

Multi-Player Cribbage

by:

Travis Reese

Project Overview:

For this project I will be creating a cribbage game. This game will be designed as a server and client setup. I will be using Java as the language, with networking and JavaFX for the client-side GUI. As I have not worked with Java networking or Java FX, part of my project will include researching and applying those technologies. I'm hoping that I will learn a great deal about java networks and network security that I can apply in future jobs.

Research:

Java Networking	5
JavaFX GUI	10

Expected Functionality:

Server Application	[25]	
Game host		15
Network server		10
Playable Cribbage game	[10]	
Follows the game rules:		
card deck with shuffling and dealing		5
pegging, hands, and crib rounds		3
score tracking		2
Client Application	[20]	
Connects to server, auto-joins game		10
User Input		10
GUI	[10]	
JavaFX		5
Board/scores		2
Cards in hand, cards in play.		3

Additional Functionality:

Three-way Gameplay	10
Game size option (2 or 3)	5
AI Player	20
Multiple difficulties	5
In-Game Chat	15

Point Explanations:

Server

Game host

- Start and control a game
- update clients individually

Network server

- Network control
- user limit, auto-reject if full

Client

Connects to server

- makes the network connection, update client if full
- auto-join game once connected to server
- user input

- accept user input
- relay input to server-side

GUI

board / scores

- draw the board, and the scores
- update information as updates are received

Cards: Hands, play

- Show the cards in only my hand
- show the cards in a separate area as they are played

3-way game

- make a game that can be played by 3 people instead of 2
- give the option in client, instead of making server decide on launch

AI

- make a computer player that you can play against
- allow user to select difficulty

Beginner

- follows rules, plays crib and cards randomly

Intermediate

- plays cards and crib so max the points in hand
- pegs randomly

Expert

- plays cards to max points in hand
- know whether to throw points to crib
- pegs using strategy (runs, pairs, etc)

In-Game chat

- A networked chat function to allow players to message each other

Grading Scale:

A	90+
B	80-89
C	70-79
D	60-69
E	< 60