**Greedy Dwarf Environment and Basic Action Scenario**

**Group 9 - Alyssa Mihok, Diana Vera, Ivana Pavlovic and Jazbel Lopez**

The Greedy Dwarf game is a top down strategy game that will allow the user to move up and down the screen on Tiles in order to strategically collect gold and other valuables while trying to escape the Dragon. This scenario will describe the layout and formation of the top down environment as well as basic action functions like movement, picking up items and being seen by the Dragon.

Key features implemented in this scenario include the majority of the UI and key elements of gameplay such as picking up objects and the Dragon’s line of sight and movement. There is a single large screen, the Dragon’s Lair, controlled by the Map class. The Map contains a collection of Tile objects for Creatures and Pickup objects to move and stand on. The layout of the Tiles and Map in this scenario will be shown in **Figure 1** below.

**Scenario - Don’t Get Caught**

This scenario begins with the user launching the program and the system displaying an opening title screen. By pressing the “Enter” button on the title menu the player gets a brief introduction to the game and how to play before the player enters the Dragon’s Lair.

The Player object is placed in a start position on the Map at the lowest center Tile in the view. In the top center of the Map will be the Dragon and a few tiles directly below it a Pickup item, the Treasure. All objects are created upon pressing “Enter” and the Player and Dragon will have consistent starting positions.

The UI will take input from the user using the keyboard’s arrow keys to change direction and move the player over one Tile per each press of the key. The user will have the ability to explore any part of the Dragon’s Lair freely. The Dragon will idle until the player enters its line of sight. The line of sight will be a range of Tiles around the Dragon in a diamond shaped area with the furthest points being Up, Down, Left and Right from the Dragon’s position in the center. This is shown in **Figure 2** below.

The Treasure in this scenario will be within the Dragon’s range. Once the Player is in the Dragon’s range, the Dragon will take in the Player’s position and begin to move towards the player one Tile for every press of the Player’s arrow key. If the player moves out of the Dragon’s range, the Dragon will continue to move towards the last known location of the player.

The Player can interact with the Treasure object on the map by stepping onto the Tile the Treasure is on in order to pick up the Treasure. Once the Player obtains the Treasure the Player can move back down the Tiles to the bottom of the view. If the Player reaches the last row of Tiles in the view the Player “escapes” the Dragon’s Lair and the game exits but if the Dragon steps into the Player’s current Tile, the Player loses and the game exits.

Figure 1 - Diagram of the Dragon’s Lair.

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Figure 2 - Dragon’s Range in Yellow

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