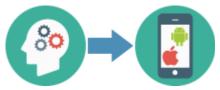# Mobile App Development
CS 4153

Team Assignment 01 – 20 Points
Last updated: Sep 08, 2016   7:30 AM   Due: Sep 27, 2016

Your team is to deliver a stylish and sturdy implementation of a sliding block puzzle 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.

Roll the Ball, Unblock Master, and Rush Hour are examples of a family of games known as *sliding block puzzles*. (See the video at the *Roll the Ball* link to see how that game works.) Your game should meet the following specifications:

- Design and write your app specifically for the iPhone 6S 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 sliding block puzzles.
- When the game 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.
- Implement at least three levels of the game. (That is, when the player finishes one puzzle, move on to the next puzzle, and so on.)
- When the user slides tiles, they should slide smoothly, but they should stop when they encounter another tile or the edge of the play area.
- Come up with a scoring scheme based on one or more criteria of your choice; for example, you could use number of moves, clock time, bonus for finishing, etc.
- Create a PDF user's guide utilizing a word processor. In the guide, describe how to play the game. If you have utilized any special classes, assets, etc. that you did not create yourself, reference them in a section of the user's guide. If you have some special features of the app you want to make sure the instructor sees, highlight them in a section of the user's guide.
- Do not 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.

- Creativity, style, and correct operation will be among the factors used to grade the projects.
- Everyone should have coding tasks to perform, if possible; I suggest that teams meet as needed to discuss new things the members learn that might be useful to all teammates.

Notes
- Name your project:

    T01_teamColor

    where *teamColor* is your team color, only (i.e., Red, Green, Blue, etc.).

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.