**Homework 1 – Your Name: \_Austin Pack\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Due: Sunday (see Syllabus)**

**Points: 50**

**Project Concept**

**In just a few short paragraphs describe your initial idea(s) for your course project. Provide a tentative title, if you have one. Give whatever details you have tentatively come up with.**

**Describe what platform will host the program – PC, Mac, smartphone, the Web, whatever. What programming language(s) and IDE(s) are you considering using? What version control system are you considering using? Tell whether you plan to build this program solo or if you plan to be part of a 2-3-person team. Name your proposed teammates if you already have constructed your team.**

**Note that what you describe is just a preliminary collection of notes/ideas for your course project. You are not fixing things in stone. It is expected that there may be (will be) several (if not many) changes before things solidify. The “solid” description of your course project will the contents of Homework 2, due at the end of Week 2.**

**Be certain to review the Course Project document.**

At the moment, I currently have two different ideas for a course project. One is an android app of the classic Slider Puzzle. The other is a website app, that is just a Sudoku puzzle. For either project, Both of the projects would be done by me alone, and both projects would use Git and Github for version control. I am currently leaning more towards the android app. While the idea and what I am planning seems a bit more complicated, I am more comfortable with android than I am with web development.

The tentative title for the sudoku app is just currently JavaScript Sudoku, since that would be the main language being used for the program. Of course, it would be developed for the Web, and would use a combination of HTML, CSS, and JavaScript. I would be using the Atom IDE for the development. The game would allow the user to pick up to 3 different sized boards. A 6x6, 9x9, and 16x16. The app would also allow for three different difficulties, that would just remove a fixed amount of cells each time. A cell would turn red if the inputted number was wrong, based on the current game board and not the actual solution. And the idea to add a note section, that would allow you to write in multiple numbers in a smaller text, just to take notes of what number could possibly go into that cell.

The tentative title for my android app is Android Slider. It would be developed for android phones, and Android and Java would be used for the programming language, with Android Studio being used as the IDE. There would be options for three different size boards. A 3x3, 4x4, and 5x5. The user could have the option of using numbers for the puzzle, or choose a picture from their device and use that as the puzzle. I am thinking about including a local file that will keep track of the user’s fastest time for completing each sized grid. Possibly also include the animation of the tile moving, based on a flick gesture along the screen. There would be a main menu, where the user could start a new game, continue a game, and check the high scores.