Galactic Escape

Game Rules Documentation

Objective

1. Navigate your spaceship through a perilous asteroid field to collect all available fuel cells.

2. Survive for up to 2 minutes by managing your ship's energy and health, while maximizing your score by collecting fuel cells quickly.

Core Mechanics

1. **Player Spaceship**

   o **Health:** The spaceship starts with a certain amount of health. Collisions with asteroids will damage the ship and reduce its health. If health reaches zero, the ship is destroyed, and the game is lost.

   o **Energy:** The spaceship requires energy to maneuver (move forward/backward, strafe, and turn). Energy is consumed when movement or turning inputs are active. Energy does not deplete passively. If energy reaches zero, you will lose control and subsequently lose the game.

   o **Fuel Collection:** Flying through a Fuel Cell replenishes a portion of the spaceship's energy and awards score.

2. **Asteroids**

   o **Quantity:** The game features at least 3 (typically more) randomly moving asteroids.

   o **Behavior:** Asteroids move in random directions and have continuous rotation animations, creating a dynamic and hazardous environment.

   o **Collision:** Colliding with an asteroid inflicts damage to the spaceship's health. The amount of damage is proportional to the impact force. The asteroid involved in the collision is destroyed.

3. **Fuel Cells**

   o **Appearance:** Glowing, cylindrical collectibles that are procedurally generated.

   o **Effect:** When collected by the spaceship, they provide a fixed amount of energy and add to the player's score.

- o **Animation:** Animated with continuous rotation and a gentle floating/bobbing effect.

- o **Scoring:** The base score for collecting a fuel cell is augmented by a time bonus – the faster you collect them (i.e., the more time remaining in the game), the higher the bonus score per cell.

4. **Time Limit**

- o The game has a 2-minute (120 seconds) countdown timer.

Game End Conditions

1. **Victory:**

- o **All Fuel Cells Collected:** If the player successfully collects all fuel cells spawned in the level before the time runs out and before the ship is destroyed or runs out of energy. Feedback*: "YOU WIN! All Fuel Cells Collected! Final Score: [Player's Score]"*

2. **Game Over:**

- o **Time Expires:** If the 2-minute timer reaches zero before all fuel cells are collected or other loss conditions are met. Feedback*: "GAME ENDED. Time's Up! Final Score: [Player's Score]"*

- o **Ship Health Depleted:** If the spaceship's health reaches zero due to asteroid collisions. Feedback*: "YOU LOST! Ship Destroyed by Collision! Final Score: [Player's Score]"*

- o **Ship Energy Depleted:** If the spaceship's energy for maneuvering reaches zero. Feedback*: "YOU LOST! Energy Depleted! Final Score: [Player's Score]"*

Controls

1. **Spaceship Movement (Keyboard):**

- o **Forward Thrust:** W or Up Arrow

- o **Backward Thrust:** S or Down Arrow

- o **Strafe Left:** A or Left Arrow

- o **Strafe Right:** D or Right Arrow

- o **Strafe Up:** Spacebar or Numpad +

- o **Strafe Down:** Left Alt or Numpad -

- o **Turn Left (Yaw):** Q

- o **Turn Right (Yaw):** E

2. **Camera Control (Mouse):**

   - o **Rotate Camera:** Hold Right Mouse Button and move the mouse.

   - o **Zoom Camera:** Use the Mouse Scroll Wheel.

3. **Game Flow (Keyboard):**

   - o **Pause / Resume Game:** Press ESC to open/close the Pause Menu. The Pause Menu provides options to:

     - ▪ **Resume:** Continue the game.

     - ▪ **Restart:** Restart the current level from the beginning.

     - ▪ **Quit Game:** Exit the application.

Scoring

1. Score is primarily earned by collecting Fuel Cells.

2. Each Fuel Cell has a base score value.

3. An additional time-based bonus is awarded for each Fuel Cell collected. This bonus is higher if the cell is collected earlier in the game (when more time is remaining on the main game timer).