**CSCE 155N Matlab Programming Project 3 – Summer 2015**

**Assigned: Tuesday 6/27/2016**

**DUE DATE:**

**Electronic: Friday 7/8/2016 at 11:59 PM**

**(no hardcopy needed)**

**Multisite BBBB**

**Problem Statement:**

*Note: The game may be the same, but we are adding some interesting functionality.*

For this project the game will be “multi-user”, as are many top video games these days. A pair of players should be able to get Matlab running on their computers or use CSE, and invoke their own copies of multiBBBB.m. The copies will need to communicate with each other. One relatively easy way is to use your personal web site capability on CSE where files can be placed and be made visible to others. It is also feasible to set permissions in CSE accounts so that others can have limited access to particular folders and files simply by using cd to get in. Still another is to use a facility like DropBox and set up sharing. All these possibilities can be described in greater detail. I am setting up a demonstration that may help.

**Collaboration:**

Work together as a team on any or all aspects of the research and design. Ideally take advantage of the talents of each member of the team. Use your teams to finalize each of the multiple design options. It is essential to keep track of who did what and where any useful information was found. You need to keep track when you help someone and when you receive help from someone. This includes students from other teams and those outside the class, TAs and me (the instructor). Keeping a log is highly recommended.

**What and How to Submit:**

Read and have your program conform to the “Program Documentation Guidelines” which were provided previously.

As you make progress with the project, periodically handin (electronically) updates numbered as mine are on my site. How many updates really depends on what seems natural. It might be 5 or it might be 15. Anyway, we should see a progression of “working” programs handed in as ***multiBBBB1.m***, ***multiBBBB2.m***, etc.

By the deadline hand in electronically the two files, multiBBBB.m (the Matlab function file for the game), and multiBBBB.doc (which contains summaries, documentation, and sample runs).

Each team member should submit his/her own analysis of the relative contributions of all the members toward the project. This should be submitted electronically using each member’s handin account. This is in addition to the acknowledgement section of the main report. Assuming allocation is fairly even, all will receive the same grade.

The Word document should contain the following, all carefully labeled:

* Cover page with name(s) and the account under which it is submitted, title, date submitted, etc.
* A discussion of the features you implemented in the project. Describe how they work and what Matlab options were used to program them. This should be at a fairly high level, not a line-by-line analysis of the code.
* An “instruction manual” that a non-programmer can use to set up and run the game.
* An annotated cut and paste sample dialog sampling of the running of the game. (Hint: Use the ‘diary’ command or cut & paste as appropriate.)
* A discussion of the testing that was performed. This should include testing of each component as it was being built, and testing of the final program ensuring that it works properly under a comprehensive range of conditions.
* An annotated cut and paste of a sample dialog, demonstrating how your program responds to extreme and faulty input. (This could be combined with the previous section.)
* Acknowledge all collaborations (both internal to the team and external), detailing what each person contributed individually, and what was done jointly. Indicate approximate percentages of the work contributed by each person in design, coding, testing, documentation, and report preparation.

**Grading Criteria:**

* Properly running features – 30%
* Program logic is well designed – 20%
* Progress versions – 20%
* Documentation guidelines are followed – 10%
* Handin Documents formatted and arranged as specified – 10%
* Testing is comprehensive – 10%