**Assignment – 3 (Design Document Outline)**

**Game Genre:** 2D-Tile Matching Game

**Characters:** Utilized 7 Characters to jumble among the tiles and to help adjust the complexity of the levels the game is generating varied numbers of tiles and characters in each level. The character and tile distribution of each level is as follows,

Easy: 4 Characters, 6\*7 Tile size.

Medium: 6 characters, 8\*9 Tile size.

Hard: 7 characters, 9\*11 Tile size.

**Interface & Rules:** The Game Starts from an empty screen which has a Play button to bring up the minigame. The Mini Game has 3 buttons (Easy, Medium and Hard) which bring up the respective levels, every level has a designated Timer, Move Counter and Score. If the Player finishes up all his moves before the timer reaches 0 the player wins and if the Timer runs out, then the player Loses.

**Input:** Game uses Mouse as input and upon Left click selects a tile and if the user clicks any tile adjacent to the selected tile, then the two clicked tiles will swap positions. Clicking anywhere else apart from the adjacent tiles once the tiles are selected doesn’t result in a swap, instead deselects the previous selection.

**Matching:** If the Swap results in consecutive placement of three or more similar tiles, then it results in a match which adds to the score and deducts one value from the remaining moves counter.

**Sound:** Every time there is a valid Swap and a match there’s Sound Effects implemented respectively.

**References:**

I have used the following tutorial and starter project as a reference to build the project.

<https://www.raywenderlich.com/673-how-to-make-a-match-3-game-in-unity#toc-anchor-011>

**Assignment Github Link:**

https://github.com/amerali1994/Game3011\_A3\_MohammedAmer