server to the client using the Missile and mine data message, but I couldn't figure out how they were updating, I tried including the direction and x/y cords to initialize, I even made a Missile update message that was sent whenever a missile was active using a missile ID, but that didn't work either. They blow up when they impact something on host maching, so I think the internal physics is working on the client machine but I could not figure out how the were operating.

b) most of the Messages I made were specifically for the Host to sent to the client, the code to execute them isn't even stored on the host side.

c) collisions are figured out on each machine. I have the fence visualization done via server message but the bomb/missile/ship collisions is local.

d) added/chaged several functions within the ship class to allow for message update on the client.

Tried adding missile ID to allow for position update via message from server but I culdent get that working.

e) Most of the trouble I had came from the missile, I was never able to figure It out as explained above. The ships rotation also gave me a bit of trouble but I was able to get that knocked out. I tried using different information via message to find was to get the missile to update correctly and some of those DataMessages are still in my code, but they didn't allow me to get them to update properly. One Idea I had for the missile issue, was to rework the missile class completely and just have it be a visual object only having the spirte, and updating its position every frame but I did not get that done. I had no trouble getting Bomb to work.

4) a) https://www.youtube.com/watch?v=rqRUzR0_1XI&feature=youtu.be