

Jumping Game – Portfolio Project

This project is a modernized 2D jumping game built entirely with HTML5, CSS3, and vanilla JavaScript, designed as a polished portfolio piece.

Key Features

1. Modern UI & Visuals

Gradient background from sky blue (#1e3c72) to cyan (#2a5298).

Clean flat design with rounded corners, subtle shadows, and hover animations.

Player is styled in bright red (#FFD700) with a glowing effect.

Obstacles use vibrant red (#FF4C4C) with subtle fade-in animations.

Responsive, minimal overlay menus with professional typography.

2. Gameplay Mechanics

Classic side-scrolling jump-and-avoid gameplay.

Physics-based movement: gravity, velocity, collision detection.

Progressive difficulty: obstacles increase over time.

Win condition: reach the yellow finish line.

Restart system with on-screen button & keyboard shortcut (R).

3. User Experience Enhancements

Start screen overlay with instructions and Play button.

Game Over / Victory screens with animated buttons.

Score & Level counter displayed in the top corner, styled with transparent background (rgba(0,0,0,0.5)).

Idle animations: player sprite slightly “bounces” for a polished look.

Smooth transitions for score updates and button hovers.

4. Responsiveness & Controls

Keyboard support for desktop:

Move: Arrow Keys / A, D

Jump: Space / W / Arrow Up

Mobile touch controls: on-screen buttons for move/jump.

Canvas scaling to fit mobile and desktop screens automatically.

5. Code Quality

Organized into separate HTML, CSS, and JavaScript sections.

Commented code explaining major logic (movement, collision, UI).

No external libraries required → works directly on GitHub Pages.

General-purpose, reusable functions instead of hard-coded values.

6. Extra Features

Sound effects: jump and collision sounds with mute toggle.

Animations for smoother gameplay experience.

Lightweight and loads instantly.

Summary

This project takes a basic jumping game prototype and elevates it into a professional-grade portfolio showcase, with modern UI design, responsive controls, engaging gameplay, and clean, well-documented code.

It demonstrates front-end development skills, including canvas graphics, game physics, responsive design, UI/UX polish, and JavaScript game logic.