



CS 315

Software Design

Homework 10

Model-View-Controller

Due: Dec. 10, 11:30 PM

Objectives

- To gain experience with the Model-View-Controller architecture
- To design a user interface

Assignment

In this assignment, you will modify your design from Homework 9 to incorporate a user interface. Up until this point, our design has focused on Model classes, like Card, Hand, Game, Player. We have ignored issues concerning the user interface.

Your goal in this assignment should be to reuse as much of your existing design as possible, extending it to include user interface elements to display the state of the game to the users and to allow the user to play the game.

You should turn in:

- Drawings of the main screens that the user would encounter while playing the game.
- Descriptions of the view classes you need, which model changes they observe and how they are notified of those changes.
- Descriptions of the controller classes you need and how those controller classes update the model and/or view.

Your updated design should be documented using a combination of diagrams and textual description. Use diagrams where you believe they lend insight into the design. Use English to explain what your design is and why.

When designing the user interface, consider what a user sees of her own information, the information of other players, and the common information. While, in general, when playing this game, we would expect the game to be distributed so that users are playing on different computers, you can ignore all details concerned with distribution when doing your design. Assume that each user has one or more windows that she can see and none of the other users can see. In particular, each user should have her own view on the community cards. Do not assume that the users can all somehow see a single community card window. (Pretend each user is in her own dorm room.)

Also, you can ignore user interface details involving how a user joins a game or leaves a game. Just concern yourself with selecting the version of Poker to play and the actual playing of the game.

Grading

Completeness of UI design	20 points
View classes	20 points
Controller classes	20 points
Use of UML diagrams	20 points
Discussion of design	20 points

Turning in your work

To turn in your work, please submit on Ella your diagrams (as a jpg, gif, or pdf) and your design discussion, preferably as a pdf file. Alternatively, you may submit paper copies of your work.