**Homework 2 – Your Name: \_Austin Pack\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Due: Sunday (see Syllabus)**

**Points: 50**

**Scope Document**

**Write a description of your course project. This document will describe your course project in as much detail as possible. This description will serve as a roadmap for your design and implementation. Although it is not unlikely that there will be some updates, modifications, additions, subtractions to your project over during the design and implementation, the hope is to minimize the number of and extent of changes.**

**Your scope document must include:**

1. **Title / Name of the program**
2. **Programmer name(s)**
3. **Project Owner name**
4. **Development platform (PC, Mac, Linux)**
5. **Which operating system will be used?**
6. **Target platform(s)**
7. **IDE name**
8. **Programming language(s)**
9. **Version Control System name**
10. **What assets will be needed (e.g., artwork, sounds, videos)**
11. **What collaboration tools will be used (e.g., email, Discord, F2F)**
12. **A complete list of requirements that must be met in order for the project to be considered successful. This includes functionality as well as appearance.**

The name for the project that is being done for the class is ‘Android Slider’, an implementation of the classic slider puzzle game. The project is being done by one person, so Austin Pack is both the programmer and the project owner. The development platform will be done on a PC, which is using the Windows 10 64bit operating system.

The target platform will be Android phones, and should be able to work on all Android phones. The IDE that is being used is Android Studio, and the application will be tested on both a virtual device and a physical Android phone. The programming languages being used is Java and XML. For the version control system, the project will use Git with Github to keep documentation of versions of the app. The Git will be inside of Android Studio, and will push the updates to GitHub for the documentation. The only assets needed for the app will be some sound files, for the tiles moving and a victory sound. Since the project id being done by one person, there will be no collaborations tools being used.

In order for the project to be considered successful, there are a few requirements that must be met. These requirements are:

* There must be a Main Menu, with different options. One for a new game, and one to view the current high scores.
* The tiles/game pieces have to be animated when they move, and not just blink into place.
* There must be three different sized boards, a 3x3, 4x4, and 5x5.
* The application must be able to work on any sized phone screen
* There has to be some kind of sound that plays for the game pieces moving, and a victory sound for when the puzzle is completed.
* The game must give a solvable board to be played.
* The game shall have a timer and a move counter, that is constantly being updated as the game is played.
* The fastest time and lowest amount of moves shall be recorded as high scores for each of the board sizes. Meaning, each board size will have their own high score tab.