

ICS 167: Multiplayer Online Systems Project

Pong Game

Milestone 4: Latency Mitigation (Due in dropbox 11:59pm: 3/3/2015)

In this milestone you are going to implement your latency mitigation mechanism to improve the players' gaming experience. Your mechanism needs to consider the case that the server and the clients are run on different machines.

- **Latency mitigation**

As you have already observed in milestone 3, network latency can have huge effect on the gaming experience. Now you are going to figure out a way to mitigate that effect. For example, the game client may slow down the ball when it moves toward the player's paddle so the player has more time to react. There is no perfect solution to this problem. You may try any technique that you think will be effective.

- **Synchronization between machines**

Now you need to consider the case that the server and the clients are run on different machines. If your latency mitigation mechanism requires looking up system time, you need to make sure all of the machines are synchronized. You may connect to a NTP server to sync your machines before you run the game. Or you may implement the synchronization mechanism in your code.

Please put your server and client code in different folders with one team member's student ID as the name of the files and the folder. Compress them to a zip file, and make sure you upload it to the course dropbox by the deadline. Please use this Student for consecutive submissions. Always list all team members IDs and names in the files. Track participation and what each member contributed. This will be part of the overall evaluation of the team grade and individual grades.