**John Rambo Game Documentation**

**Introduction**

"John Rambo" is a console based C++ game inspired by the legendary character. The game offers an engaging experience where players control Rambo, guiding him through obstacles, destroying crates, and combating computer operated tanks. The gameplay is reminiscent of classic console based games, providing the illusion of forward movement as the character progresses through the levels.

**Developed By**

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**Game Features**

**Player Controls**

Use arrow keys (Up, Down, Left, Right) to control Rambo's movement.

Press 's' to shoot bullets.

**Obstacles**

**Crates**: Colliding with crates reduces Rambo's life. After hitting 5 crates, Rambo gains an extra life.

**Obstacles**: Colliding with obstacles reduces Rambo's life.

**Tanks**

Computer operated tanks move horizontally on the screen.

Rambo loses a life if it collides with a tank.

Shoot bullets to destroy tanks.

**Levels**

The game has two levels: Level 1 and Level 2.

In Level 1, there are 3 tanks to destroy.

In Level 2, there are 5 tanks to destroy.

**Road and Speed**

A speed road increases Rambo's speed by 1.5x.

**Scoring**

The game tracks the distance achieved by Rambo.

**Function Descriptions**

**1. lifeCheck():**

Checks Rambo's life. If life is less than or equal to 0, the game ends.

**2. forwardMovement():**

Moves the game objects backward, creating the illusion of forward movement for Rambo.

**3. tank():**

Manages the computer operated tanks, their movement, and collision with Rambo.

**4. setup():**

Initializes the game's variables and sets the initial state.

**5. draw():**

Draws the game map, including Rambo, tanks, crates, road, and obstacles.

**6. position():**

Controls Rambo's position using arrow keys.

**7. bullets():**

Controls the bullets shot by Rambo and checks for collisions with tanks and crates.

**8. bulletsTank():**

Controls the bullets shot by tanks and checks for collisions with Rambo.

**9. obstacle1():**

Manages the appearance and collision of three types of obstacles.

**10. levelCheck():**

Checks the current level and sets the number of tanks accordingly.

**11. road():**

Creates a speed road that increases Rambo's speed.

**12. crates():**

Manages the appearance and collision of crates.

**13. main():**

The main game loop that calls functions in a sequence, controls the game flow, and handles user input.

Ends the game, prompts the user for their name, and writes the score to a file.

**Conclusion**

"John Rambo" is an exciting console game that combines classic gameplay elements with the iconic character. Players must navigate through obstacles, destroy tanks, and survive to achieve the highest distance possible. The game offers an enjoyable and challenging experience for users who appreciate classic console games.