To: Prof. Felleisen
From: Derek Feng, Micheal Reveliotis
Subject: Milestone sequence for Fish game system
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The milestones for the Fish game system will demonstrate the progress of the system as it is developed from a locally functional game with simple AI players to accepting network connections from clients who have developed their own game-playing algorithms. Our milestones will consist of an initial visualization of the game state, a demonstration of the game played with local AI players, a showing of clients being able to connect to the game through our protocol, and lastly a full game demo with remote AI players connecting and playing through an entire round of Fish.

The first milestone will be a visualization of the game state, which will make the appearance of the game immediately apparent to interested parties. For this milestone, we will require that the functionality of the rendering component and the game state component are implemented.

The next milestone will be a functioning demo of the game being automatically handled by the referee with local AI players. This is an advancement from the previous milestone, as the game framework will have been implemented and visibly functional, which investors will be able to understand without having to know about implementation details. This milestone will require the referee to be completed, so that the game will be able to handle requests and responses for moves from players, as well as some example player components to be completed in order to generate said moves.

The third milestone shows remote clients' capability to establish connections to Fish game servers, which is key to making the system profitable. More specifically, the third milestone requires the server-client connection to be functional to the point where they can exchange data and create at least sample output in order to visually demonstrate progress. This needs the game server and connection management component to be at least partially functional, enough to connect a server and a client, though at this point game state data exchange may not be complete yet.

The last milestone will be a full game run by remote AI clients. The game server and connection management system will be fully functional at this point in development and will be able to relay the game state between the server and the AI players to allow proper progression of the game. Additionally, the server would support the transactions required for player entry into the tournament.