WEB ARCHITECTURE

FINAL PROJECT

WINTER 2022 RISD-CE

OSI MODEL

PLAYER 01:

ANGELINA STORTI

START

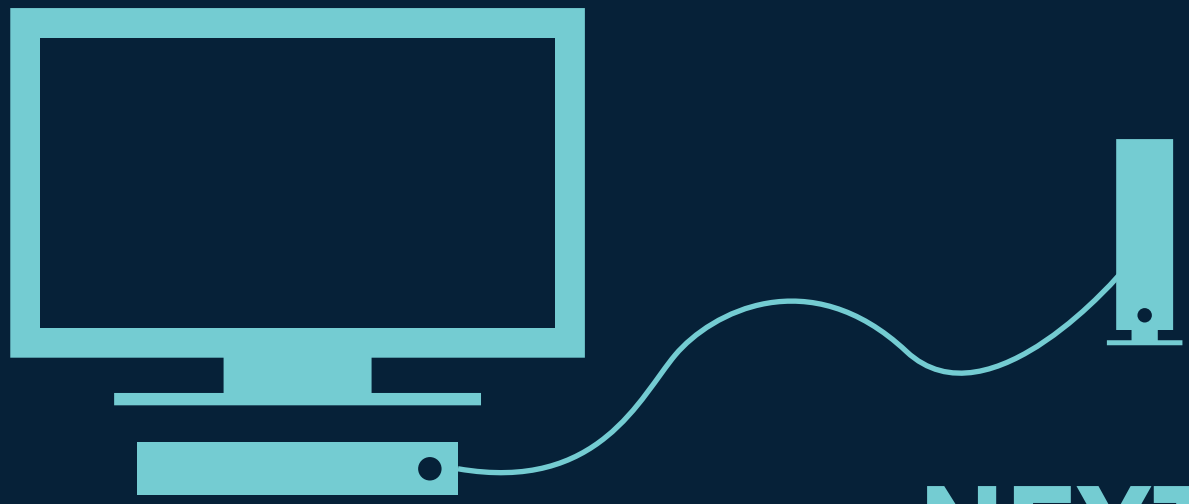
TOPIC: P2P

Based on what I learned about the OSI model, I will be using my experience on peer-to-peer, known as "P2P" video game online networking. I grew up playing several multiplayer local games online with my brother and our mutual friends (and still do today). A P2P network is created when at least two or more computers are connected and share resources and data without a separate server.

NEXT

LAYER 1: PHYSICAL

I will be using my xbox as an example since I use it for P2P games. My xbox connects to the internet by running an ethernet cable directly from my modem into the LAN port located on back of my xbox.



NEXT

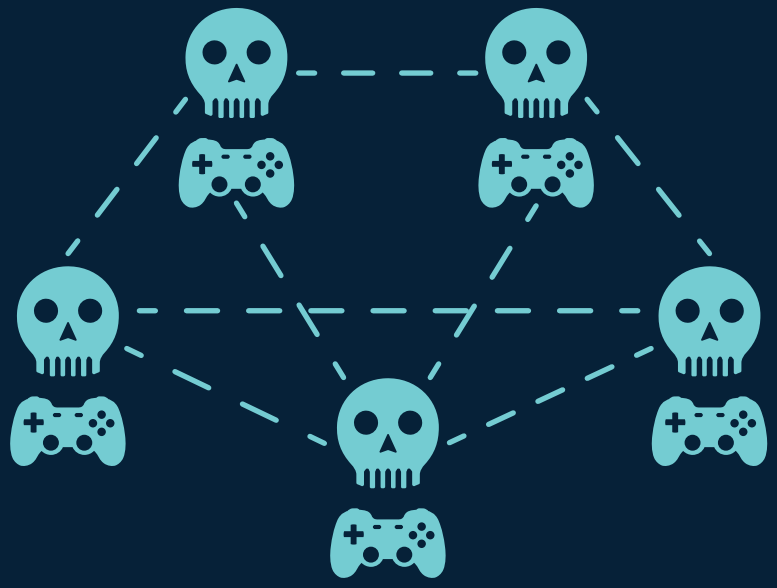
LAYER 2: DATA LINK

The data link checks for any errors regarding my connection to the internet through my modem. I log into my gamer profile, the information is broken down into bits as 1's and 0's. This helps with data transfer.

NEXT

LAYER 3: NETWORK

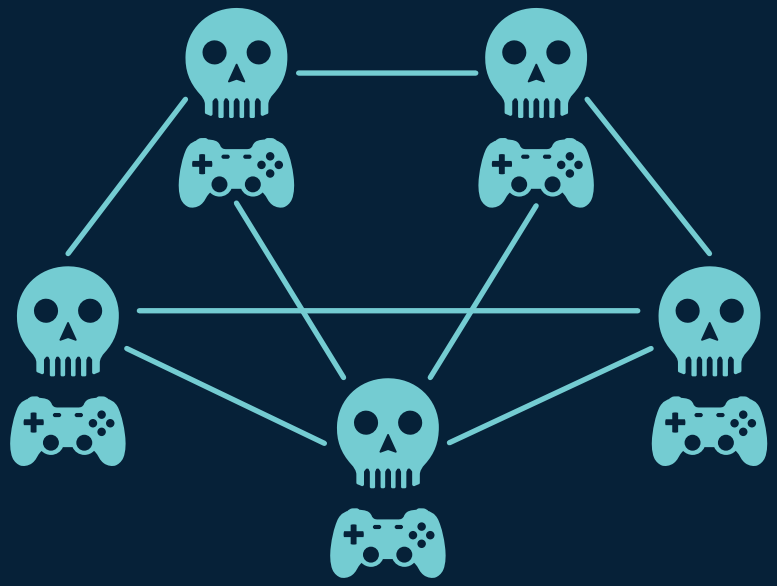
A local game is started between my brother and some friends. One of our xboxes becomes a host server. Our data packets are being sent to appropriate places by using our I.P. addresses. Waiting for final transport.



NEXT

LAYER 4: TRANSPORT

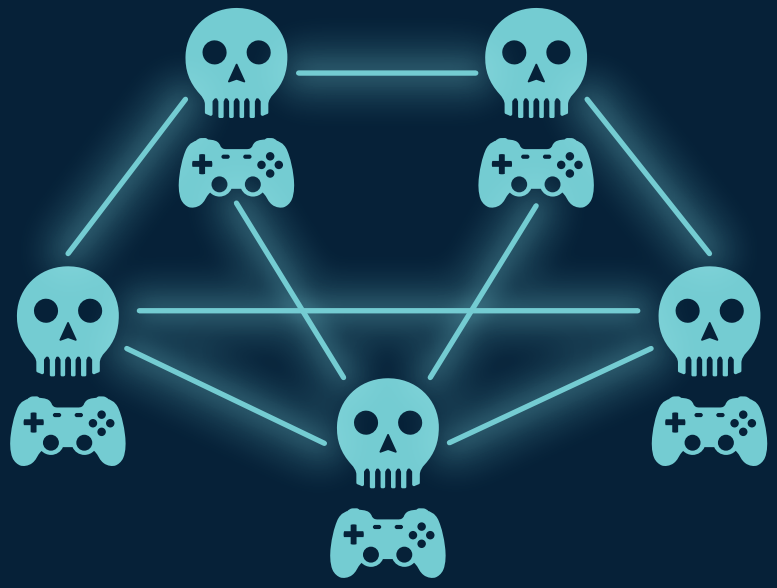
- This is when all players' data is actually sent to our modems and then through our xboxes, establishing connection. This is done by piecing data bits back together.



NEXT

LAYER 5: SESSION

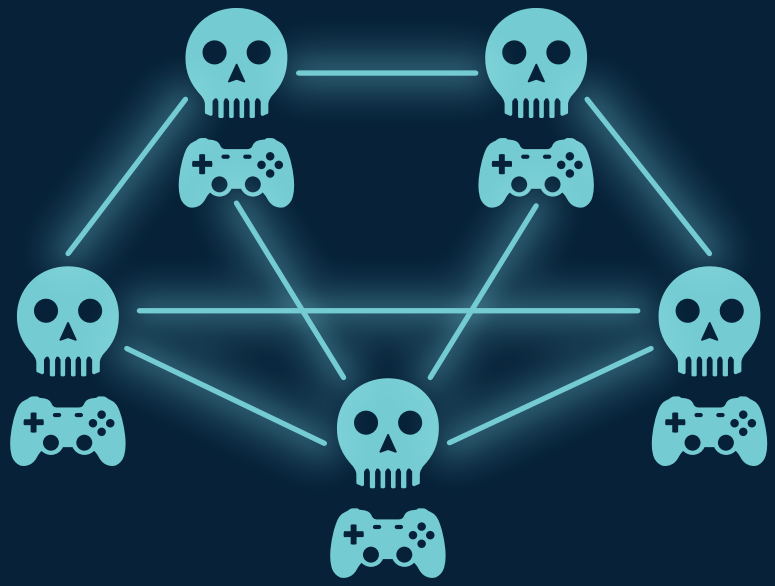
- Our connection to each other's modems/xboxes is maintained and the lines of data are still kept open in order to keep communicating.



NEXT

LAYER 6: PRESENTATION

- Data continues to be communicated, translating it into a format that our modems/xboxes understands.



NEXT

LAYER 7: APPLICATION

The players' interaction with the formatted data is presented through game play. The result shows up on each player's screens as live game play continues.

END