**User Stories**

**By: Austin Pack**

**CS-552 Agile Methods**

**Date: 9/22/2019**

**Table of Contents**

1. **Solved Game Board**
2. **Compatible to Different Screens**
3. **Main Menu**
4. **How-to-play Section**
5. **Tile Animation**
6. **Time keeping and Move Counter**
7. **High score**
8. **Solvable Board**
9. **Different Difficulties**
10. **Picture Tiles**

**Solved Game Board**

User Story:

“As a player, I want the game to end so that I know exactly when I have successfully solved the puzzle.”

Acceptance Criteria:

To determine that the puzzle has been solved correctly, some sort of pup-up must come up clearly indicating that the game is done. The user must not be able to move any more tiles, and the timer should stop as well. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 6/10.

**Compatible to Different Screens**

User Story:

“As a parent, I want the gap to be able to work on any sized android screen so that I don’t have to worry about figuring out if the app would be compatible with the current device and settings for my children or myself to play.”

Acceptance Criteria:

To determine that the app is compatible with different sized android devices, the application needs to appear the same regardless of the screen size. The puzzle board and main menu must be proportioned correctly and fit perfectly in the current screen for each device. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 7/10.

**Main Menu**

User Story:

“As an organizer, I want the application to have a main menu as the screen that pops up first when I open the app so that II can choose what kind of puzzle I want to do or view my high scores before automatically going into a game.”

Acceptance Criteria:

A main menu has simple acceptance criteria. It simply just needs to be the first screen that pops up once the application opens, have a title at the top showing the app’s name, and must have different options for a new game of different board sizes and to view the high scores. The only sketch that would be needed for this task is a simple sketch of a main menu, and the item has an estimated story point rating of a 3/10.

**How-to-play Section**

“As a beginner, I want there to be a section that explains how to play the game so that I can understand what I am supposed to do, and I know the objective of the puzzle.”

Acceptance Criteria:

There is just a simple acceptance criterion for this task. There must be an option in the Main Menu, that leads the user to a different window that explains how to play the game. The only sketch that would be needed for this task is a simple sketch of the How-to-Play section, and the item has an estimated story point rating of a 3/10.

**Tile Animation**

User Story:

“As a player, I want to see the tile actually move into place instead of appearing into place so that no only can I know for a fact that the tile I wanted to move did but can also see the tile that I wanted to move actually moving.”

Acceptance Criteria:

For this task to be accepted, the tile simply needs to be shown moving along the screen. And it needs to be animated at a speed that is in a respectable pace. Not too fast for it to happen almost instantly, but also not to slow to where the person is waiting to continue. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 5/10.

**Time keeping and Move Counter**

User Story:

“As a competitor, I want to know the current time I’ve spent on the puzzle and the amount of moves that I’ve done so that I know my current statistics for this puzzle and can keep track of how well I am doing.“

Acceptance Criteria:

For this task to be accepted, there must be a bar above the puzzle that is displaying the current move count and time spent in the puzzle. The counter must be updated accordingly with every move made, and the timer must continuously run until the puzzle is solved. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 5/10.

**High score**

User Story:

“As a competitor, I want the application to keep track of my best times and move counts for the puzzles so that I can keep track of my best times and try to beat them.“

Acceptance Criteria:

For this task to be accepted, there should be a section in the Main Menu that leads to a high score section in the app. The new screen should display the top three fastest times and lowest moves done for that size puzzle. The high scores should be saved locally and updated each time a score is beaten. A simple sketch could be needed for the look of the High Score screen, and the item has an estimated story point rating of a 6/10.

**Solvable Board**

User Story:

“As a player, I want to actually be given a slider puzzle that can be solved so that I don’t have to worry about wasting my time, doing the puzzle just to see that the board given to me isn’t playable or solvable.”

Acceptance Criteria:

To determine that the puzzle generated is solvable, an internal mechanism will have to be implemented that will reshuffle the board if the initial one given isn’t solvable. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 6/10.

**Different Difficulties**

User Story:

“As a novice puzzle player, I want to be able to choose a different board size for the puzzle so that I can not only have more variety in the puzzle, but also be challenged with a larger and harder version of the puzzle.”

Acceptance Criteria:

For this task to be successful, the main menu must offer an option for a puzzle using a bigger sized grid. The larger and harder puzzles still must be able to fit in all screen sizes and keep track of the High Scores all the same, each size with its own set of high scores. Each puzzle size must work and function the same as each other, with the only difference between them being the size of the grid and number of tiles itself. There are no images or sketches needed for this item, and the item has an estimated story point rating of a 7/10.

**Picture Tiles**

User Story:

“As a player, I want to be able to play a slider puzzle that uses pieces besides numbered tiles so that I can get a bit more variety from the app and customize the puzzle, so it isn’t the same every time.”

Acceptance Criteria:

For this task to be successful, the app must be able to offer a way for the user to have the option of using a selected image instead of the default numbered tiles. The user must be allowed to select a picture from their device, and the app must properly cut the picture up into however many tiles needed for the puzzle. The puzzle must function the same way when using the picture tiles, as it would when using the numbered tiles. The images that would be needed for this would come from the device’s photo gallery itself, and the item has an estimated story point rating of a 8/10.