Team project: Mancala game

Team Name: Checkers the Dog

Coders: Lam Lu, Matthew Summers, Wesley Eversole

CS 151

3, December 2012

In completing this project we have used a number of object oriented design patterns to complete this Mancala game. To start off we have used MVC to control what the user has access to. This lets the Mancala game handle more than one view. In the view we use composite patterns to build up object like the player pit side. We could have done the composite pattern better if we used another class, a panel class that would build panels with 6 buttons on it but we did not do this for the project. What we did do is use the decorator pattern to add more functionality to the buttons of the game. In our GameButton class which lets us give the buttons player ID information and the buttons position ID on the board, allowing our model to better use them. The ability for the view to then be devoted to Mancala game came from the strategy pattern which MancalaView class was the back bone of this functionality. This let our views and any other view that we might add, to access to a model that our controller has access to.

The game logic for Mancala took time to fully understand it need to be looked in to in order to understand how best to be applied. Special moves like the capture move took knowing both player sides and which spots were the opposite pits. The undo functionality was tricky as well since it need to change back the last turn in the board. This was simply solved by keeping a copy of the last turn available to then revert the change.