RESCUESQUAD 2D

14.11.2020

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FINAL PROJECT PROPOSAL

Introduction to Computer Science
New York University Abu Dhabi

Overview

This is a 2D tactical shooter game that aims to neutralize bad guys and rescue hostages in different locations. The player navigates around and shoots when he encounters them.

GOAL: Complete the mission without penalties - and do it fast for a higher score.

Initial Screen

When the player opens the game, the first thing he sees is a menu with three options.

Start Game, Choose Location (Mansion, Hotel or Bank) and **How to Play**. They can navigate any of them using the "up" and "down" arrow keys respectively.

End Screen

When the game ends either when player gets killed or when he finishes the complete game by killing all enemies, the end screen will display the following:

- Final Score
- No. of kills
- Penalties (if hostages are also killed)
- Run Time
- Grade (based on performance)

To **RESTART** the game, the player will have to press the "R" key.

To **END** the game voluntarily, the player will have to press the "Esc" key.

Gameplay

The player is represented by a SWAT shooter sprite. The player controls the shooter by using the "W", "D", "S" and "A" keys. The gun can be aimed and fired using the mouse. The player has to distinguish between the enemies and the hostages, and not shoot the hostages knowingly or unknowingly. The enemies will be seen having a gun while the hostages will not. There will be a limited amount of bullets, so the player cannot use it indefinitely. He will have to reload as and when necessary using the "Space" key on the keyboard. The player will have an option to change his guns or plant a bomb using the "X" key, after which there will be a pop up asking the desired action which is to be taken. The player, the hostages as well as the enemies lose life when hit by three gunshots.

The goal is to eliminate all enemies and save all hostages with maximum efficiency and in minimum time duration (finish fast for a higher score).

Game Features

The basic features of the game include:

1. The shooter sprite, and the ability to move in any direction
2. The ability to fire bullets
3. The player's score will be displayed and updated with each kill
4. The health meter and number of bullets left will be displayed
5. The enemy will be killed after 3 gunshots, but will vary with the type of gun used
6. The player will have multiple lives and will vary according to the difficulty of the levels. They can choose when to start their next life and reappear
7. There will be few medkits or bandages placed randomly and player can revive
8. A new level i.e. mission will start when all enemies are killed
9. Sound effects
10. Additional animations for the enemies being killed

Objects

The game will use the following major objects:

SHOOTER

This object represents the player on the screen.

Variables

1. X coordinate
2. Y coordinate
3. X velocity
4. Y velocity
5. Amount of health
6. Rotation
7. Boolean for if the soldier is alive
8. Bomb

9. Gun type
10. Health Meter

ENEMIES and HOSTAGES

This object represents the bad guys on the screen. It will inherit from soldier class.

Variables

1. X coordinate
2. Y coordinate
3. Health meter

MEDICAL

This object represents the bandages and medkits placed randomly around the location.

Variables

1. Medkit
2. Bandage

SCORE BOARD

The scoreboard keeps track of and displays the score, number of lives, level for the player and time taken to finish the game.

Variables

1. Score
2. Level
3. Lives
4. Timer

Team Member Contributions

Ronit Singh - first half of the game i.e. start screen display, making backgrounds and levels, shooter movements and actions using mouse and keyboard, final score, timer, updating

lives

Giorgi Kituashvili - second half of the game i.e. end screen display, gunshot animation and effect, placing enemies and medkits randomly in and around the location

Together, we both will be working on sound effects and collision detection with walls.

Gameplay Sample Pic

Sample Background Top-Down View

Red circle represents the player

Enemies and hostages will be placed randomly anywhere

Shooter (player)