**SQUID GAME: TUG OF ROPE**

*About This Game:* *This OpenGL program implements a 3D tug-of-war game with interactive gameplay and dynamic visuals. It features real-time player control, stamina management, and a 30-second match timer. The game includes computer-controlled bot opponents, camera movement, and win animations for immersive feedback. A display shows scores, high scores, and game status, while pause, resume, and restart functionalities enhance playability. Overall, the code demonstrates combining graphics, user input, and game logic in an engaging OpenGL simulation.*

**Member 1:** Raiful Islam Rafi (22201791)

* **Game Logic:** The logic for TUG, where the player pulls the rope in the game. This will require translating players and the ropes shapes on the winning side of the game. Pressing ‘A’ will translate the shapes towards the left player side, and pressing ‘L’ will translate the shapes towards the right side. Whosoever pulls and gets past the score of 10, that player wins. Also, if both pulls are the same, the game is a tie.

* **Win Animation:** The player who wins the game will take a part of the rope and run away with victory.
* **Stamina:**This feature allows a player to win through his stamina over the other player. If a player pulls over the rope too many times, I will decrease his stamina to a point where his pulls won’t affect the score, momentarily. This gives the other player, if he has more stamina, to compete and have an edge over the opponent, to win the game.

**Member 2:** Irfath Ara Sarika(22201794)

**\* Scoreboard of High Scores:**is handled by reading/writing a JSONL file inside OpenGL game loop and drawing it on the HUD with draw\_text()

**\* Game Design:**  is baked into the scene rendering : platforms, rope, players, lighting, and the mechanics are all drawn with OpenGL primitives.

**\* Pause/Resume/Restart:** logic is in keyboard input (keyboardListener) and state variables (game\_paused, round\_running), integrated with the rendering and idle updates.

**Member 3:** Khan Tousif Hossen (21201055)

* **Camera Movement:**
* **30-Second time round winner:**
* **Bot Player:**

[Github Repository](https://github.com/RI-Rafi/CSE423-Tug-Of-Rope)