Unity Mini Start 023

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Use the level made in mini tutorial 22.

- Delete the enemy.
- Place the question box sprite and give it a box collider 2D
- Change the players script so the player is able to jump on space key press
- Give this script to the Player

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Playermovement : MonoBehaviour
{
public float speed;
Vector3 characterScale;
float characterScaleX;
public bool ladderarea = false;
public float climbSpeed;
public float climbVelocity;
public float gravityStore;
private Rigidbody2D myrigidbody2D;

void Start()
{
myrigidbody2D = GetComponent<Rigidbody2D>();
gravityStore = myrigidbody2D.gravityScale;
characterScale = transform.localScale;
characterScaleX = characterScale.x;
}
private void Update()
{
if (Input.GetKeyDown(KeyCode.Space))
{
GetComponent<Rigidbody2D>().AddForce(new Vector2(0, 7), ForceMode2D.Impulse);
}
if (ladderarea)
{
myrigidbody2D.gravityScale = 0f;
climbVelocity = climbSpeed * Input.GetAxisRaw("Vertical");
myrigidbody2D.velocity = new Vector2(myrigidbody2D.velocity.x, climbVelocity);
}
if (!ladderarea)
{
myrigidbody2D.gravityScale = gravityStore;
}
if (Input.GetKey(KeyCode.LeftArrow))
{
characterScale.x = -characterScaleX;
transform.Translate(Vector2.left * speed * Time.deltaTime);
}
if (Input.GetKey(KeyCode.RightArrow))
{
characterScale.x = characterScaleX;
transform.Translate(Vector2.right * speed * Time.deltaTime);
}
transform.localScale = characterScale;
}
}
```

Now the player is able to jump.

- Place the coin sprite above the box and give it a circle collider 2D and a rigidbody with the Z constraint selected.
- Create a new script and call it coins.
- Add this script to the coin

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Coin : MonoBehaviour
{
Vector3 originalPos;

void Start()
{
originalPos = new Vector3(gameObject.transform.position.x, gameObject.transform.position.y,
gameObject.transform.position.z);
GetComponent<Rigidbody2D>().AddForce(new Vector2(0, 7), ForceMode2D.Impulse);
}

void Update()
{
if (transform.position.y < originalPos.y)
{
Destroy(this.gameObject);
}
}
}
```

If you run the level you will see the coin move up as we added force to the Y axis. Also at start the coordinates of the coin are stored. When the Y coordinates are smaller than the original the coin will be destroyed. You can add sound and score for it later if you want. Drag this ready to go coin to the prefab folder.

- Create a new script and call it Coingiver.
- Give this script to the box.

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Coingiver : MonoBehaviour
{
public int coinstogive;
public GameObject cointospawn;
public float laserLength = 1;
public bool enablecoins = true;
public LayerMask LineOfSightMask;
public Sprite Emptybox;
```

```
public void SetBoolBack()
{
enablecoins = true;
}
public void SpawnCoins()
{

if (coinstogive > 0)
{
enablecoins = false;
Instantiate(cointospawn, new Vector3(transform.position.x,transform.position.y+1.5f,transform.position.z) ,
Quaternion.identity);
coinstogive -= 1;
Invoke("SetBoolBack", 0.3f);
}
}

void Update()
{
if(coinstogive <= 0)
{
this.GetComponent<SpriteRenderer>().sprite = Emptybox;
}
RaycastHit2D hit = Physics2D.Raycast(transform.position, Vector2.down, laserLength, LineOfSightMask);
Debug.DrawRay(transform.position, Vector2.down * laserLength, Color.red);
if (hit.collider != null)
{
if (hit.collider.gameObject.tag == ("Player") && enablecoins == true)
{
SpawnCoins();
}
}
}
}
```

You can set the ammount of coins to give in the inspector's view. Drag the empty box sprite to the inspectors window. This sprite will be visible when there no coins more to give. Eacht time the raycast hits the player it activates the coin give function the bool is reset by using the SetBoolBack function after a 0.3f waittime. You can now create coin or bonus blocks that need to be hit at the bottom.