

## Lab 3 – Tag Helpers, Model Binding and Unit Testing, Group B

CS295N, Web Development 1: ASP.NET

### Objectives

- Gain experience using:
- Tag Helpers (use at least 2 types)
  - Model binding (for the name field)
  - Unit tests (write at least 3 tests)

### The Game of Pig

Write a web app for playing Pig:

In the game of Pig, two players take turns rolling a die. On their turn, a player rolls the die as many times as they wish, or until they roll a 1. The player's score for the turn is the sum of the rolls—unless the player rolled a 1, then the score for that turn is zero. The first player to reach 100 wins (after each has had their turn in the final round).

- The user will enter their name
- The user will play against the computer
- The user will click a button to roll a die, the die image showing the number rolled will be displayed.
- The user will click a different button to end their turn
- When the user's turn ends, their score will be displayed, the computer will take a turn and its score for the turn will be displayed
- The app will display a winner by name when the score reaches 100

### Alternative App

Propose a different web app (instead of Pig) that gives you practice with the same three things. If you would like to do this instead of the Pig game, send a message to your instructor with your proposal, and if it's approved, create the alternate app.

### Submission to Moodle

#### Beta Version

Upload the following to the Code Review Forum:

1. A zip file containing your web app's Visual Studio solution folder.  
Or, a link to a repository containing your web site solution source code. You can put the link on the same document with the report on your exercise from part 1.
2. A code review of your lab partner's work. (You do this after your lab partner submits item 1 and you have reviewed it.)

#### Production Version

1. Item 1 as above but revised as needed.
2. Item 2 above.
3. The code review of your work (the one done by your lab partner) with the second column ("Production") completed by you.