**3D SuperBugZapper**

**Overview**

This web game is a fast-paced, interactive 3D challenge where you control a rotating sphere covered with bacteria. Your goal is to eradicate the bacteria by clicking on them before they grow too large. The game is built using WebGL and runs in your web browser.

**Objective**

• **Player Objective:** Click on bacteria as they appear on the sphere to remove them and earn points.

• **Winning Condition:** Earn enough points by removing bacteria (15 points per bacterium) so that your total score reaches or exceeds the target score. The target score is calculated as the number of bacteria multiplied by 15.

• **Losing Condition:** If two or more bacteria grow past a certain size (specifically, if they reach a 30° arc threshold), the game ends with a loss.

**How to Play**

1. **Starting the Game:** Open the game in your web browser. The game will load a 3D sphere with a random number of bacteria scattered on its surface.

2. **Interacting with the Game:**

• **Mouse Controls:**

• **Drag:** Click and drag your mouse to rotate the sphere. This allows you to view all parts of the sphere where bacteria may appear.

• **Click:** Click on the sphere to target and eradicate bacteria. When you click, the game checks the pixel color under the cursor. If it matches the color of a bacterium (within a certain tolerance), that bacterium is removed.

3. **Scoring:**

• **Player Score:** Each bacterium eradicated adds 15 points to your score. Your current score is displayed on the screen (e.g., “Player gains: X”).

• **Bacteria Growth:** As time passes, bacteria grow. When a bacterium grows to a 30° arc size, it counts as “bacteria reached.” The number of bacteria reached is displayed (e.g., “Bacteria reached: Y”).

4. **Game End Conditions:**

• **Winning:** If your total player score reaches or exceeds the target score (number of initial bacteria × 15), a “You win!” message is displayed, and the game stops.

• **Losing:** If two or more bacteria grow past the threshold (30° arc), the game displays a “You lose!” message, and the game stops immediately.

**User Interface**

• **Player Score Display:** Shows your current score as you eliminate bacteria.

• **Bacteria Reached Indicator:** Displays the number of bacteria that have grown too large. Keep an eye on this counter to avoid a loss.

• **Win/Lose Message:** When the game ends, a message will appear indicating whether you win or lose.

**Troubleshooting**

• **Game Not Loading:** Ensure your browser supports WebGL and that JavaScript is enabled.

• **Performance Issues:** The game may run slower on older devices; try closing other applications or tabs if you experience lag.

• **Unresponsive Clicks:** If clicking seems ineffective, verify your mouse is functioning correctly or refresh the page to restart the game.