

## **Sprint 2 backlog**

### **Ping Pong Game Logic**

The goal of this sprint is to design a smooth and functional ping pong game that two users can join and play together

#### **Feature 1: Client Side Game Rendering and User Control**

Task 1.1: (3 hours) [Yuanyuan Dong]

Implemented the overall DOM of the game rendering on stage.js and the update APIs for ball moving and pad moving.

Task 1.2: (2-3 hours) [Yuanyuan Dong]

Implemented the client side communication to server that could serialize sending packets and deserialize receiving packets.

Task 1.3: (4-5 hours) [Yuanyuan Dong]

Implemented the physic engine including: call back for periodical ball moving and bouncing calculation, prediction queue and entity interpolation

#### **Feature 2: Server Side Coordination and Authorization**

Task 2.1: (4 hours) [Tianyi Chen]

Implemented server side communication Django channel that would receive user's data, transform and coordinate data, and send authoritative data back.

Task 2.2: (3 hours) [Tianyi Chen]

Implemented Server side physic engine for ball bouncing and movements.

Task 2.3: (2-3 hours) [Tianyi Chen]

Implemented Server side reconciliation logic for game judgements.