PROJECT REPORT

GROUP 6 TEAM 2

GAME ARCHERO

ABSTRACT:

The game we developed is based on idea of archery. Here in this game, there stands two archers on two sides of the screen one among the two is us, the player, and the other is the computer itself. We aim the target and try to shoot the enemy and even enemy does same to us. Finally, the one standing with the health remaining will win the game.

INTRODUCTION:

Firstly, as we launch the game there appears a loading window and succeeded by a main menu window. This main menu consists of the level we want the game to be, which may be either hard, easy or medium depending on our selection. This main menu consists of a controls options that displays all the keys for various movements and controls of the game. It even consists of sound option that that mutes the background score when clicked on it.

Now on selecting the level, the game begins and depending on whose health completes first winner is declared and if we win then comes a win window displaying that we won and if we lose then comes a loose window displaying that we lost both the windows have two options one is to restart and other is to return to main menu.

There lie a pause button lying on top of the window while the game is running, when we click on the pause menu then three options appear one is to return to main menu second to restart and other to resume the game. There is a confirmation window that pops up when we click quit in whichever window we may be in, it confirms our exit.

SYSTEM REQUIREMENTS:

- Pre-installed pygame library

IMPLEMENTATION:

Firstly, the loading_menu() function is called it displays the loading screen using rectangles in pygame.

From this function the next function main_menu() is called which displays a window with levels of difficulty along with controls and as we select one of the levels the controls shifts to the function game_play().

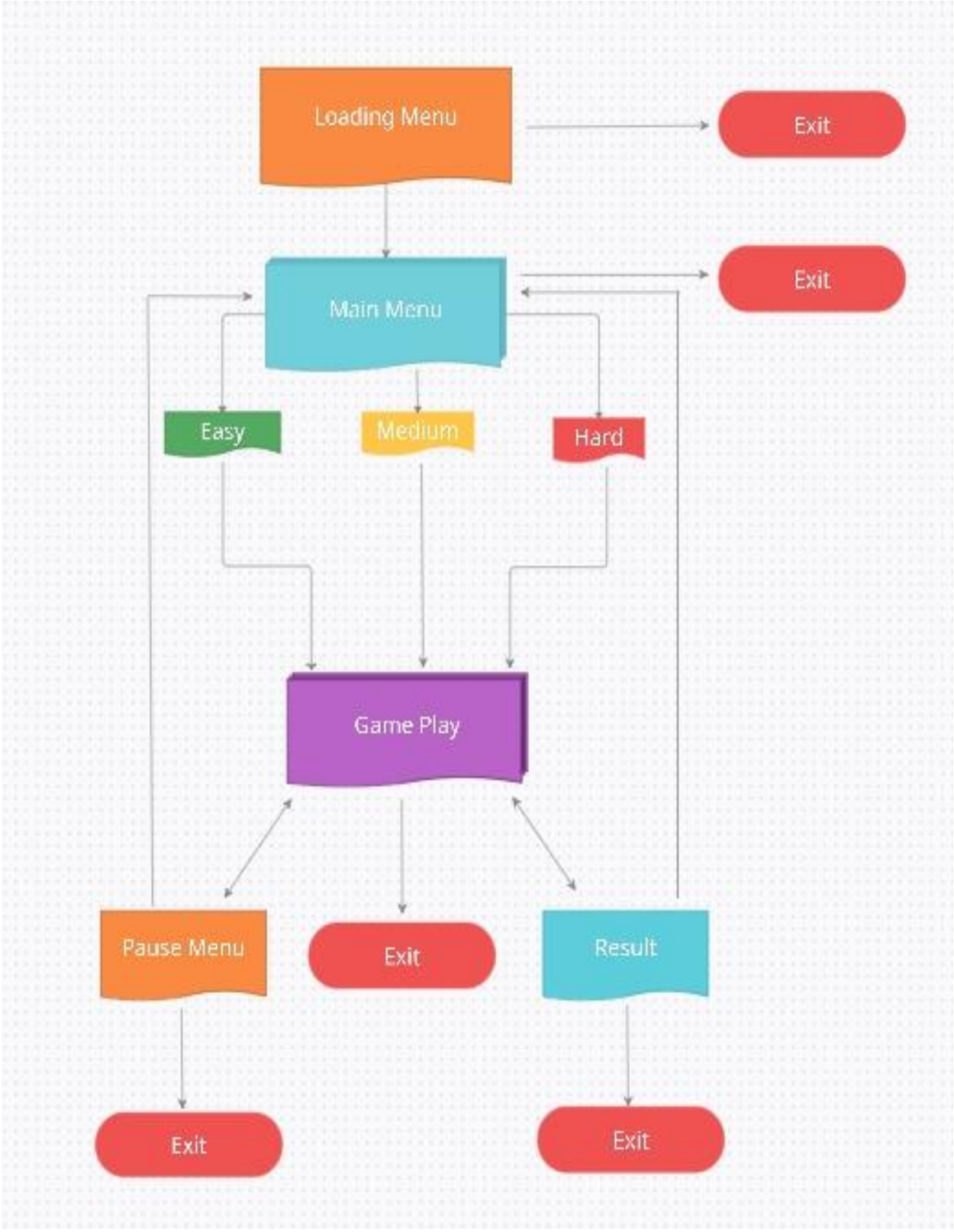
In this function game_play() we used other function archer() and enemy() to implement the visibility of both the archers with their possible 13 possible angles of firing. But we restricted the enemy archer to only 2 positions. Upon considering the events occurred, we shift to the function projectilearch().

Projectilearch() function creates the trajectory for the arrow that is shot depending the angle chosen from the 13 angles present and the trajectory is is completely based on the laws of reflection and as it hit the any of the point then we call a function colldetect() which checks whether the arrow hit the required target or not and depending on that health of the enemy decreases.

The same exists for enemy even but it is done by another function named enemyhit() that creates the trajectory for arrow of the enemy based on the probability of hitting which is 1/3 for easy level, 2/3 for medium level and 5/6 for hard level and it colldetect() function to find out whether the arrow hit the archer or not and deducting the health if it hit.

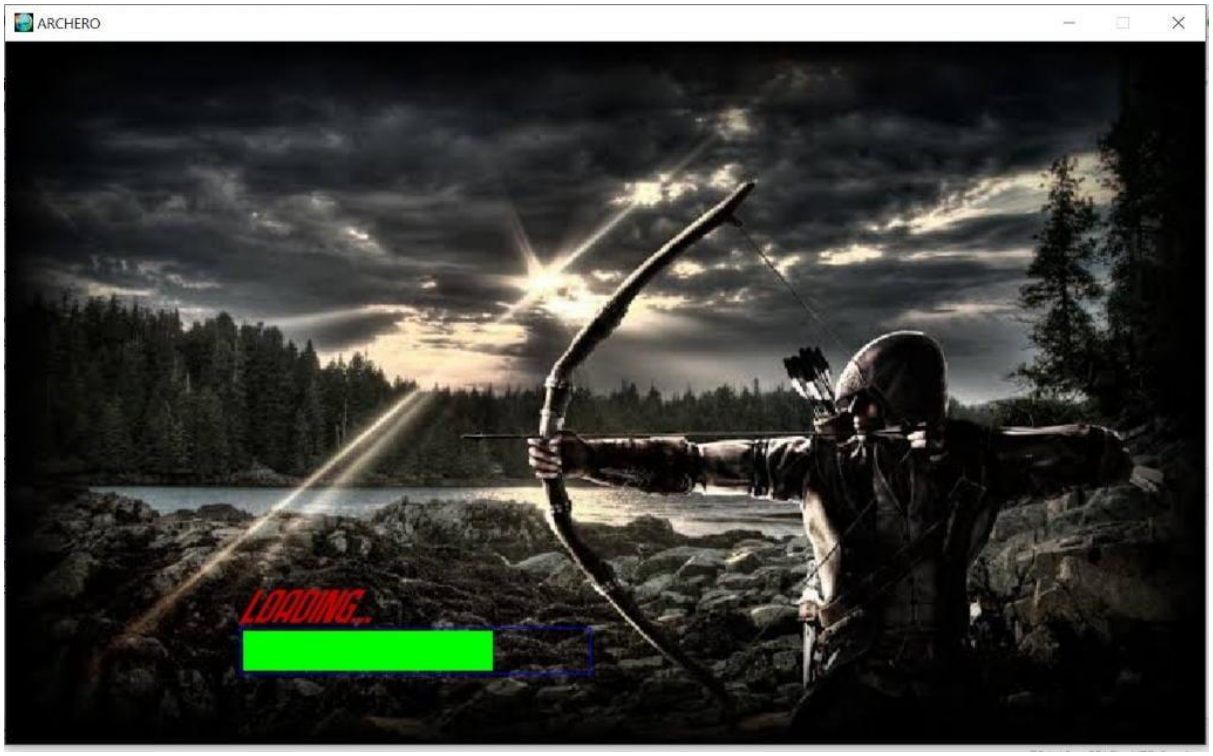
We included pause_menu() function which will be called when pause button present on game window is clicked. And finally on completing the game the result window appears by calling result() function the looping of function starts.

FLOW CHART:


Loading Menu
Exit
Main Menu
Exit
Easy
Medium
Hard
Game Play
Pause Menu
Exit
Result
Exit
Exit

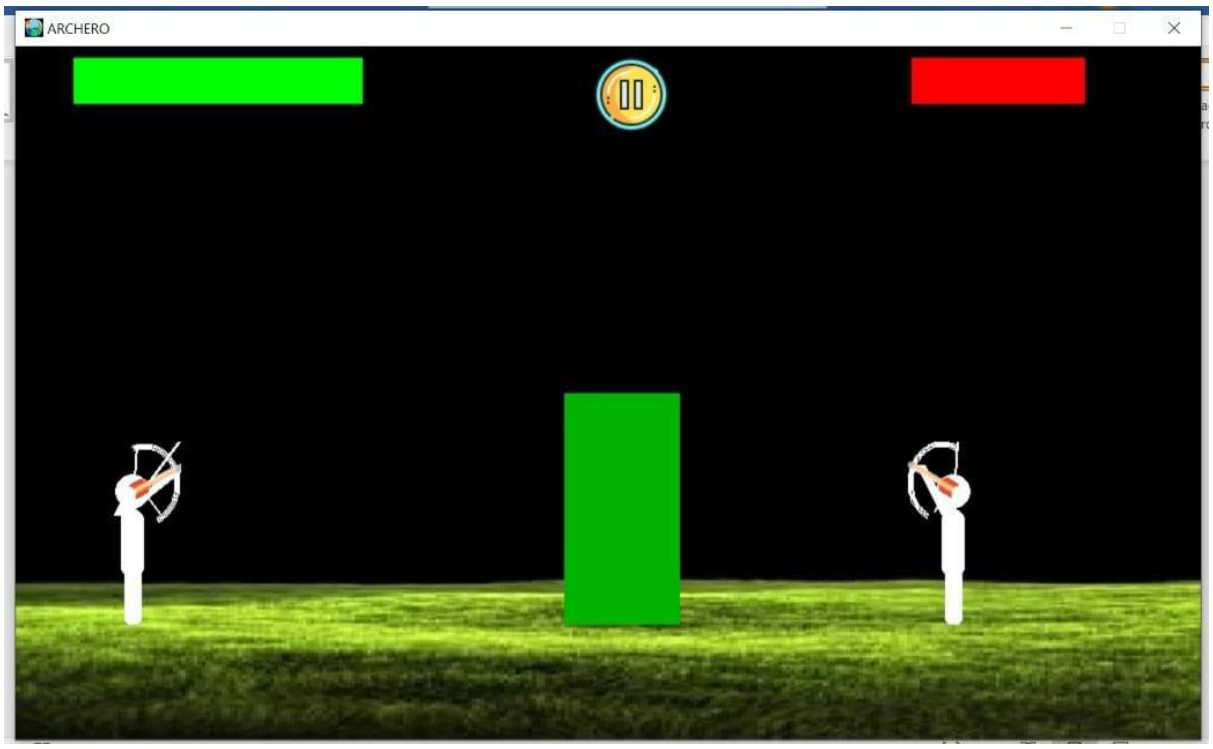
DEMONSTRATION:

LOADING WINDOW:

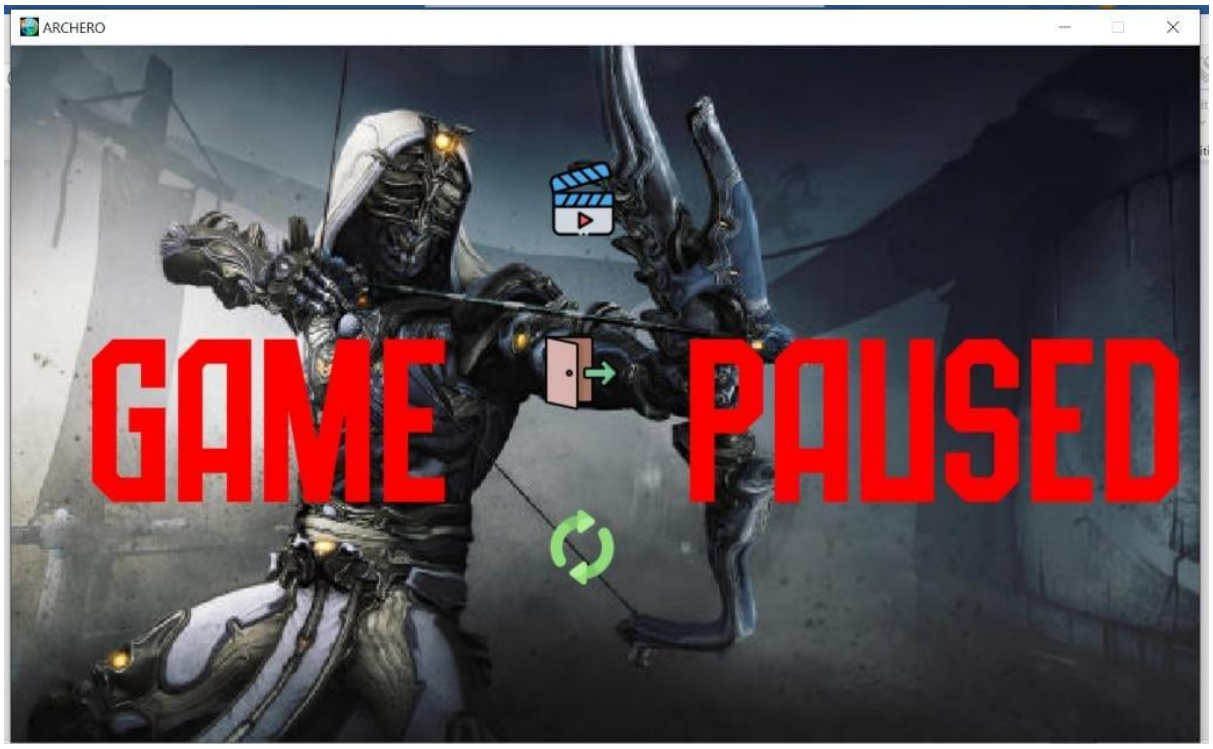


MAIN MENU:

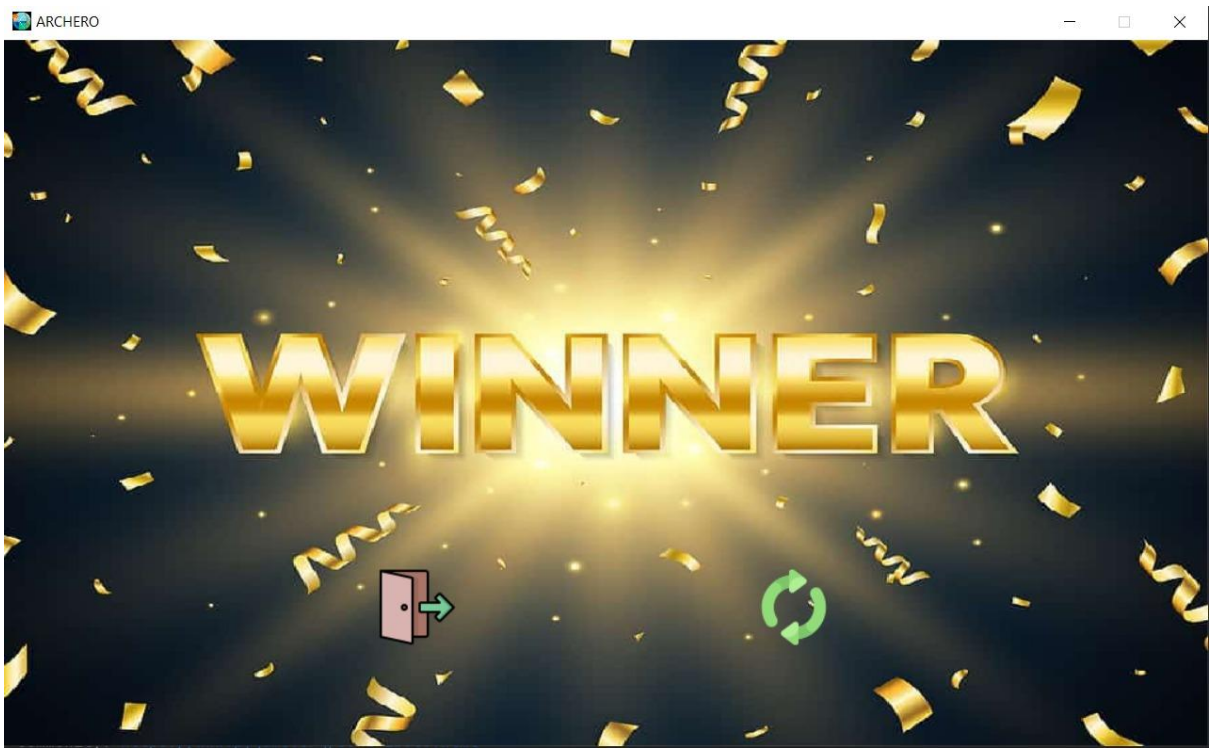
GAME WINDOW:

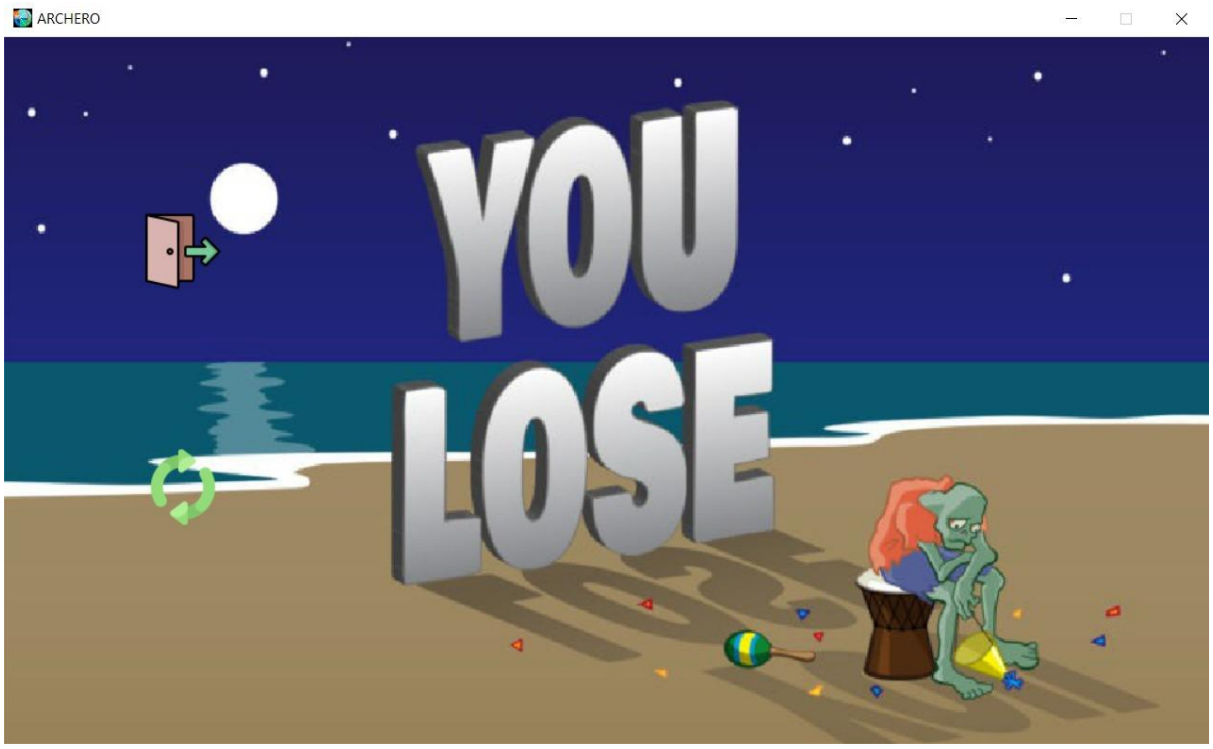


PAUSE WINDOW:



RESULT WINDOWS:





TEAM MEMBERS:

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ADDED EXTRA AFTER DEMO:

- Sound button: The button that controls the background sound in the main menu.
- We added a direction line i.e. a line that depicts the direction in which arrow will be shot.

THANK YOU...