# *Web Programming II (420-C20-HR)*

# *Assignment 4 – Animations and Libraries*

Date assigned: Tuesday, April 19, 2016

Date due: Tuesday, **May 10, 2016**

**Overall Objectives**

These assignments are part of a large, final assignment which will demonstrate the learning objectives for the overall course. There are 4 assignments that will make up the assignments for the course.

The overall assignment is to build a one person casino game such as: blackjack, roulette, slots, poker, keno, bingo or crown & anchor. The user (player) gets to start with a sum of money and play the games against the computer. Each game has different limits and different pay outs. The idea is to build the foundations of the casino in the individual assignments. If time permits we will combine the assignments into one casino at the end.

The four assignments will be as follows:

1. Assignment 1 (this assignment): Set up the basic rules of the game. This will not include any graphics or fancy interface, but serves to try and understand how to program the rules using JavaScript. This is an exercise in design and testing; let’s make sure the base is correct before moving forward;
2. Assignment 2: Create and validate the form for the user information and use this information as part of the game play. Add some simple graphics to the game;
3. Assignment 3: Add storing the user’s information so that it can be maintained between games.
4. Assignment 4: Use JavaScript libraries to add animation to the games; create an animated splash page for your casino.

**Basic Rules for Assignments**

1. You MUST keep all the formatting for your code in an external CSS file. Uses classes and ids whenever possible and employ good naming standards. This will come in very handy when completing the final assignment. I STRONGLY recommend using a template (DWT in Dreamweaver) so that, when the assignments are put together, applying the templates is easy.
2. We will use a “mobile first” design philosophy. The games must be able to play on mobile phones, tablets and desktops. They will likely behave slightly differently on each of these platforms.
3. Your JavaScript should be put into functions wherever possible and all functions should be kept in external files and linked to the html file that is using it.
4. This is to be taken professionally. Part of learning in this program is to learn to be a professional in the field. Make sure you take that into consideration.

**Learning Objectives**

Upon successful completion of this assignment, the student will be able to:

* Create an animated splash page using two types of animation
* Use jQuery and jQueryUI libraries for form validation and animation

To do:

1. Create a folder named YourUserNameC20A04Casino.
2. In this assignment you must work with the previous assignment that you completed.
3. Using the name of your casino, design a splash page which will be the first page that user sees when starting the application. It can be a door that opens; floodlights that scan over an image on the page, moving letters/images, etc… use your imagination. If you use images make sure you attribute any copyright information as necessary. The following requirements must be met in the Splash page:
4. The file name must be index.html
5. You must use JavaScript for your animation;
6. The animation must be unique for at least 20 seconds (unique means that it cannot be the same two second animation repeated over and over in that 20 seconds);
7. You must use both a canvas and a non-canvas moving image;
8. The animation must be related to your casino;
9. The casino name must be displayed on the Splash page; and,
10. There must be a way to skip the animation and go to the next page.
11. When the animation is complete or the user presses the Skip automatically jump to the intro.html page. When you get to the intro page, follow the same rules as in the last assignment.
12. Update game.html to include animation while the game is played. This includes things like, but not limited to:
13. Dealing cards (Blackjack, Poker)
14. Spinning/selecting balls (Keno, Bingo)
15. Rolling dice (Crown and Anchor)
16. Spinning images (Slots, Roulette)
17. Dragging a dropping things like poker chips (all games)
18. Change the intro.html form to use the jQueryUI JavaScript library. Include jQueryUI fields in the form and make sure you include help messages on screen using jQueryUI fields. Make sure that you submit using a jQuery-submit to only submit when the form is valid.
19. jQuery has a lot of animation techniques and a lot of add ons that provide even more animations. There is no way that we can cover all of them in class. Experiment with and use at least one other jQuery feature (animation or other) in either your game or on the intro page. Such things like;
20. Lights flashing on winning
21. Words like Congratulations, Great, Keep Going, etc. growing and shrinking as the user wins and loses.
22. Add a generic error handler to display a message for the user if an unexpected error occurs. When that type of error happens, display a message of the error and restart the game.
23. Using the techniques shown in class, make sure you are using event handlers effectively and using the event object where possible and necessary.
24. Make sure ALL the rules work for your game.
25. If you find “bugs” in your game play (i.e. assignment 3), fix them.
26. Test the game in a variety of conditions. Test the game of the other two people doing your game.

**To submit**

When you have completed the assignment, zip the YourUserNameC20A04Casino folder and save it to the Moodle drive for the course.