

Parachute Landing Game

1. Game Concept and Goal

- **Objective:** The player controls a character with a parachute who is descending toward a moving landing pad. The goal is to land the character safely on the pad without crashing.

2. Game State Management

- **Start Screen:** Display a clear start button with the title of the game. Allow users to press the start button to transition to the main gameplay screen.
- **Gameplay:** The player controls the descent, trying to land on a moving pad. Add gravity, acceleration, and player controls for a fun experience.
- **End Screen:** After the player either lands or crashes, show the result and allow them to restart or exit.

3. User Interface (UI)

- **Start Button:** The player clicks to start the game. Make it clear and prominent.
- **End Button:** When the game ends, allow players to end or restart the game using a button. This can also help to reset the game state.
- **Game Feedback:** Display clear messages like “Landed Safely” or “Crashed” with a visual cue to make the outcome clear.

4. Gameplay Features

- **Character Movement (Descent):**
 - The character (parachutist) should be controlled via gravity. You can apply additional control via mouse or key presses to slow down or accelerate the descent.
- **Landing Pad:**
 - The pad should move horizontally. If the character lands in the area of the pad, it should be considered a successful landing.
- **Collision Detection:**
 - If the character falls outside the landing pad, it results in a crash.
 - The player has to control the character's descent, ensuring they land on the moving pad to avoid a crash.

9. User Interaction

- **Mouse or Keyboard Control:** The player should be able to control the parachutist's descent by pressing a key (e.g., space to slow down or speed up the descent).

Sample Gameplay Flow:

1. **Start Screen** → Player clicks “Start Game”.

2. **Gameplay** → The character falls with gravity, and the landing pad moves left/right. Player must land on it to win.
3. **End Game** → Player either lands successfully or crashes, and the "Game Ended" screen appears.
4. **Restart/Exit** → Player can restart the game or return to the start screen.