

## Step 1: Set Up the Project

1. Open Unity Hub
2. Click “New Project”
3. Choose “2D Core” template
4. Name it `MonkeyBananaGame`
5. Click “Create”

## Step 2: Set Up the Scene

- Create GameObjects: Player, Tree, Banana, Ground, Canvas (UI)
- Organize with empty GameObjects like “Environment”, “Collectibles”, and “UI”

## Step 3: Add Sprites

- Use placeholders or download from Kenney.nl
- Import PNGs into `Assets/Sprites/`
- Set Texture Type to “Sprite (2D and UI)”

## Step 4: Create the Player (Monkey)

1. Create a 2D Sprite GameObject named `Player`
2. Add `Rigidbody2D`, freeze Z rotation
3. Add `BoxCollider2D`

### Movement Script: `PlayerMovement.cs`

```
using UnityEngine;

public class PlayerMovement : MonoBehaviour
{
    public float moveSpeed = 5f;
    public float jumpForce = 7f;
    private Rigidbody2D rb;
    private bool isGrounded;

    void Start() => rb = GetComponent<Rigidbody2D>();

    void Update()
    {
        float move = Input.GetAxis("Horizontal");
        rb.velocity = new Vector2(move * moveSpeed
                                   , rb.velocity.y);
    }
}
```

```

        if (Input.GetButtonDown("Jump") &&
            isGrounded)
        {
            rb.velocity = new Vector2(rb.
                velocity.x, jumpForce);
        }
    }

    void OnCollisionEnter2D(Collision2D collision)
    {
        if (collision.gameObject.CompareTag("
            Ground"))
            isGrounded = true;
    }

    void OnCollisionExit2D(Collision2D collision)
    {
        if (collision.gameObject.CompareTag("
            Ground"))
            isGrounded = false;
    }
}

```

## Step 5: Set Up Environment

- Ground: Add Sprite, BoxCollider2D, tag as "Ground"
- Tree: Add Sprite, optional Collider2D

## Step 6: Create the Banana System

### Banana Prefab

- Add SpriteRenderer and CircleCollider2D (isTrigger = true)
- Create this script:

```

using UnityEngine;

public class Banana : MonoBehaviour
{
    private void OnTriggerEnter2D(Collider2D collision
    )
    {
        if (collision.CompareTag("Player"))
        {
            BananaCollector.Instance.Collect()
            ;
            Destroy(gameObject);
        }
    }
}

```

```
}  
}
```

## Banana Spawner

```
using UnityEngine;  
  
public class BananaSpawner : MonoBehaviour  
{  
    public GameObject bananaPrefab;  
    public Transform[] spawnPoints;  
  
    void Start()  
    {  
        foreach (var point in spawnPoints)  
        {  
            Instantiate(bananaPrefab, point.  
                position, Quaternion.identity);  
        }  
    }  
}
```

## Step 7: Score System

### BananaCollector.cs

```
using UnityEngine;  
using UnityEngine.UI;  
  
public class BananaCollector : MonoBehaviour  
{  
    public static BananaCollector Instance;  
    public int score = 0;  
    public Text scoreText;  
  
    void Awake()  
    {  
        if (Instance == null) Instance = this;  
    }  
  
    public void Collect()  
    {  
        score++;  
        if (scoreText != null)  
            scoreText.text = "Bananas:_" + score;  
        else  
            Debug.LogWarning("ScoreText_is_NULL!");  
    }  
}
```

## Step 8: UI Setup

1. Create Canvas → UI → Text (rename to **ScoreText**)
2. Set font size, color, anchor to top-left
3. Drag **ScoreText** into **scoreText** field of **BananaCollector**

## Debugging and Fixes

- **Movement Script Error:**

- File name and class name must match (**PlayerMovement.cs**)
- No compile errors in Console
- Class must be **public class PlayerMovement : MonoBehaviour**
- Let Unity recompile, then reassign

- **Text Namespace Error:**

- Add **using UnityEngine.UI;** at the top of the script

- **Jump Not Working:**

- Check if **isGrounded** is ever true
- Confirm Ground has "Ground" tag
- Player has **Rigidbody2D**
- Collider setup correct
- Add Debug line for **isGrounded**

- **Collider Settings:**

- Player: **Rigidbody2D**, **Collider2D**, **isTrigger = false**
- Ground: **Collider2D**, **isTrigger = false**, **tag = "Ground"**
- Banana: **Collider2D**, **isTrigger = true**

- **Banana Not Spawning on Tree:**

- Create child empty **GameObjects** (spawn points) under trees
- Assign them to **BananaSpawner's spawnPoints** array

- **Banana Not Disappearing:**

- Banana collider: **isTrigger = true**
- Player: **Rigidbody2D**, **tag = "Player"**
- Banana script uses **OnTriggerEnter2D**
- Add Debug log to confirm trigger

- **UI Positioning:**

- For top-left anchor, use:
- Pos X = 20
- Pos Y = -20
- Width = 300
- Height = 100