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CS 341: Data Structures and Algorithms

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Game Proposal

Project Idea

The project idea is to do a GUI with multiple games to choose from in the client program. Our group is planning to implement a few different games with our program. When you launch our program a dialog box will display and give you a list of games to choose from. After the program is launched you will be able to choose from 4 games: Blackjack, Speed, Memory, and Simon Says.

Program Requirements

The program is going to need a few classes and interfaces to run this program, and a list is below:

* GUI Client
* Card Class
* Deck Class
* User Class
* AI Class
* Black Jack Class & Interface
* Sim Says Class & Interface
* Speed Class & Interface
* Memory Class & Interface

Goals

For an A grade: We would like to add multiplayer support which may incorporate mapped keyboard keys. A computer player may be added in which plays against the player(s). Multiple games will be used, along with credit for each user in which is able to be gambled. Statistics may be tracked for various games using multiple output files. Lastly, users may be able to differentiate into players and admins.

For a B grade: We would like proof of concept, therefore there is some aspects of multiplayer incorporation. There will also be multiple games within the overall program. The GUI depicts playing cards using images.

For a C grade: We would like the basic framework of the program created. A GUI will have the layout and the structure of how the program works. An initial popup window will display which games or players would like to be selected. Data structures are used to hold card or deck objects, while ADT's are used to define the methods and their specifications.

Mile Stones

1. Work on is the GUI Client program.
2. Work on the common classes that would be used for each game.
3. Work on is to figure how to set up AI and multiplayer support.
4. Work on each individual implementation of separate games.
5. Put it all together to test and debug making sure it all works.
6. If time, add additional features to program.