

Poker game

(Sprint2 Planning Document)

<https://github.com/srhee91/PokerGame>

Team 3

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Sprint2 Planning Document

1. User stories to be implemented

GameSystem Part:

1. As a user, I would like the host to respond properly to player actions received from the client in accordance to the rules of Texas Hold'em.

Host Part:

2. As a developer, I would like *Host* to be able to allow the *GameSystem* and *HostMessageHandler* to exchange *GameState* and *PlayeAction* objects.

Network Part:

3. As a user, I would like to choose a game lobby from a list of all available hosts in the local network instead of specifying an IP number.
4. As a developer, I would like *HostMessageHandler* and *ClientMessageHandler* to be able to set flags to notify the *GameSystem* and the GUI, respectively, when new information has been received.

GUI Part:

5. As a user, I would like my action to be sent to the host when I click on a button. I would also like to see updates on the screen during an ongoing game as a result of the players' actions.

2. Description of tasks

1. Make the *GameSystem* class able to update the *GameState* depending on received *PlayerActions* according to the rules of Texas Hold'em. (e.g. updating chip amounts, calculating/distributing split pots, shuffling/dealing cards).

(Sang Rhee, 40 hrs) (Somi Choi, 10 hrs) (Boheon Jeong, 10 hrs)
2. Make the *GameSystem* class able to determine the proper order of player turns based on the *PlayerActions* it receives and to send out *GameStates* prompting the players when it's their turn.

(Boheon Jeong, 30 hrs) (Somi Choi, 30 hrs)
3. Implement *Host* class to the point where *GameSystem* can interact with *HostMessageHandler* to send *GameStates* and receive *PlayerActions*.

(Hanchen Li, 20 hrs) (Yuying Wang, 20 hrs) (Sang Rhee, 10 hrs)
4. Modify *CalculateRank* class to be able to compare players' best-hands for all possibilities and finds the winner.

(SoMi Choi, 10 hrs) (Boheon Jeong, 10 hrs)

5. Integrate *ClientMessageHandler* methods into the GUI *ComponentListeners* so that button presses in the GUI will cause the proper *ClientMessageHandler* action to occur.

(Yixing Wang, 30 hrs Hanchen Li, 30 hrs)

6. Add a *searchForAvailableHost()* method that can search the whole subnet and return an array of IP addresses with Poker game lobbies. Concurrency will be used to make sure this can be done in a few seconds.

(Yuying Wang, 30 hrs)

7. Add a UI element (either in its own GUI mode or as a popup in *StartMode*) that will display a list of Poker game lobbies that a player can join after *searchForAvailableHost()* returns. The user can select the lobby they want to join.

(Yixin Wang, 20 hrs)