🎮 Unity Assignment: “Bounce Dash” — A Hyper-Casual 2D Game

🧠 Objective:

Create a hyper-casual 2D arcade-style game called **“Bounce Dash”** where the player controls a bouncing ball that dodges obstacles and collects coins to score points.

📋 Core Gameplay:

- The player controls a **bouncing ball** that automatically bounces vertically.
- The player can **move the ball left or right** using keyboard (A/D or arrow keys) or touch swipe.
- The level scrolls vertically as the ball climbs upward.
- Add **obstacles** (e.g., rotating blades, spikes) and **collectibles** (coins or gems).
- If the player hits an obstacle, it's **Game Over**.
- The goal is to **score as high as possible** before dying.

🧩 Required Features:

🎮 Game Mechanics:

- Bouncing physics (manually or using Rigidbody2D)
- Player movement (smooth left/right)
- Dynamic spawning of obstacles and coins
- Scoring system based on time survived and coins collected

💡 **UX & UI:**

- Start screen with Play button
- Game Over screen with score and restart option
- UI animations (score update, coin pop effect)
- Minimalist but appealing design (spend effort on feel, not asset quality)

🧰 **Technical:**

- Unity 6
- Mobile input support (optional but encouraged)
- Clean and modular C# code (player movement, spawning, scoring in separate scripts)
- Include comments and basic structure in the code

💎 Bonus (Optional):

- Simple shop to unlock new ball skins (just color changes or icons)
- Implement a daily challenge mode (e.g., "collect 50 coins")
- Use Unity's Addressables or ScriptableObjects for dynamic data (obstacles, coin configs)

🚀 Submission Guidelines:

- Share a GitHub repo or zipped Unity project
- **Gameplay video is mandatory**

- Include a README with:
    - Controls
    - Setup instructions
    - Known issues (if any)
    - Short note about your approach to game feel or optimization