

## Memo: Software Component Identification

### **Component A: Croupier**

Description: The croupier is the Fish game system's play manager. It is responsible for admitting players to the game, receiving bets and entry fees, and paying out prizes. The Croupier is also responsible for the game lobby timer.

### **Component B: Game State Manager (GSM)**

Description: The GSM is a Croupier subsystem responsible updating the game state when it receives a move from players. It is responsible for ensuring bot players submit valid moves, and it is additionally responsible for recalling the turn order and determining whether the game has reached an end state.

Since a video game is a type of finite state machine, the GSM is essentially the logic that dictates the state changes to the machine.

### **Component C: Game GUI**

Description: The purpose of the game GUI is to convert a json object into a visual representation of the game state.

### **Component D: Web Framework**

Description: The purpose of the web framework is to facilitate playing the game over a TCP connection. It will collect moves submitted from players and submit them to the game state manager on the server. When the server is updated, it sends this update to all connected clients.