Phase 3   CSc 421   Kutztown

Purpose: Web-based application employing multimedia and internet play
Points: 45 + 5 (Presentation)
Due: Dec 9, 2020 @5 PM.   This is absolute.
Description: For this project, you will upgrade the memory game from Project 2

For your final assignment, you will further develop the game you wrote for Project 2. Requirements include adding multimedia and internet play.

The upgrades include:
- ➢ If you have game pieces, and it is feasible, they should have an image that changes when the mouse is over it when they are turned down (no effect to the visible side's image).
- ➢ When the user right clicks anywhere on the game board, present a floating menu from which they can choose to appropriate data, e.g. the score so far. Include a cancel option.
- ➢ Incorporate sounds. GWT should provide facilities. Discuss possibilities in the forum.
- ➢ Incorporate or refine a scoring system, particularly is instructed in the Phase 2 grade report.
- ➢ When the game ends, play appropriate animation indicating the player's performance.
  - o Use different animations for each event that triggers an animation. You may use video files, but at least one animation should be a series of pictures.

Notes:
- ▪ Internet play will be implemented using servlets, not necessarily implemented in GWT's server files.
- ▪ Turn in a file, named **readme.txt**, (all lower case, this exact name) that details any and all design decisions you made, upgrades from Phase 2, along with any other information you would provide to someone who purchased your product (including how to play)
- ▪ You need a listener to handle the right click. See if you can simply listen anywhere on the game board.
- ▪ Alternate versions of multimedia are acceptable.
- ▪ This is a senior/graduate level course. Proper style and modular design is a must. Substantial penalties, up to and including your program not being graded, will be levied for lazy, incomplete, or chintzy style, and/or not employing a proper modular design.
- ▪ **Graduate Students**: Implement the game as designated in the grade reports. This can include scoring, logging, game add-ons, etc.

Deliverables:
     Readme: Your readme, which must include the project's link and a Javadoc link.
     Project: Zip up the following and submit via turnin:
- • A zip with your GWT project's *src* subdirectories
- • The war file.
- • The html and css files from your war directory
- • web.xml, if you altered it.

     Deploy your application in a directory different from Project 2 to permit comparison.