PROJECT 3
CSC 4370/6370 WEB PROGRAMMING
SUMMER 2016
PROJECT 2 DUE DATE: 07/25/2016

Overview

A team would ideally consist of about three members, but may have as few as one or as many as 4 members. This is an excellent opportunity to improve your skills as a *team player*, a highly-desirable type of worker in the real world. (See Becoming a Successful Team Member.)

The project will consist of a five minute presentation to the class on anything related to the course material. Here you get to choose a topic of interest to you, to be creative, and to show the fruits of your labors to the class. The project does not have to be anything complicated. Be creative and have fun.

Today

1. Form teams
2. Introduce yourself to your teammates
3. Exchange email addresses
4. Choose a leader - liaison to the instructor
5. Brainstorm ideas
6. Plan how you will collaborate/communicate
7. Choose someone to "integrate" the parts done by the team members

Requirements

- **You shall choose one team member as leader for purposes of coordinating the project and reporting to the instructor.**
- **See the syllabus for how much time each team member is required to spend on the project.**
- **Each team shall make a presentation lasting five minutes or less in which you present your completed project. At the beginning of the**

- o **Leader's Name**
- o **Project Name**
- o **Description: a one-sentence description of your project**
- o **Team Members: a list of your team members (last and first names) and their project responsibilities.**
- **Optional: Prior to the time of the presentations, it is strongly suggested (though not required) that your team copy to codd server a folder containing all the files for your project**.
  - o **Please use either the leader's name or the project name as the folder name.**

Suggestions for development and presentation

- You may organize your team any way you like. One way is user, designer, coder/programmer, and tester. Another way is an architect / chief programmer with a team of programmers each of whom works on one part of the program.
- The presentation could be structured as follows:
  - o a PowerPoint slide show to introduce the problem
  - o a demo run of the program
  - o a display and explanation of some of the code
  - o a question and answer period

- Sample Project. A design for a popular card or dice game or Mini search engine that searches for books and movies, Survey generator (user creates the question and program populates the question).
- You must use JavaScript and form user entry

Implement the Game of Life in Java Script.

The game of life is a grid of cells where each cell is in the state of being alive or not. The next generation of the game depends on the current generation and the following rules:

1. Any live cell with fewer than two live neighbors dies, as if caused by under population.

2. Any live cell with more than three live neighbors dies, as if by overcrowding.

3. Any live cell with two or three live neighbors' lives on to the next generation.

4. Any dead cell with exactly three live neighbors becomes a live cell.

Requirements:

1. Create a variable sized table. (Grads use DHTML)

2. The background color of the cells will determine life.

3. The cells can be turned on or off with the mouse.

4. Display the current population (Grads only) and generation.

5. Create a button for each of the following functions:

    1. Start the game

    2. Stop the game

    3. Increment 1 generation

    4. Increment 23 generations

    5. Reset the game(Population=0 or other, Generation=0)

    6. Random Population (Bonus)

Be prepared to present in class.

- All are Programmers - Create the interface and write all the code.
- All are Testers - Develop a test plan including test procedures, test data, method of tracking and reporting bugs, and assigning priorities to bugs. May also help write code to fix bugs. Put together the PowerPoint slide show using input from the other team members.

- Decide on a schedule; estimate hours for each phase; determine when, where, and how you will communicate and coordinate your work. Part of class time will be available for team work and I will be available to help you. Email is a good way to communicate.

- PowerPoint slide show could include the following:
  - User - statement of problem, and general requirements (inputs, outputs, etc.)
  - Design - Overview of solution, key design features, user interface, UML class diagrams, pseudocode.
  - Programming - highlights of language and API features used (packages, classes, methods, etc.)
  - Testing - how tested (e.g., test plan, data used, tracking and reporting bugs, bugs fixed/not fixed, etc.)
- Choose one or more presenters. You may choose to have one person do the entire presentation. Or perhaps one will do the slide show, and a second team member will demo the program. Or, each team member may wish to present his own work.

Grading

As long as you meet the requirements (see the **Requirements** section above), you will receive full credit. Your team must turn in the paper as specified above and do the presentations in order to get credit. It will not be sufficient to simply turn in the files to D2L and have it posted on codd.