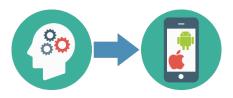# Mobile App Development
CS 4153

Team Assignment 01 – 20 Points
Last updated: Sep 8, 2017   3:30 PM   Due: Sep 26, 2017

Your team is to deliver a stylish and sturdy implementation of a match-up game. This will give you and your teammates a chance to get to know one another's skills, to learn to work together effectively before the bigger project, and perhaps have a little fun along the way.

Toy Story Memory Match-Up (which can be played online) is an example of a family of games known as *concentration* or *match-up* games. Your game should meet the following specifications:

- Name your project:
     T01_teamColor
  where *teamColor* is your team color, only (i.e., Red, Green, Blue, etc.).
- Design and write your app specifically for the iPhone 7 Plus.
- It can operate in either the portrait or landscape orientation of the device, but is not required to operate in both. (However, you can make it operate in both orientations, if the team wishes.)
- Come up with a unique theme and name for your game.
- Make effective use of color, graphics, audio, and gestures.
- Your team is encouraged to create some or all of its own graphics assets, using products such as the GIMP, Photoshop, etc. You may use graphics from other sources, but not from other match-up games.
- When the app starts, it should display a *splash screen* (i.e., an introductory screen) with a stylish "play" button. When the user taps the "play" button, segue to the actual game-playing screen. (We have not yet covered segues, but will; you can read about segues in our textbook or at https://raywenderlich.com.)
- The gameplay screen should contain the player's score, the array of cards, and whatever else the team wishes.
- The user selects two cards; as the selects a card, the image associated with the card will appear. The goal is for the two images to match.
  - Once a match is made, the app should prevent the user from selecting those two cards in future match attempts.
- Come up with a scoring scheme based on one or more criteria of your choice; for example, you could use number of matches, number of misses, clock time, etc.
- Create a PDF document utilizing a word processor. In the document, describe how to play the game. If the team has utilized any special classes, assets, etc. that it did not create, they must be reference in a separate section of the document. If you have some

special features of the app you want to make sure the instructor sees, highlight them in a section of the document. Also include a section that describes what work was done by each member of the team.

- <u>Do not</u> copy the code of any such game you find online or elsewhere. This is considered cheating. You may, however, refer to such games to get ideas. Remember: if you are uncertain as to whether your use of such materials is appropriate, ask the instructor.
- Everyone should have coding tasks to perform, if possible; the team should meet as needed to discuss app design and details, and to share new things learned that might be useful to all teammates.

Grading Notes

- Creativity, style, and correct operation will be among the factors used to grade the projects.
- The instructor will select the app that he feels best achieves creativity, style, and correct operation, and each member of that team will receive a 5-point bonus. (The decision of the instructor is final.)

Submitting Your Solution

- Remember: The project <u>must</u> be submitted no later than the due date; late submissions are worth zero points.
- Only the team leader will submit the project.
- Team leader: zip the project folder, go to the course BrightSpace site, navigate to the *Dropbox* page, and submit the zip file in the folder that corresponds to this assignment.