

Game Overview

"Cheese Defender" is a survival game where the player must protect a piece of cheese from swarming roaches by swatting them. The player earns points for each successful hit, and different roach types increase the challenge. The game ends if any roach reaches the cheese.

Gameplay Mechanics

- **Objective:** Protect the cheese for as long as possible by swatting roaches to gain points.
- **Game Over Condition:** A roach touches the cheese.

Game Entities

1. **Cheese:**
 - Position: Center of the screen.
 - Condition: If a roach touches the cheese, the game ends.
2. **Roaches:**
 - **Normal Roach:** Moves directly towards the cheese at a standard speed.
 - **Fast Roach:** Moves directly towards the cheese at a fast speed and half the size of a regular roach.
 - **Tipsy Roach:** Moves in a curvy, loopy path, making it harder to hit. Slightly faster than the normal roach.
 - **Big Boy Roach:** Takes two hits to kill:
 - **First Hit:** Reduces its speed and causes it to "jump" to a nearby location.
 - **Second Hit:** Kills the roach.
3. **Player Actions:**
 - **Swat:** Player clicks on roaches to kill them.
 - Normal roaches and tipsy roaches die with one click.
 - Big Boy roaches require two hits.
4. **Difficulty Scaling:**
 - Over time, more roaches spawn and move faster, increasing the game's difficulty.

HUD

- **Timer:** Displays the time elapsed since the start of the game in the top-left corner.
- **Score Counter:** Tracks points earned from kills.

Event Handling

- **Mouse Clicks:** Used to swat roaches.
- **Timer Events:** Update game state for roach movements and difficulty scaling.

Win/Lose Conditions

- **Win:** There is no winning state; it's a survival game.
- **Lose:** The game ends when a roach touches the cheese.