

# **Game Project: Shooting Rio**

## **Submitted By**

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## **Submitted To**

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## **OBJECTIVE:**

The major objectives of this game project are :

- To create a game in c++ language using igraphics in Visual Studio 2013.
- Analyzing pure strategy game, dominance principle
- User's entertainment purpose

## **INTRODUCTION:**

The game named "Shooting Rio" is a shooting game. There are interesting things like fun shooting in this game. In our game there is one character and two opponents. Also there are many rigid obstacles. The character is Jack- the shooting boss, who is a shooter.



**Figure 1:** Main Character Jack

The opponent is Rio. It is the prey of jack.



**Figure 2:** Opponent Rio

We used bomb as obstacles.



**Figure 3:** Obstacle Bomb

In this game the character shoot the opponet by crossing many obstacles.

## **IMPLEMENT:**

In creating the game, many different techniques are used for viewing objects and special effects-

- **Background:** In this game the Background added with proper width and length using ishowBMP
- **Characters:** The character and the opponent added with proper size using ishowBMP. These was done by igrphics. The character is able to move left to right and up and down using ispecialkeyboard.
- **Light:** Whenever the game is displayed in first position view, light sources, namely, specular, diffuse and ambient are set.
- **Collision:** The implementation of Collision detection is required when the bullet hits the rio. There are two types of Collision detection that we are connected with in the game: Collision between bullet and Rio and Collision between Jack and bomb.
- **Sound and Music:** Music is added for playing this game. Player can control it by his choice. Music was added using ikeyboard.This music makes the game more interesting and enjoyable.
- **Pausing game:** Player can pause the whenever he wants by pressing P button. This was also added by ikeyboard.



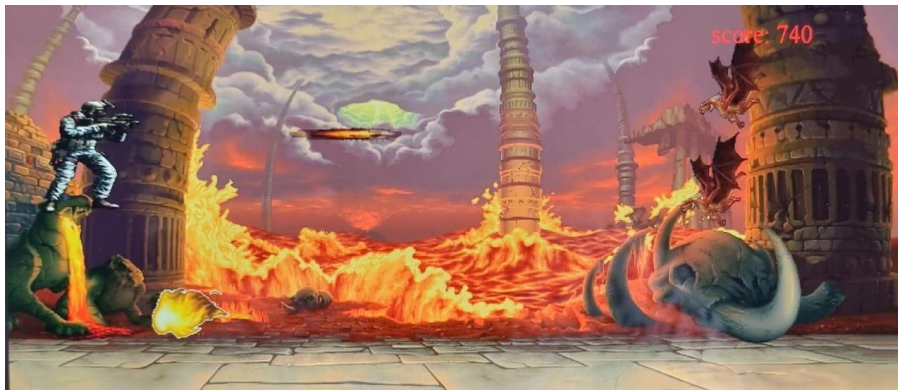
**Figure 4:** Starting Page of the game

## **DIFFICULTIES:**

Making a video game is much less daunting than it might seem. It is actually never been easier to get started making games. Therefore, we faced some difficulties while building this game.

- **Collision:** We faced some problems in Collision part. At first, the Collision didn't happen because we couldn't match the co-ordinates. Then we adjust the co-ordinates observing the size of opponent.
- **Shooting:** We faced some difficulties in shooting part also. The bullet wasn't going towards the opponent. Then we adjust the co-ordinate of bullet with Character's co-ordinate.

This is how we solved our problems.



**Figure 5:** View while playing

## **CONCLUSION:**

In the game "**Shooting Rio**", we have implemented a game environment. To enhance the game environment we have also implemented advanced features such as Collision, sound effects. We made our game original and the variety of the game features such as help and hindering items and Background music makes the game more challenging but yet interesting and enjoyable to play with.

## **FUTURE PLAN:**

There are many scope available for the improvement of this game. Some of the plans for the future of this application could possible be:

- Add more levels
- Add more obstacles
- Add more different enemies
- Increases player grade's system