Muscat College

2D Game Development

CSCUMN6.

2022/2023

Assignment of Game Developing

Submitted by:

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1. <u>Summary of the game play:</u>

The idea of the game focuses on the assistant of one of the explorers who went to the pyramids of ancient Egypt, to explore the lost mummy. The explorer (Sam) is the main player, the explorer Sam has a passion for finding the lost mummy in Egypt, (Sam) encounters many enemies when trying to enter the pyramids, and here the events begin. The explorer (Sam) begins in one of the pyramids of Egypt, which is full of mummies and traps. The screenshot below shows the expected start of the game.

- If the player falls into the (thorns), it will lose his life immediately, and restart again from the beginning of the game.
- The user can use the Keyboard to make the player move or Jump
  Left/Right Arrow = Walk Left/Right
  mouse = Jump (as long the mouse key is pressed the highest the jump will be)
  Esc = Pause/Menu UI
- User can close the game by using (esc).
- Can we see the player direction by pressed Q
- R: to restart the game.

i. Website To create my own music
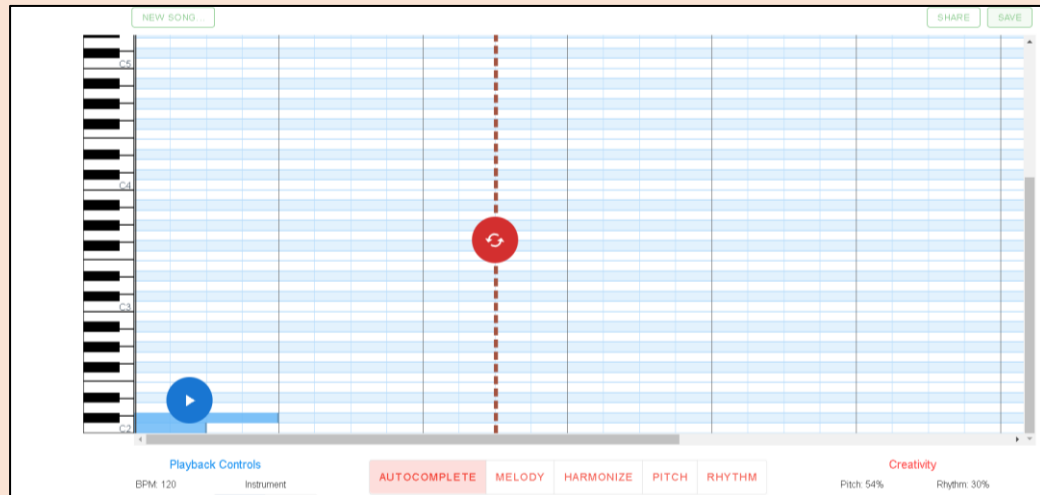
2. The problems encountered in the game:

The main difficulty that I faced was implementing the proposed scenario in the short time, as well as it took a long time to solve the map problem and coordinate it with the game.

3. Discuss the prototype game:

Since the first day of receiving the task, I have created many plans and scenarios for the game to be implemented, I have created a special list containing the name of the main character of the player, what types of enemies are proposed in the game, in addition to the number of enemies in each stage, and what is the appropriate background for the game, Sounds, pictures and tiles.

i. **Animation:** My prototype game contains some animations, through which it will be possible to attract the user to play for a longer period, I have added animation the player goes right, left, and I have added animation when the player killed by the enemy.

ii. **One or more moving player-controlled sprites:** My prototype game contains: like enemy.

iii. **Multiple moving computer-controlled sprites that interact with the player and environment:**

> I added 3 sprites enemies, which is Mummy, skeleton, Bat, and the collision with player.

iv. **Correct collision detection and handling for all sprites and the tile map:**

I have added collision for every 'char' in the TileMap in the game, also I added collision for the all enemies between player, when the player moves in the enemy the player will kill and start the game again, and collision between player and gold items, when the player move in the gold it will disappear and the score for the game will increase by 1 for every moving in the gold.

v. **Sounds, including playing a sound using your own novel sound filter:**

I used the following Sound filter :

Fade For : Game over

Echo For : Death+ Next level

vi. **Multiple keyboard and mouse event handlers:**

> My prototype game has multiple keyboard events:

a. when we pressed right arrow (→), the player moving to right, when we pressed left arrow (←) the player will be moving to left.

b. ESCAPE: STOP the game

c. Q: show the direction of the player, this is helped me to identify correct way to put the enemy or gold items.

d. R: to restart the game.

vii. **2D tile maps with at least 2 levels:**

i. My initial game contains two stages, the first stage is the explorer's attempt to collect Egyptian coins and then search for the lost mummy, then comes the second stage and finally find that mummy, then the game will again in level one.

4. Play in the future:

The current game has only two stages, (the first stage is on the way to enter the main gate of the pyramid) the second stage is the player's approach to entering

the pyramid. Based on the prototype, the functions and features that I will add are:

- Adding the player hearts, e.g., 5 hearts, makes the player if he gets hit, he will lose one hearts.
- Add more attacks (I already have sprites, thorns...)
- Add more levels
- More kind of enemies
- Adding a dialogue before the user starts playing. I will create a definition for the game in the form of dialogue in the introduction.

Depending on the time given to finish this game, I spent a great deal of effort to bring this game out with all the requirements set in the task in record time, I am happy but not completely satisfied with the result, as I wish I had enough time to add more functions and bring out the design in a great way. So, I feel my personal rating for this game is (average). On the other hand, the successful parts of the game are the design of the background of the game with tiles, create equation to identify the player direction
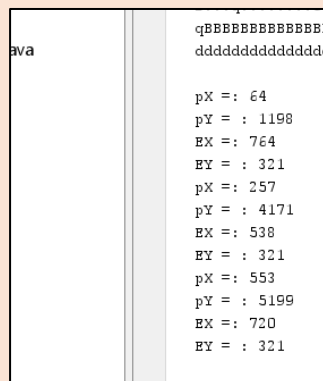

Figure 1- Locate the player

End.