Assignment 1 Assessment Criteria -"Whack-a-Zombie

Required Features (10 pts total)

Background with multiple zombie spawn locations - 2 pts

- Provide a background scene with several distinct positions where zombies can appear.
- Recommendation: at least 6 clearly separated spawn points distributed across the playfield.

Zombie design (sprite/art) - 1 pt

- Include a distinct zombie visual (head or full body).
- Ensure consistent art style; credit sources if you use third-party assets.

Zombie head display and lifetime - 1-2 pts

- 1 pt: The zombie head appears and persists until hit (no auto-disappear).
- 2 pts: The zombie head has a timer and automatically disappears after a set duration.
- Recommendation: lifetime between 800-1500 ms; use different durations to vary difficulty.

Mouse interaction / hit detection - 3 pts

- Capture mouse click events at coordinates (x, y).
- Determine whether the click hits the zombie's head (use a hitbox or pixel-perfect test).
- Prevent double-counting on a single click; ignore clicks while animations are finishing.

Score output (HUD) - 1-2 pts

- 1 pt: Display either hits or misses.
- 2 pts: Display both hits and misses, and show a differential or ratio (for example, accuracy percent).
- Accuracy formula: accuracy = hits / (hits + misses) x 100 percent.

Bonus (Extra Credit)

Audio

- Add background music and a distinct sound effect when a zombie is hit.
- Provide a mute/unmute toggle and reasonable volume levels.

Hit Effects

- Show immediate visual feedback (for example, flash, particles, squash/stretch) when a hit is registered.

Spawn/Despawn Animation

- Animate zombies appearing and disappearing (fade, pop, slide, or scale).

Notes and Clarifications

- Display the HUD (hits, misses, accuracy) in a readable corner (for example, top-left).
- Keep the frame rate stable; keep spawn timing independent of animation speed if possible.
- Use a game loop to manage spawn timing and ensure only one head is counted per click.
- Prepare assets at appropriate resolutions to avoid blurring; test on common screen sizes.
- Include a short README on how to run the game and the control scheme.