# CS110 Assignment #10 Due Wednesday, December 4<sup>th</sup>

This assignment will be worth two homework grades. 10% extra credit will be awarded to students that present their projects at the CS Fair.

For this last homework assignment you will be creating a GUI-based implementation of the kid's card game, War. If you are unfamiliar with the game, you can learn about the game here <a href="http://en.wikipedia.org/wiki/War\_%28card\_game%29">http://en.wikipedia.org/wiki/War\_%28card\_game%29</a> There are some variations in the way the game is played. For our implementation, when a "war" occurs

- Both players play the next one card of their pile face down and then another face up
- If a player runs out of cards during a war, they will immediately lose

Design decisions are yours to make; you will be graded on your design decisions. The only requirement is that you must use inheritance at least once. I would encourage you to sit down with a deck of cards and either play a game with a friend, or simulate a game yourself.

I have provided a zip file with the card images that I used. You may use these or provide your own.

#### Submission

- You will submit using GitHub as described in class (submit a link to your repository to Blackboard by due date). If you missed this lecture, you can find a handout describing the process on Blackboard
- In addition to any java files and image files, submit a .html file for each class containing the javadocs documentation (in jGrasp, File->Generate Documentation).
- Note: nothing will prevent you from altering your files in your GitHub repository after the due date; however, all updates have a time stamp associated with the files. The last update prior to the due date/time will be graded.

## **Grading 200 points total**

Design decisions 40

- appropriate class choices
- use of inheritance/polymorphism
- clean, clear public interface to each class

Implementation 75

- Correctness
- Reasonably efficient, well-implemented
- Separation of game implementation and GUI

#### **GUI 40**

- Clean, intuitive design and implementation
- Appropriate choice of components

## Documentation 30

- Complete documentation
- javaDocs files submitted

## GitHub 15

- Repository complete with all files
- A history of prior versions