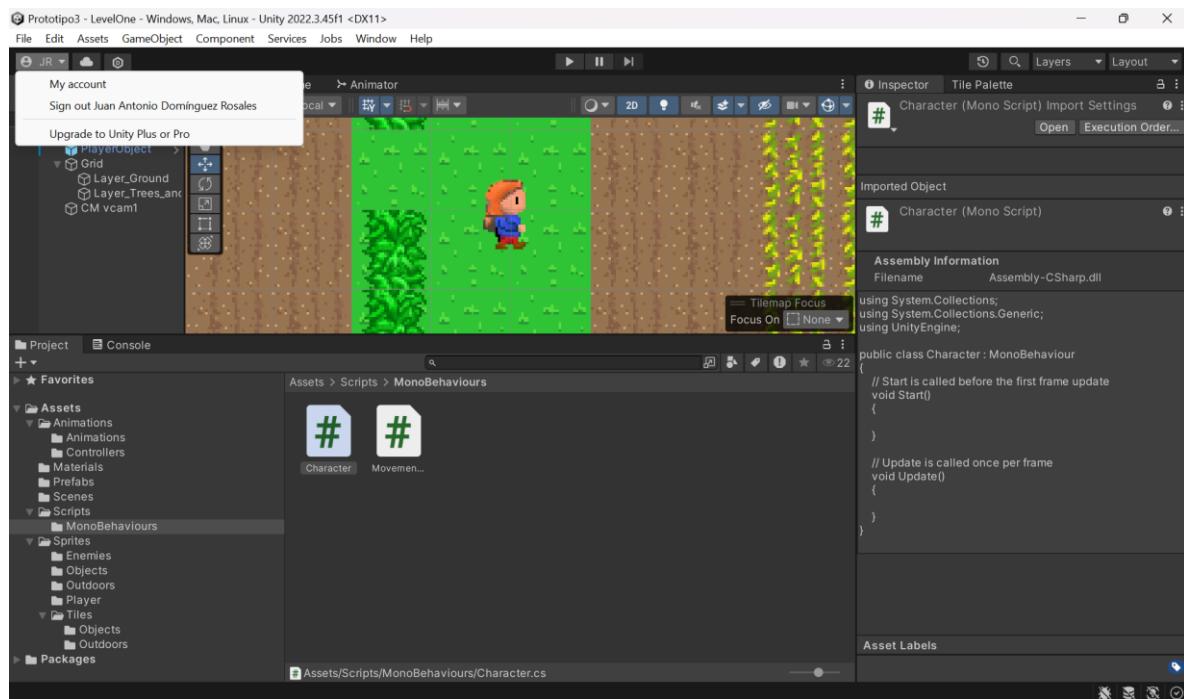
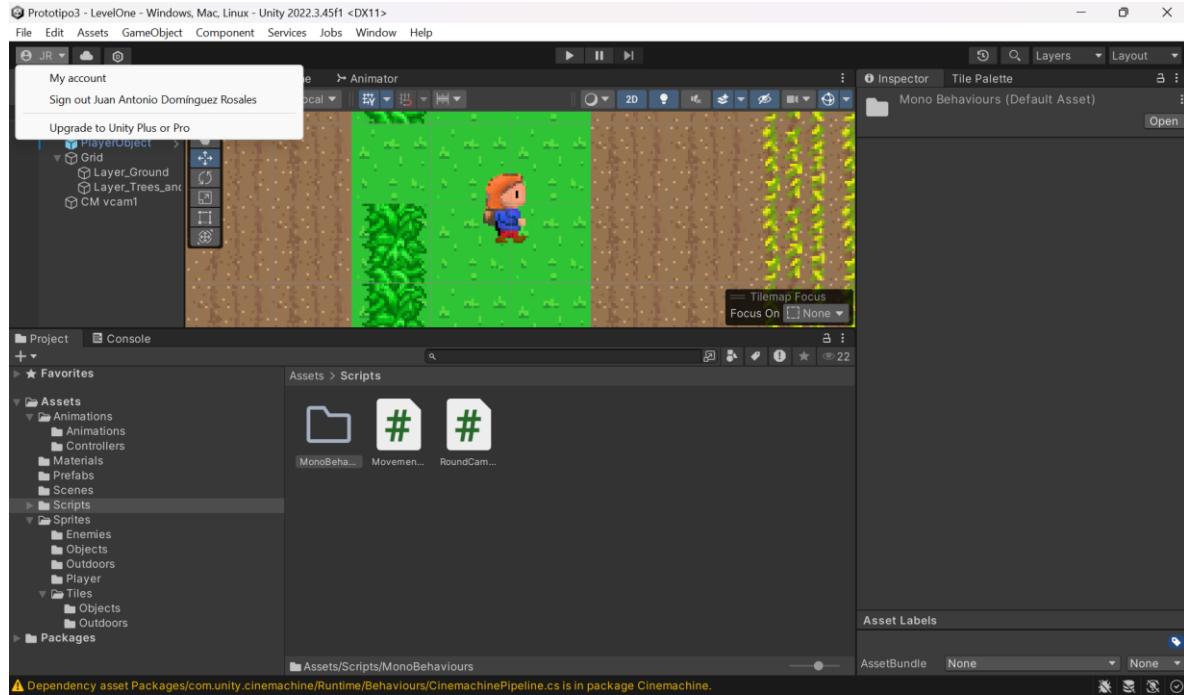


# Prototipo 5 – Evidencia 14/11/2024

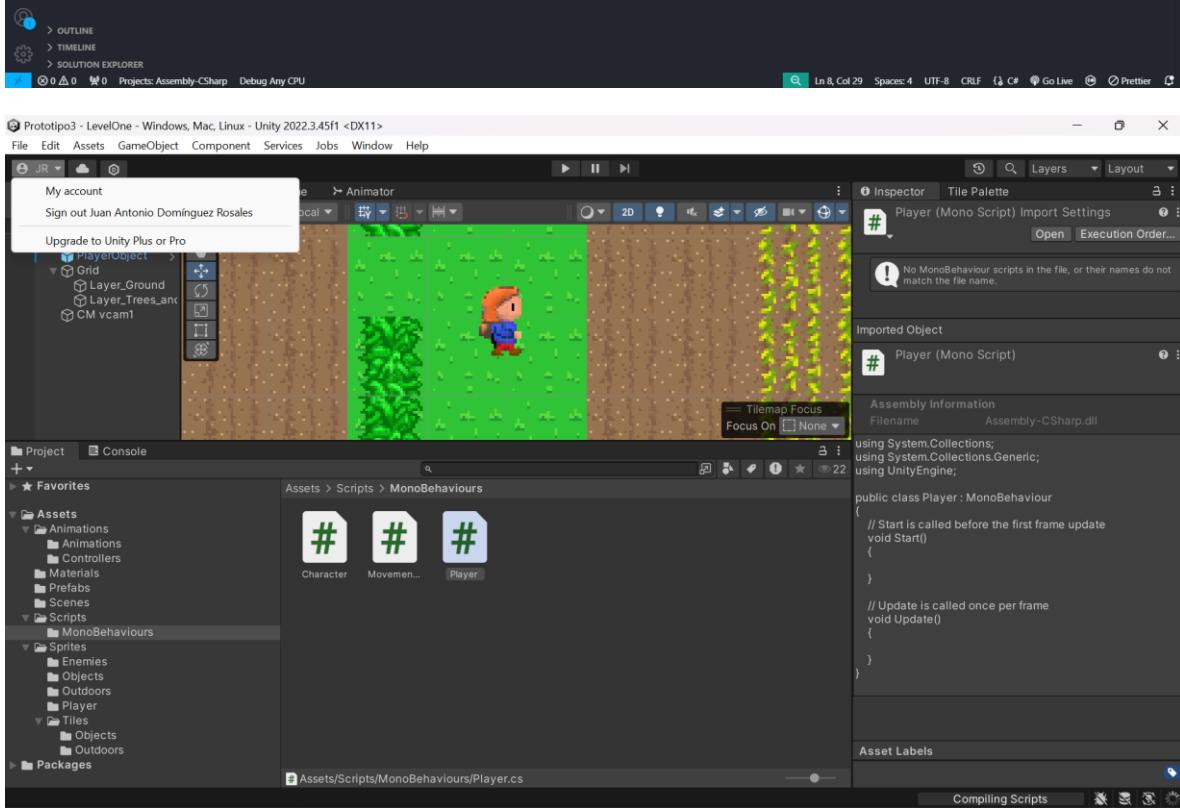
Juan Antonio Domínguez Rosales – GIDS4102



The screenshot shows a code editor interface with a dark theme. The top menu bar includes File, Edit, Selection, View, Go, and a search bar. The left sidebar is labeled 'EXPLORER' and lists project files like 'PROTOTIPO3', 'Assets', 'Scripts', and 'Prototipo3.sln'. The main code editor window displays the following C# script:

```
Assets > Scripts > MonoBehaviours > C# Character.cs > Character > maxHitPoints
1  using System.Collections;
2  using System.Collections.Generic;
3  using UnityEngine;
4
5  public abstract class Character : MonoBehaviour
6  {
7      public int hitPoints;
8      public int maxHitPoints;
9  }
```

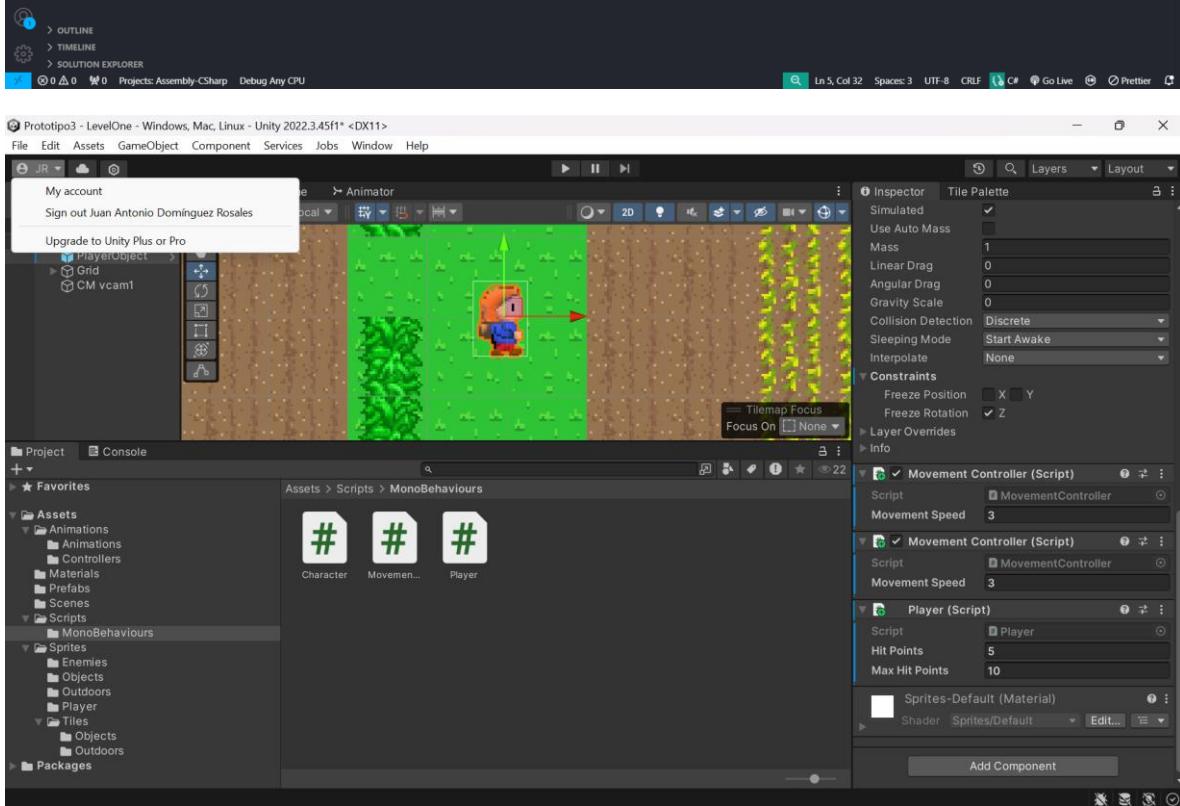
The bottom status bar shows tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS, along with a .NET Install Tool icon.

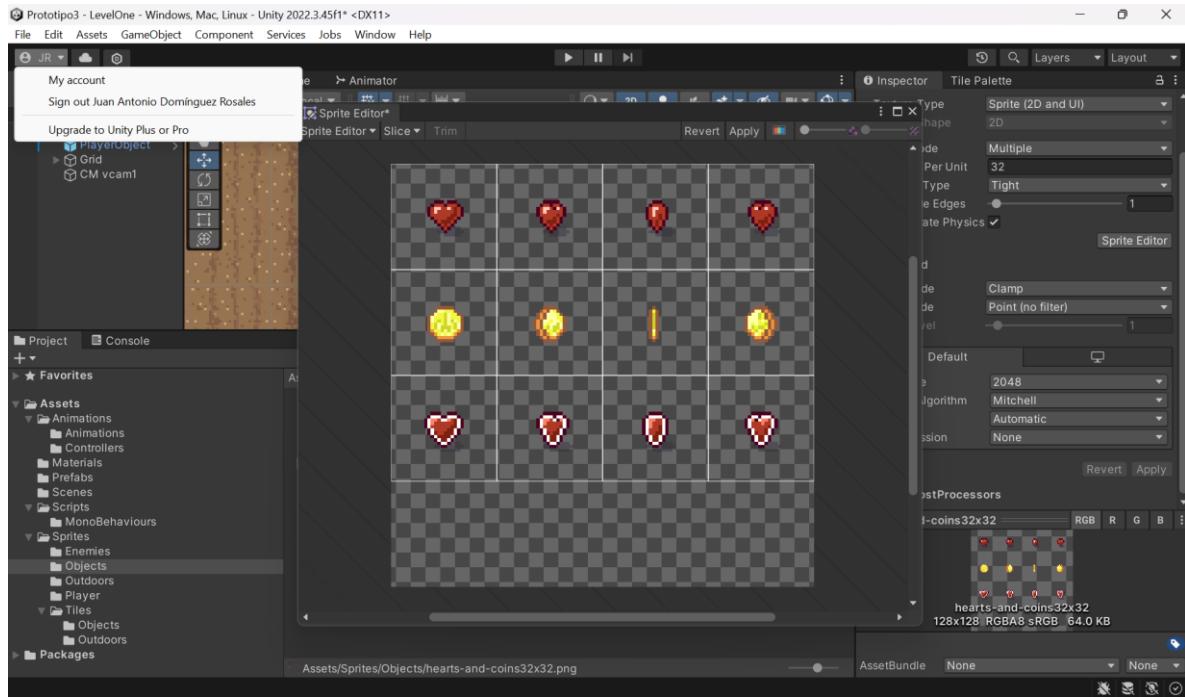
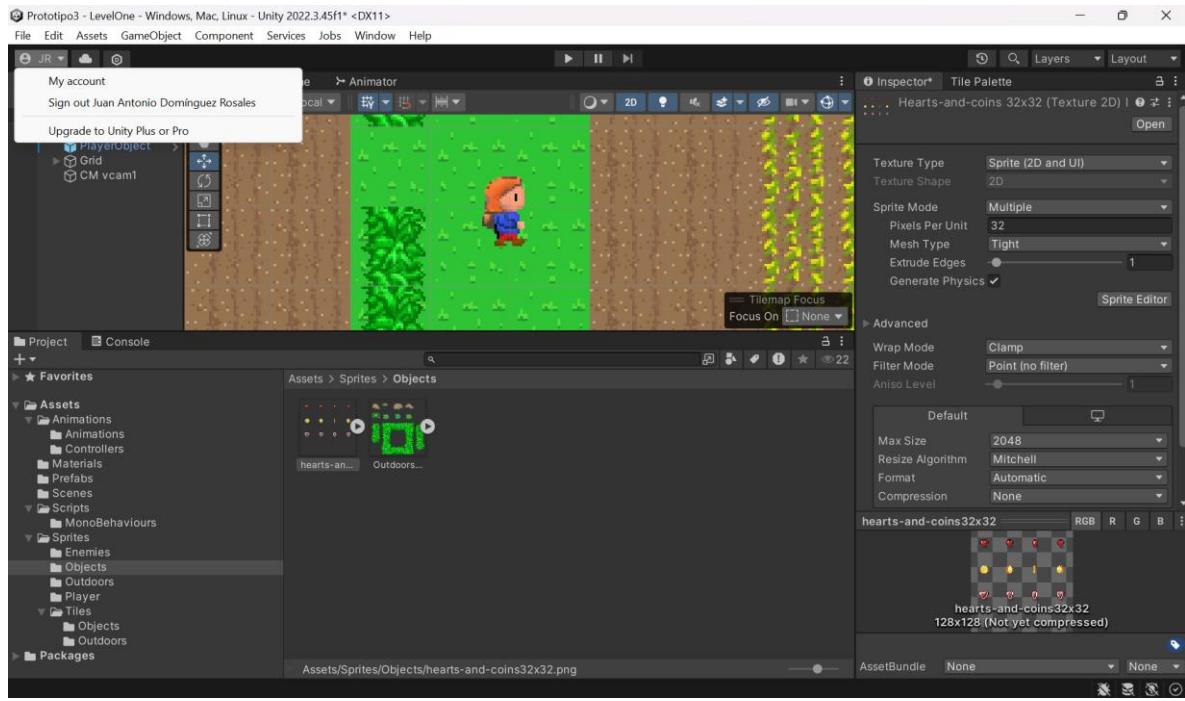


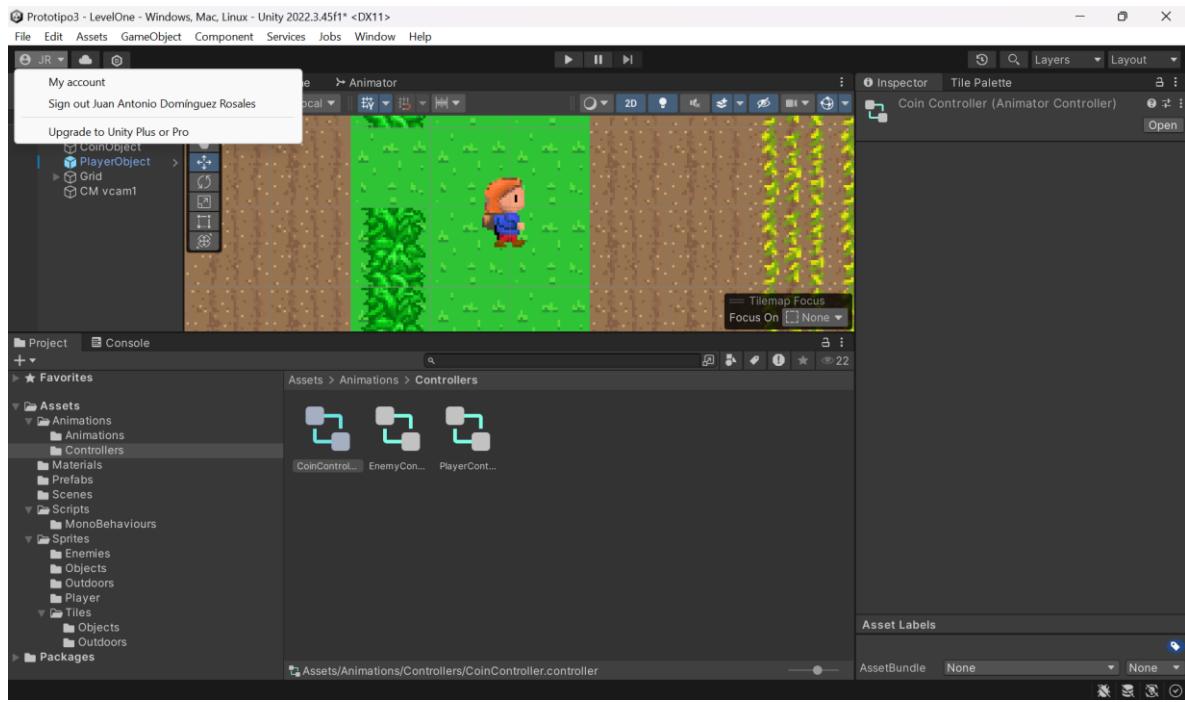
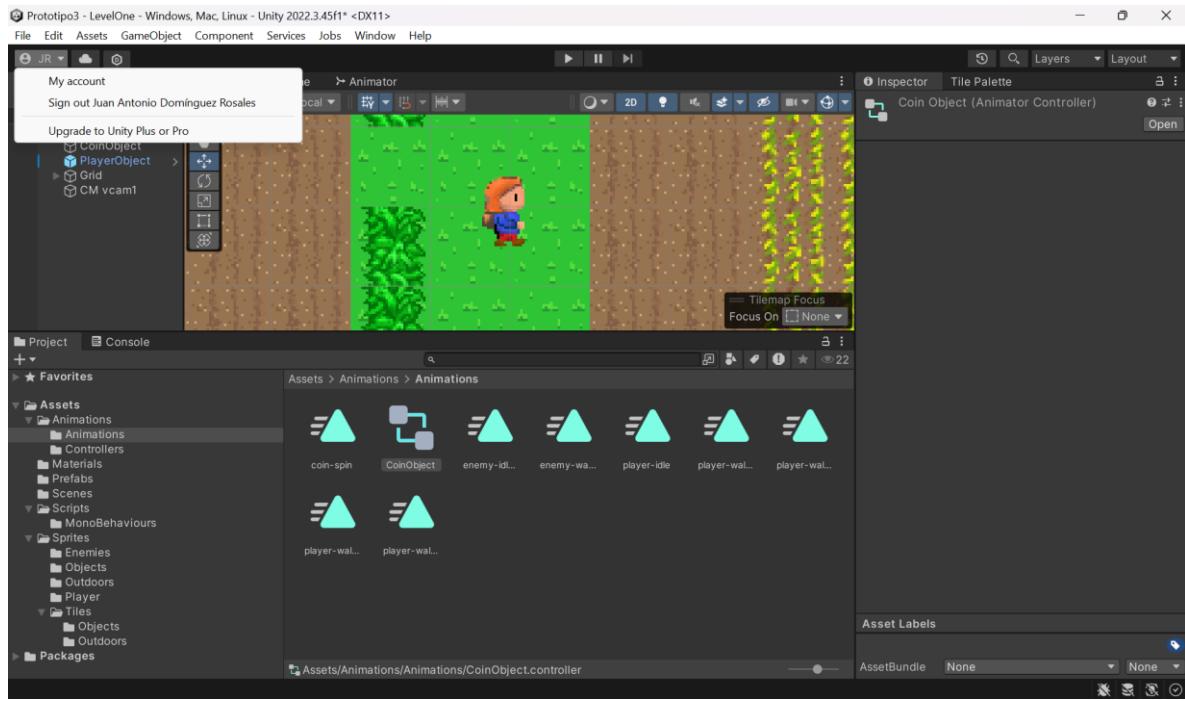
The screenshot shows a code editor window with the file `Player.cs` open. The code defines a class `Player` that inherits from `Character`. The script is located in the `Assets > Scripts > MonoBehaviours` directory. The code is as follows:

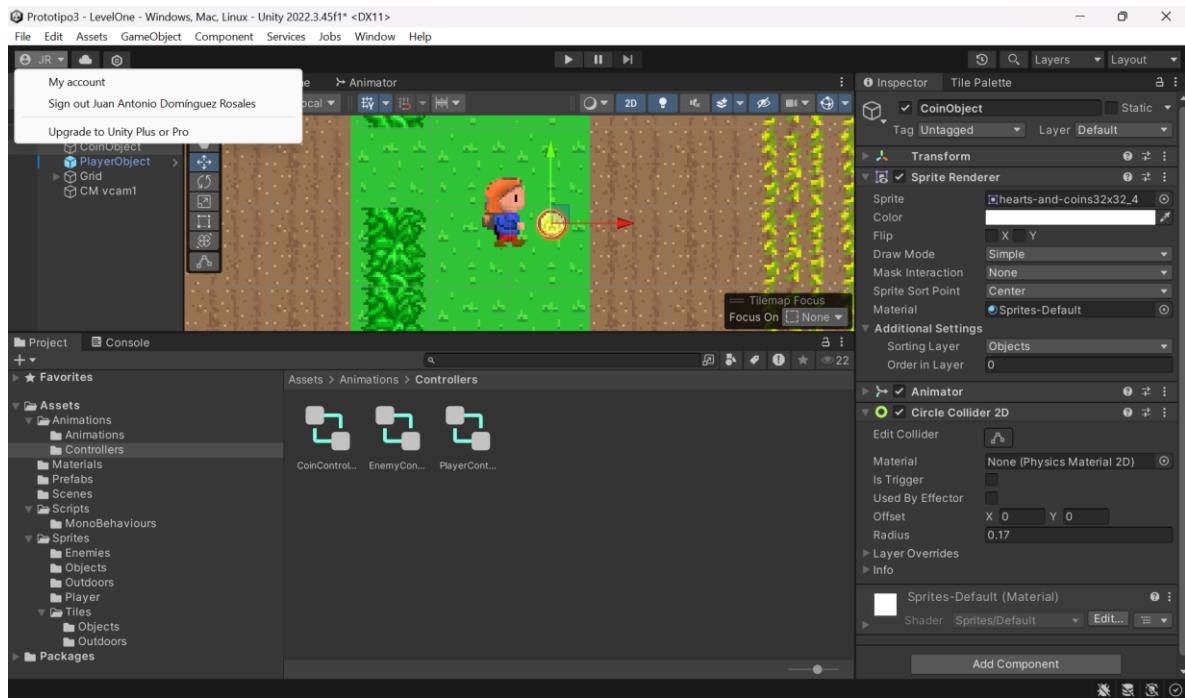
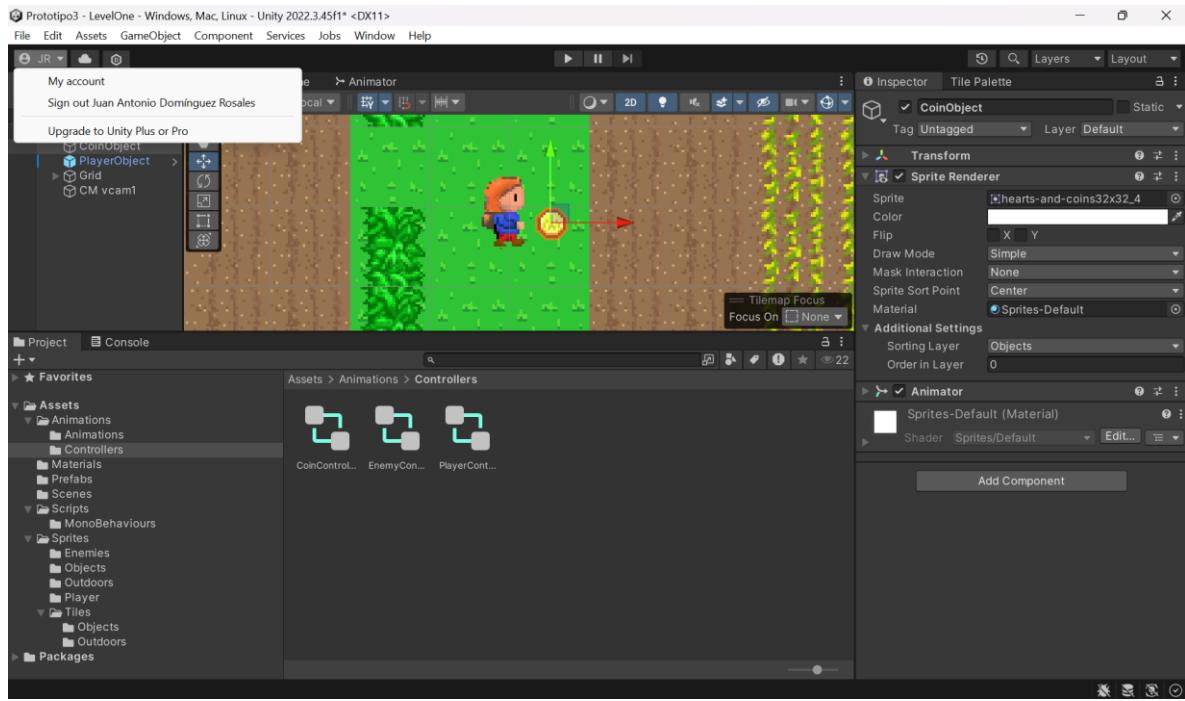
```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

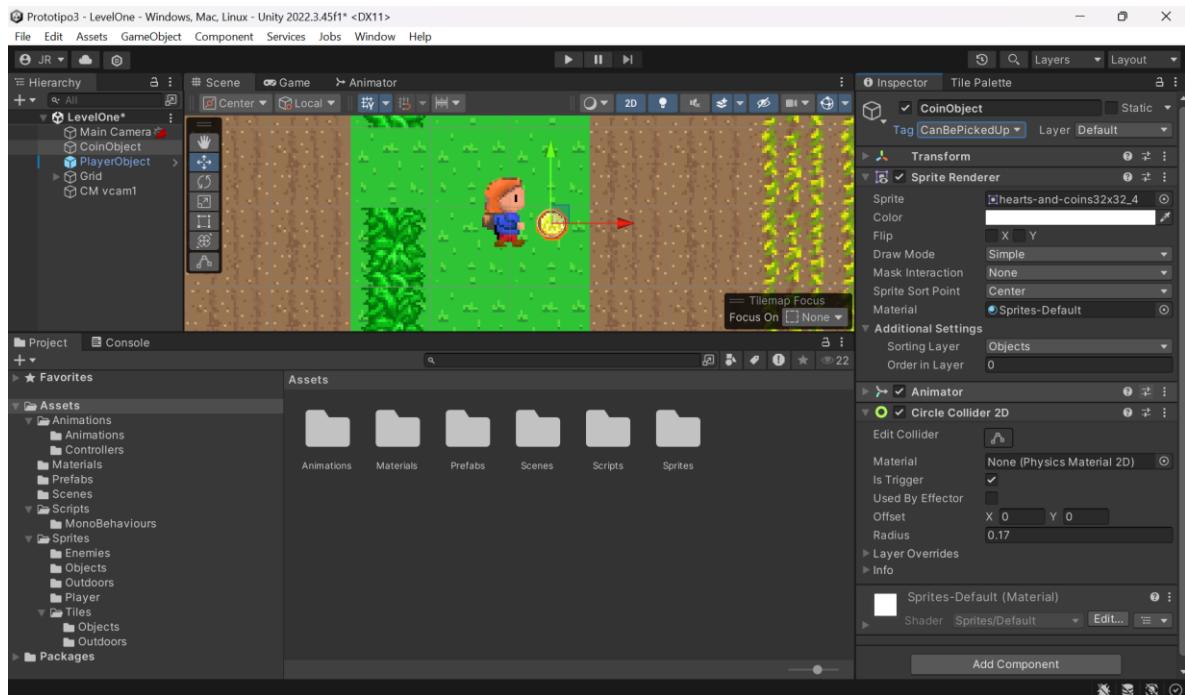
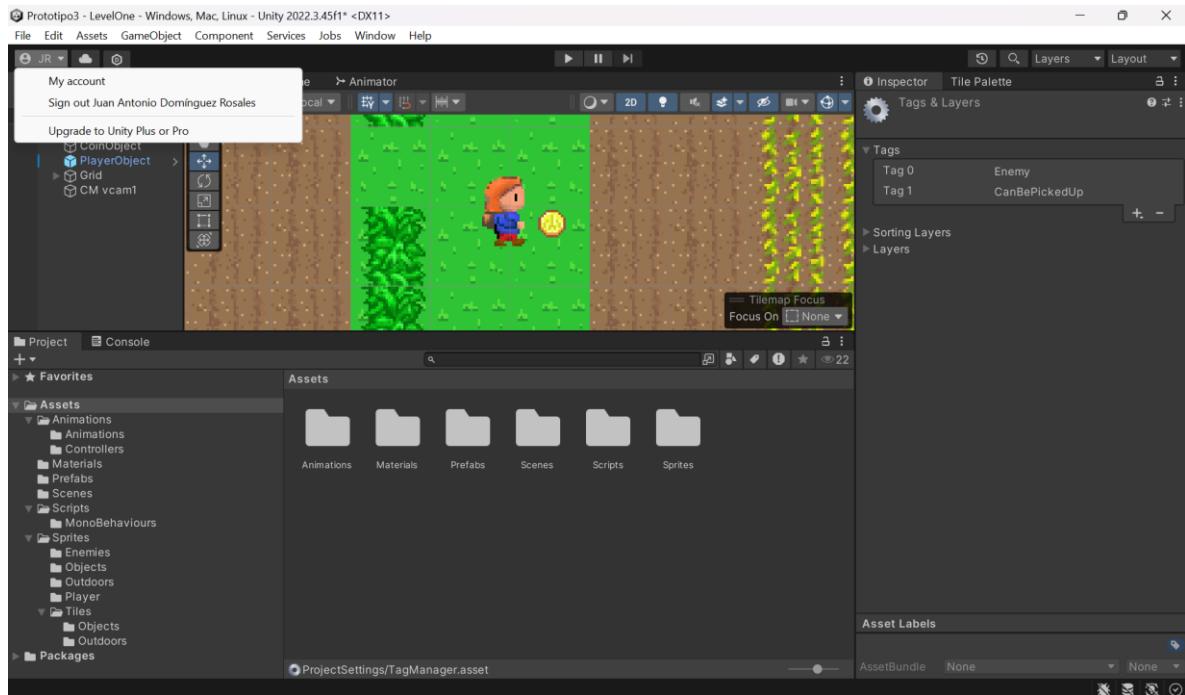
public class Player : Character
{
}
```

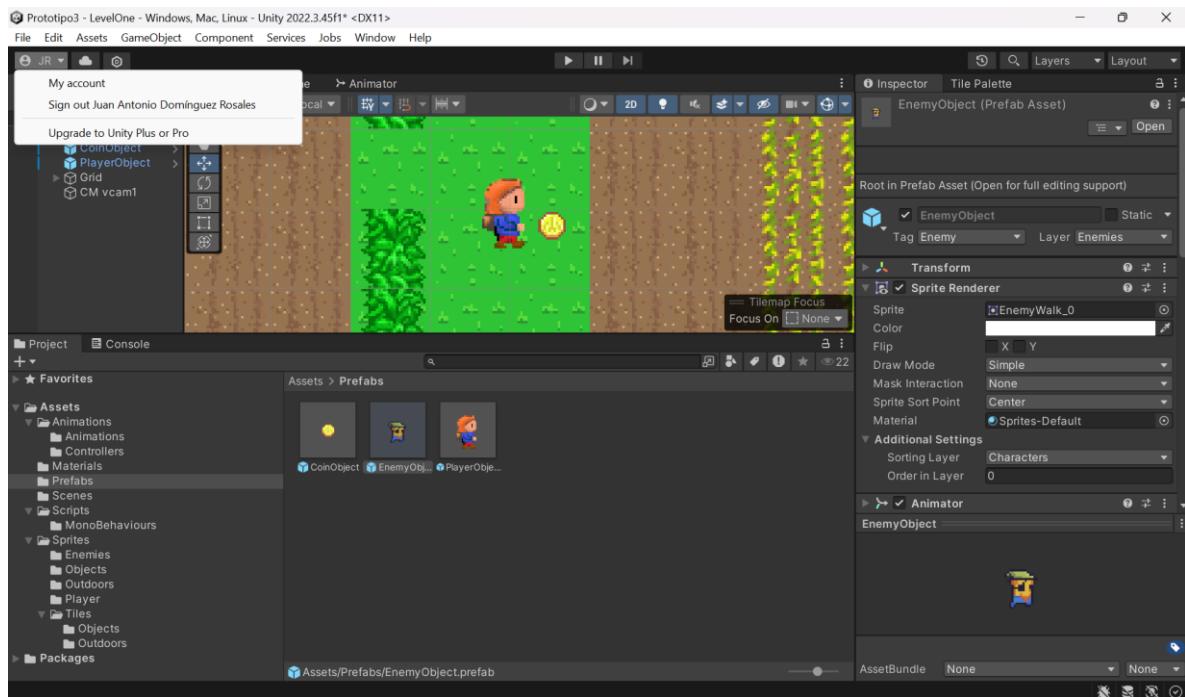
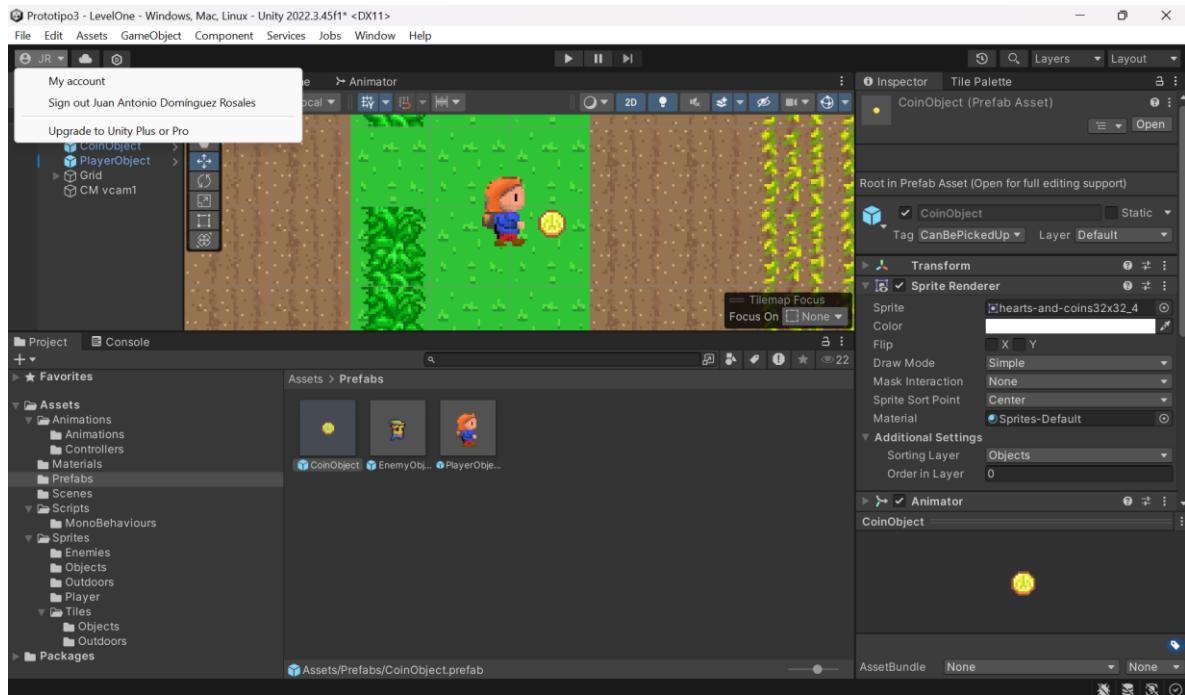


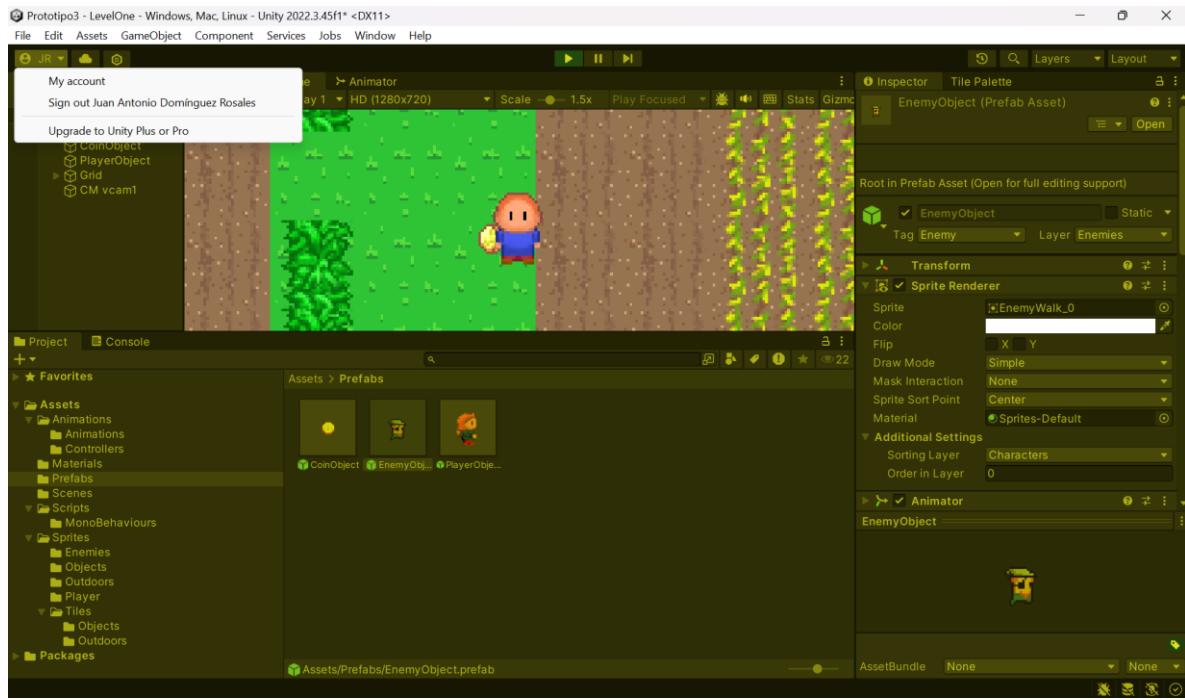
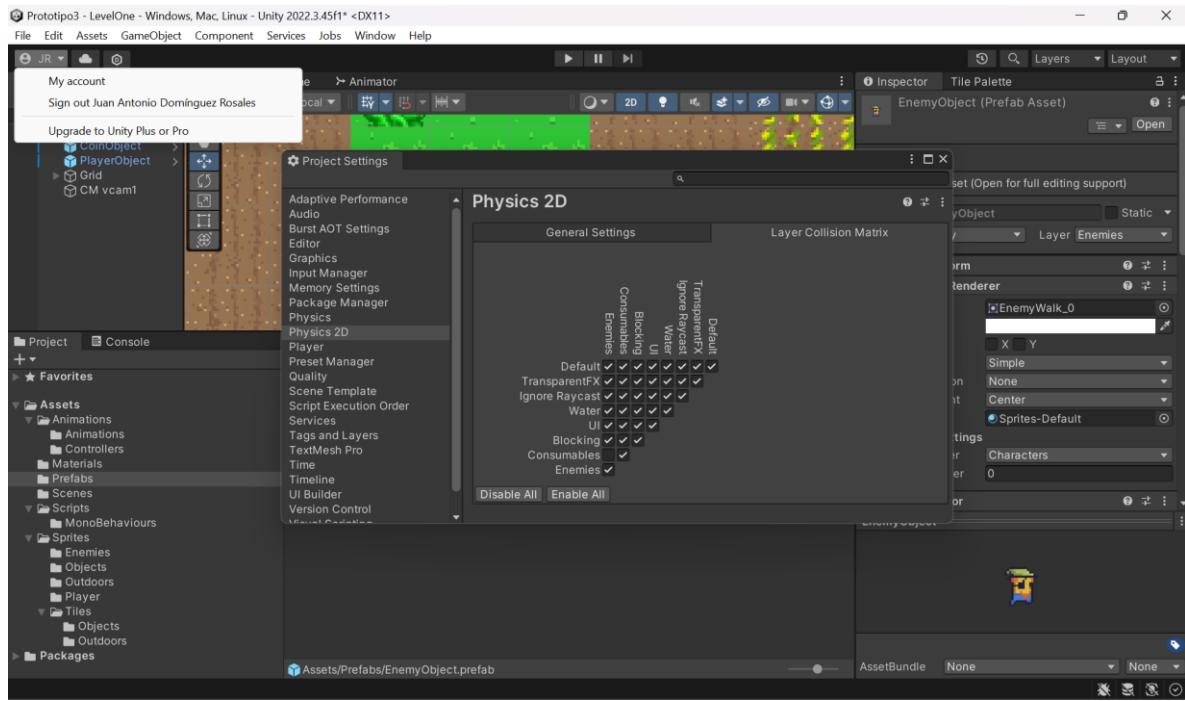












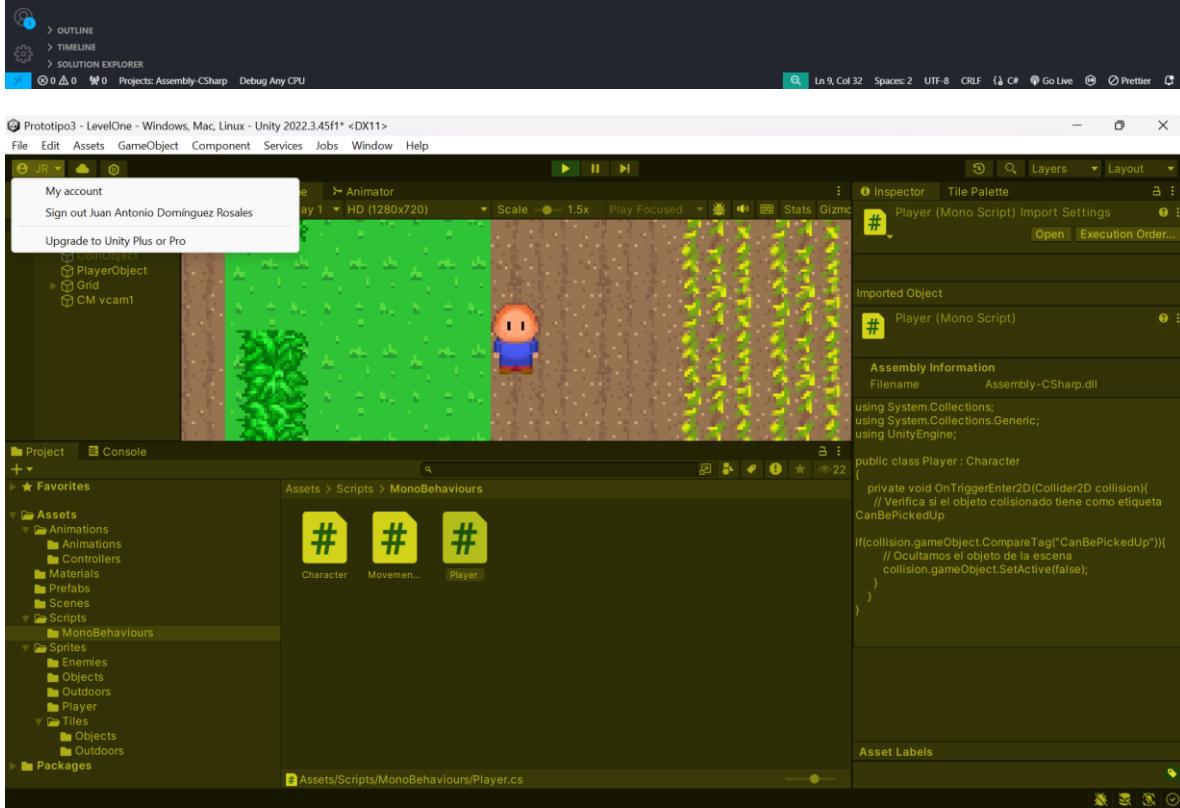
The screenshot shows a code editor window with the file `Player.cs` open. The code defines a `Player` class that inherits from `Character`. It contains a private method `OnTriggerEnter2D` which is unused. A tooltip indicates that the method is unused and provides a quick fix option.

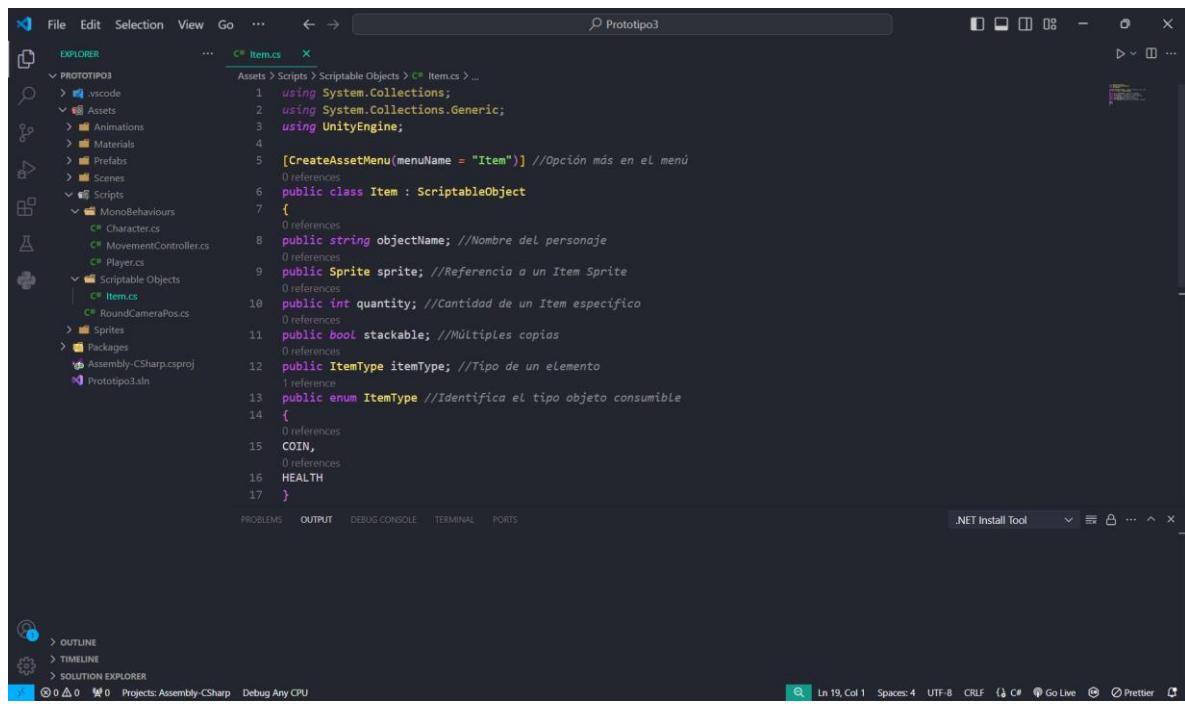
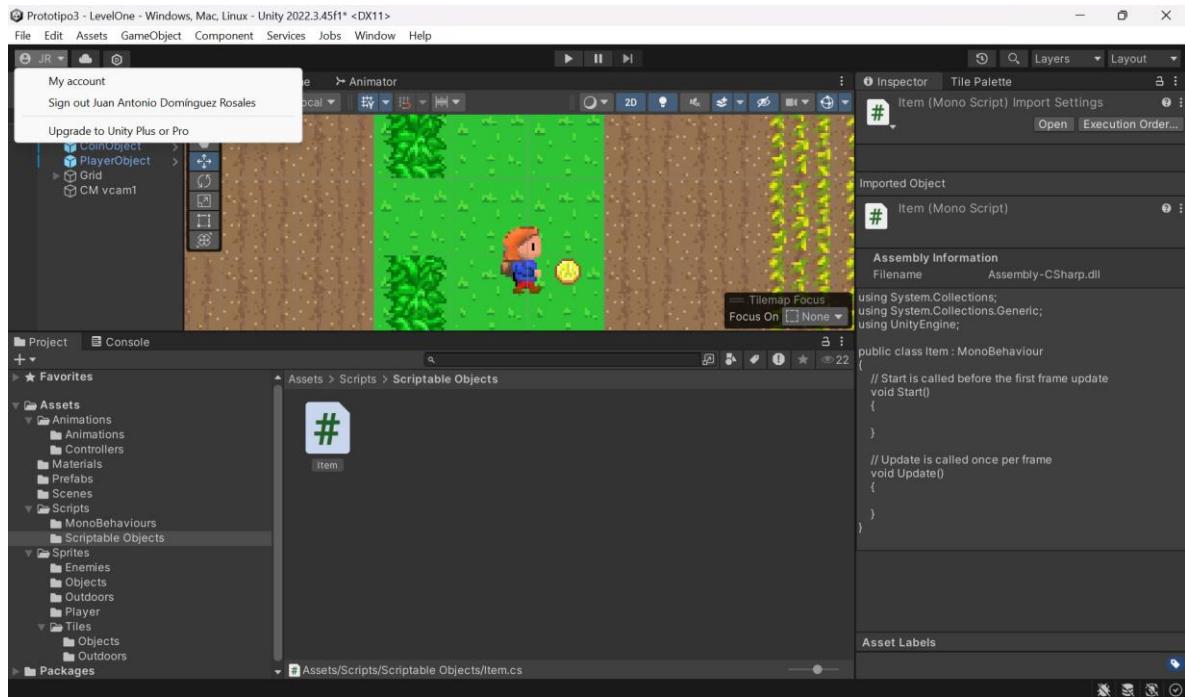
```

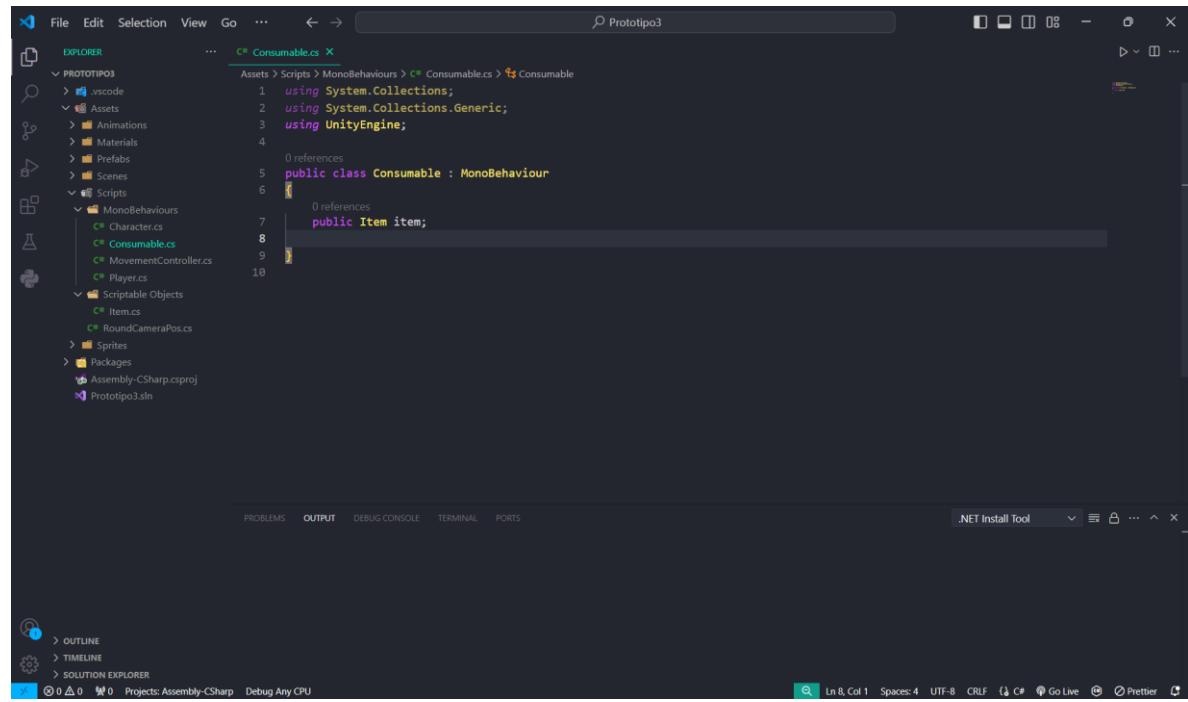
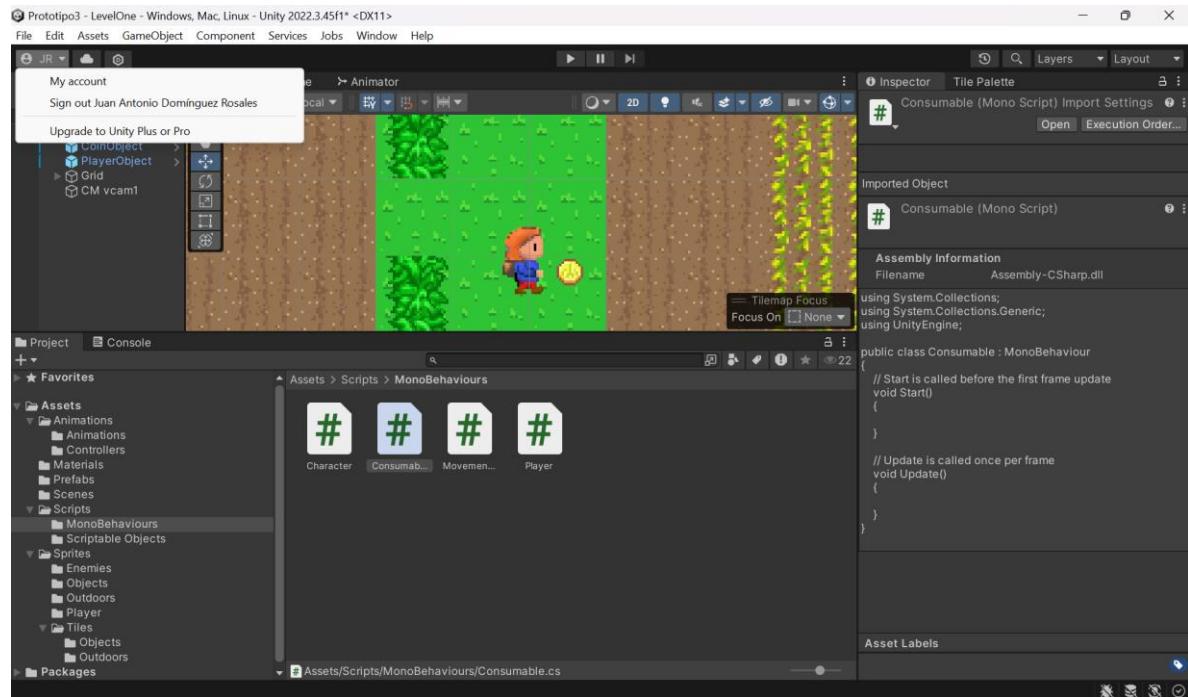
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

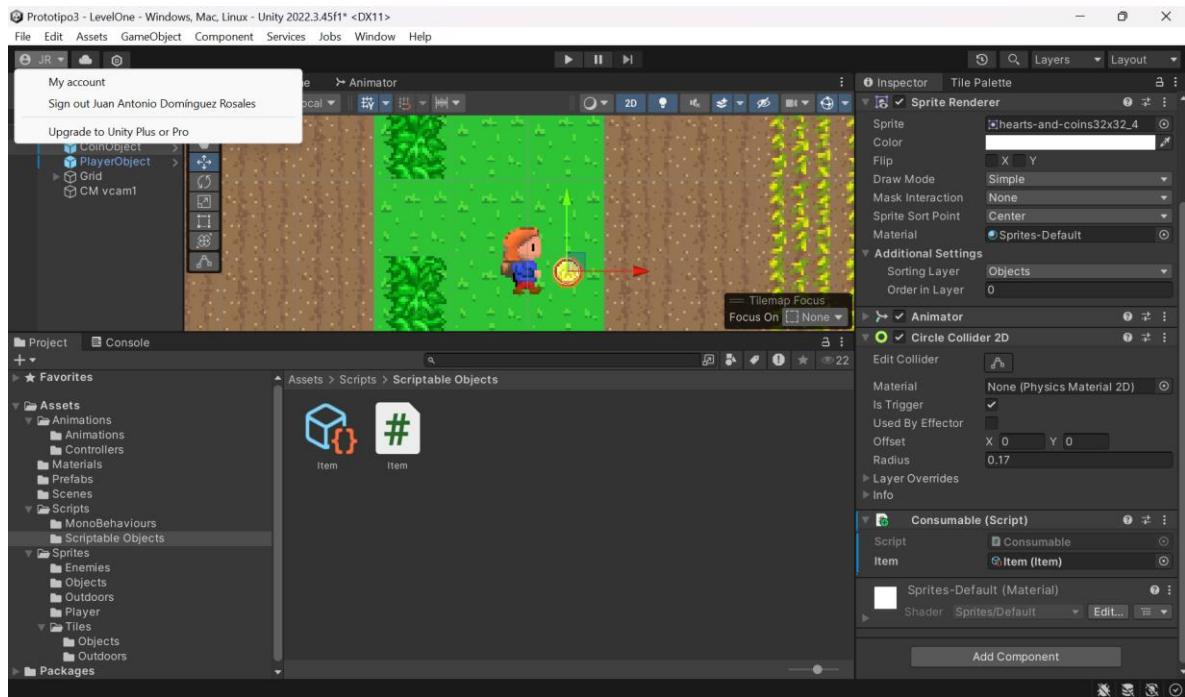
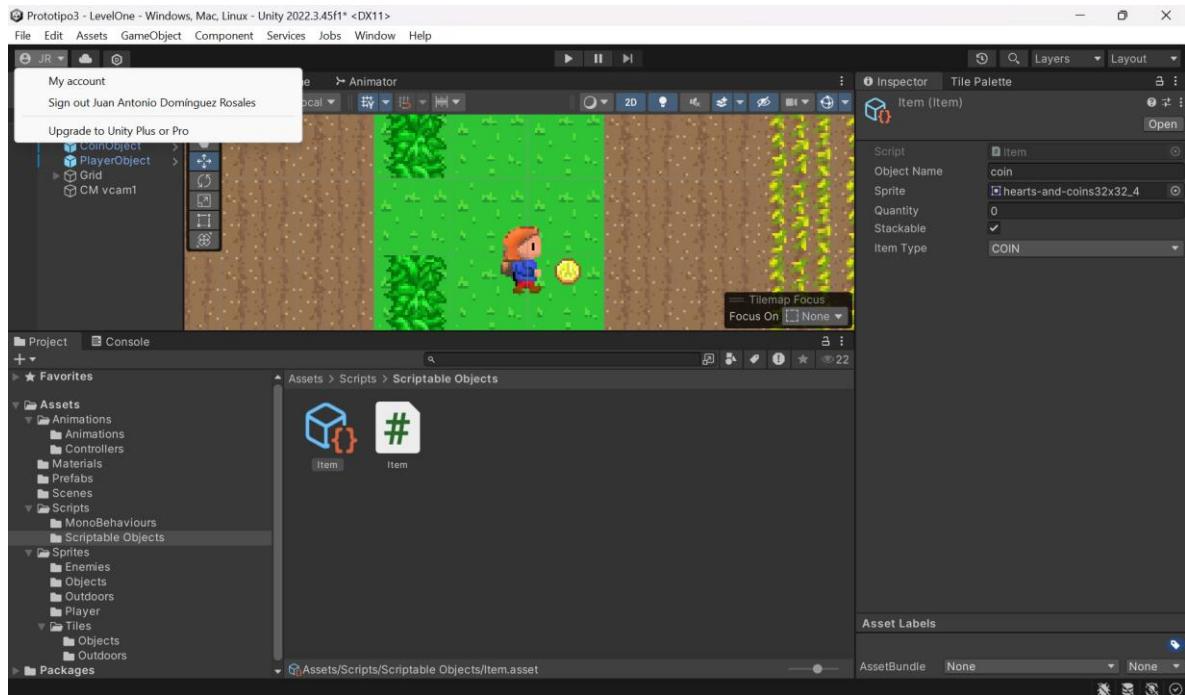
public class Player : Character
{
    private void OnTriggerEnter2D(Collider2D collision)
    {
        // Verifica si el objeto colisionado tiene como etiqueta CanBePickedUp
        if(collision.gameObject.CompareTag("CanBePickedUp")){
            // Ocultamos el objeto de la escena
            collision.gameObject.SetActive(false);
        }
    }
}

```







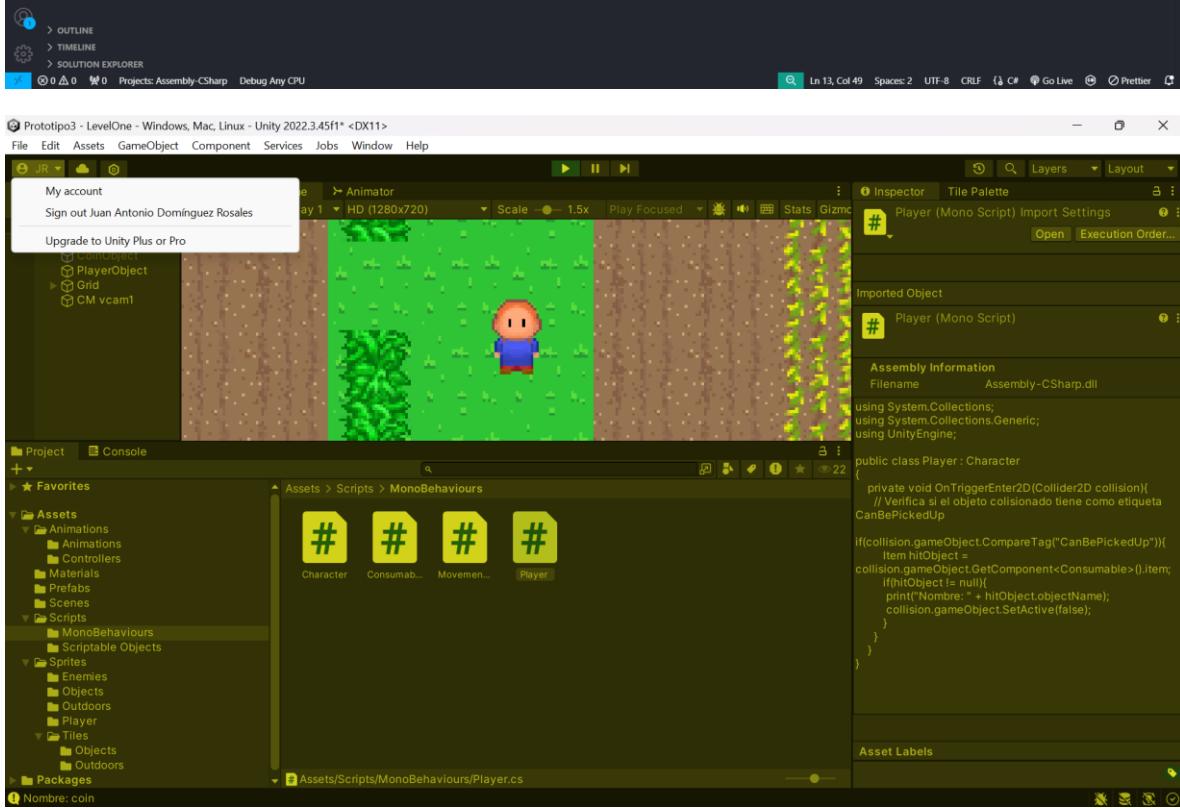


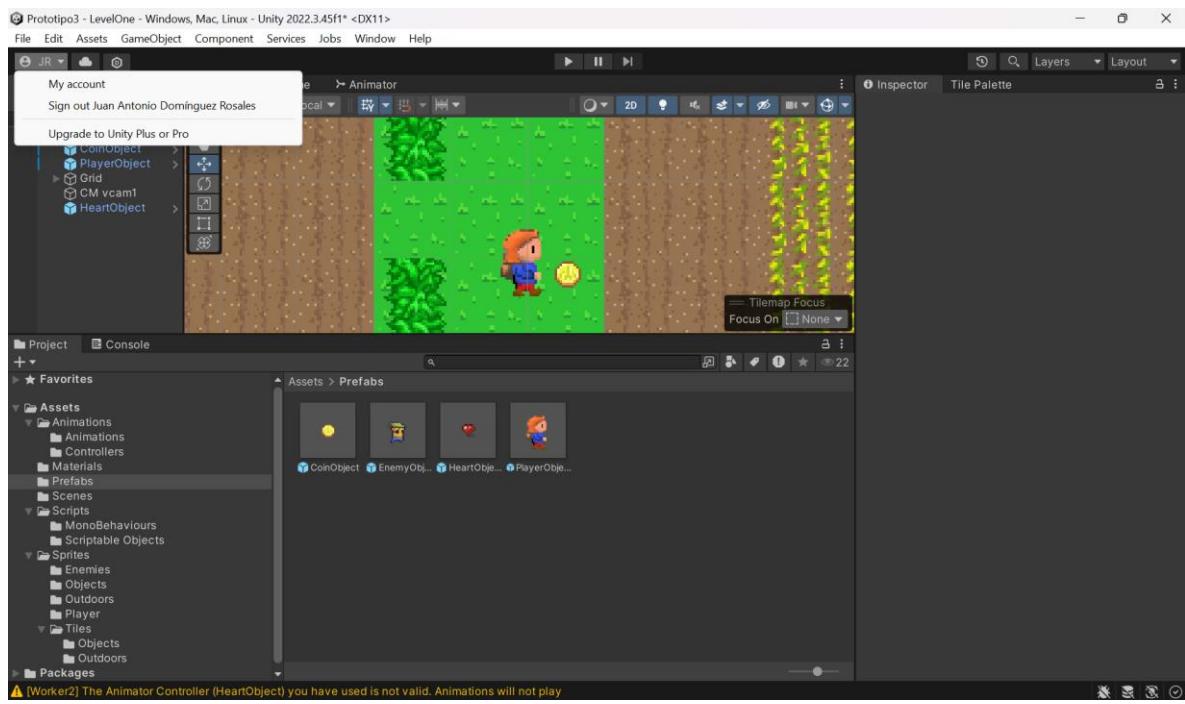
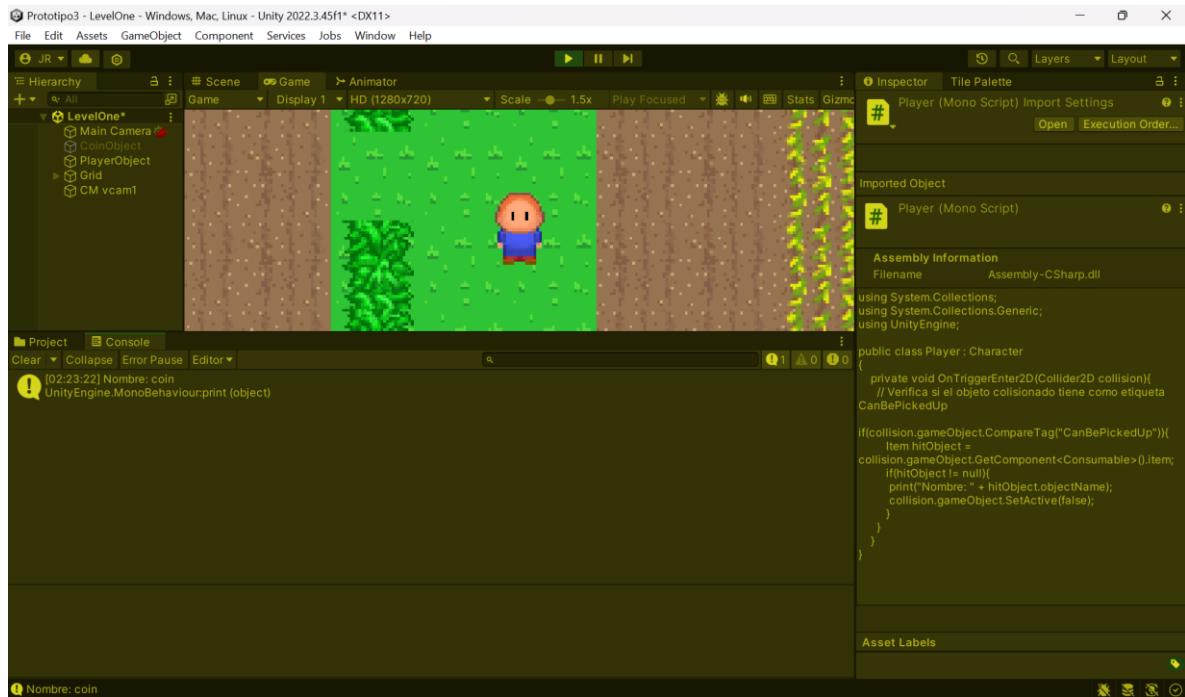
The screenshot shows the Visual Studio Code interface with the following details:

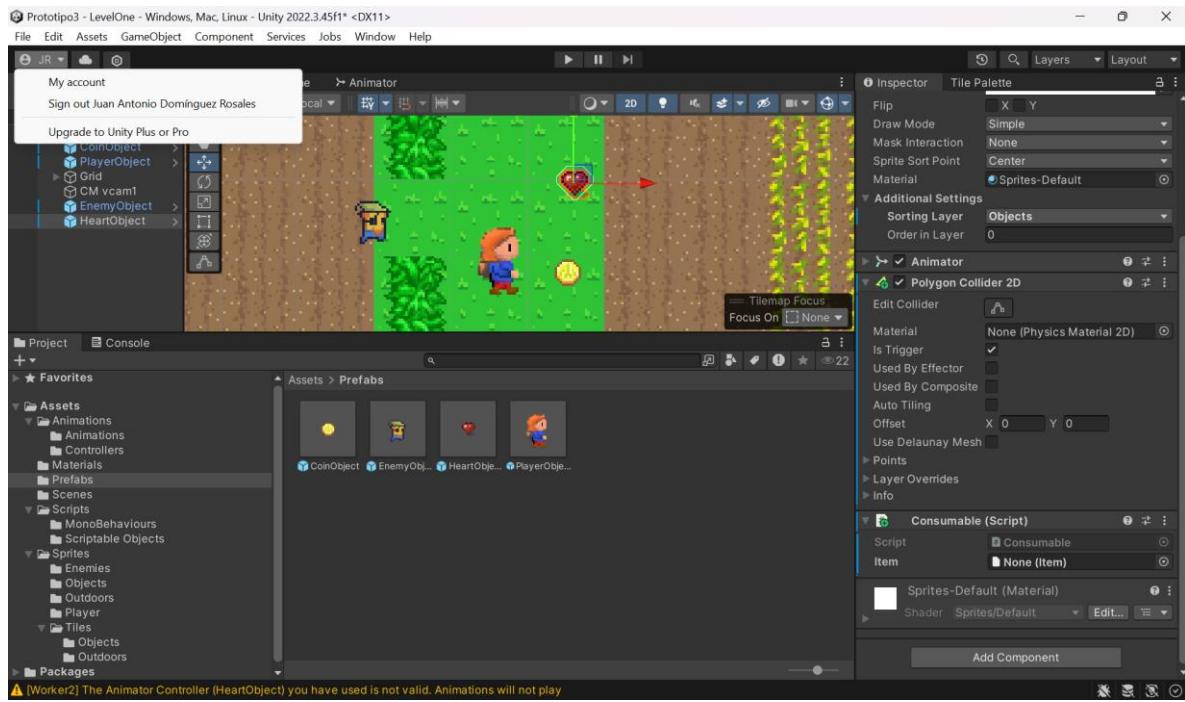
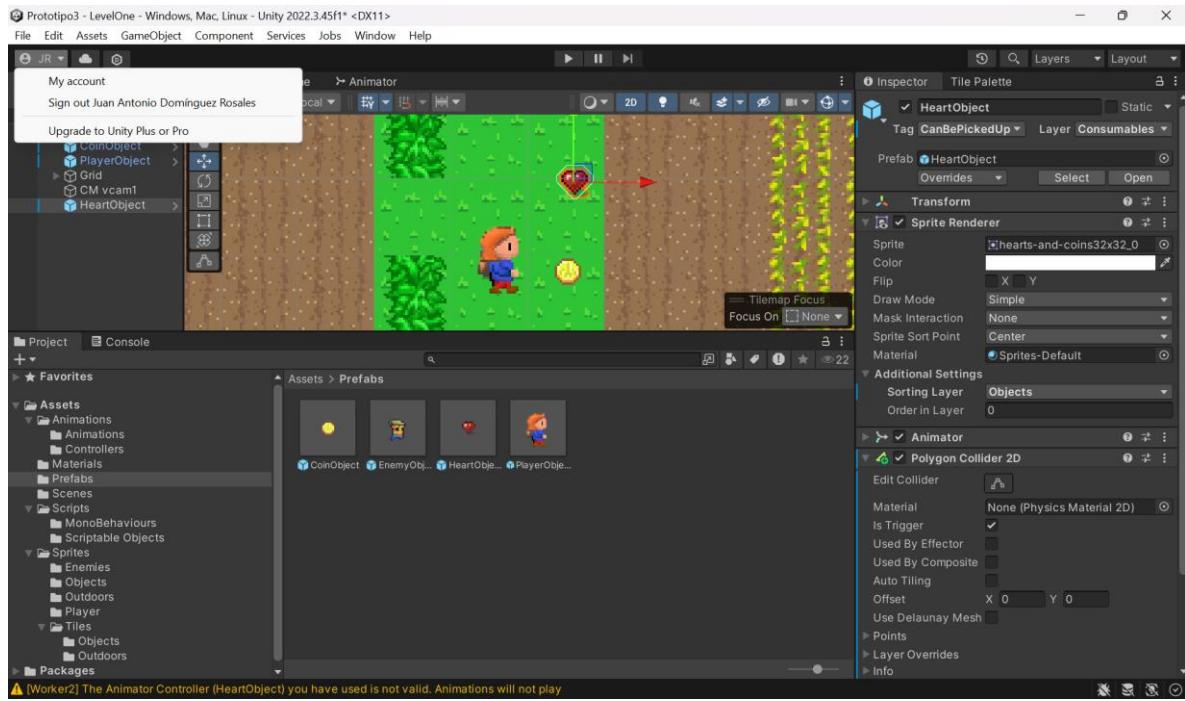
- File Explorer:** Shows the project structure under "PROTOTIPO3".
- Editor:** Displays the "Player.cs" script content.
- Bottom Bar:** Includes tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS, along with a .NET Install Tool icon.

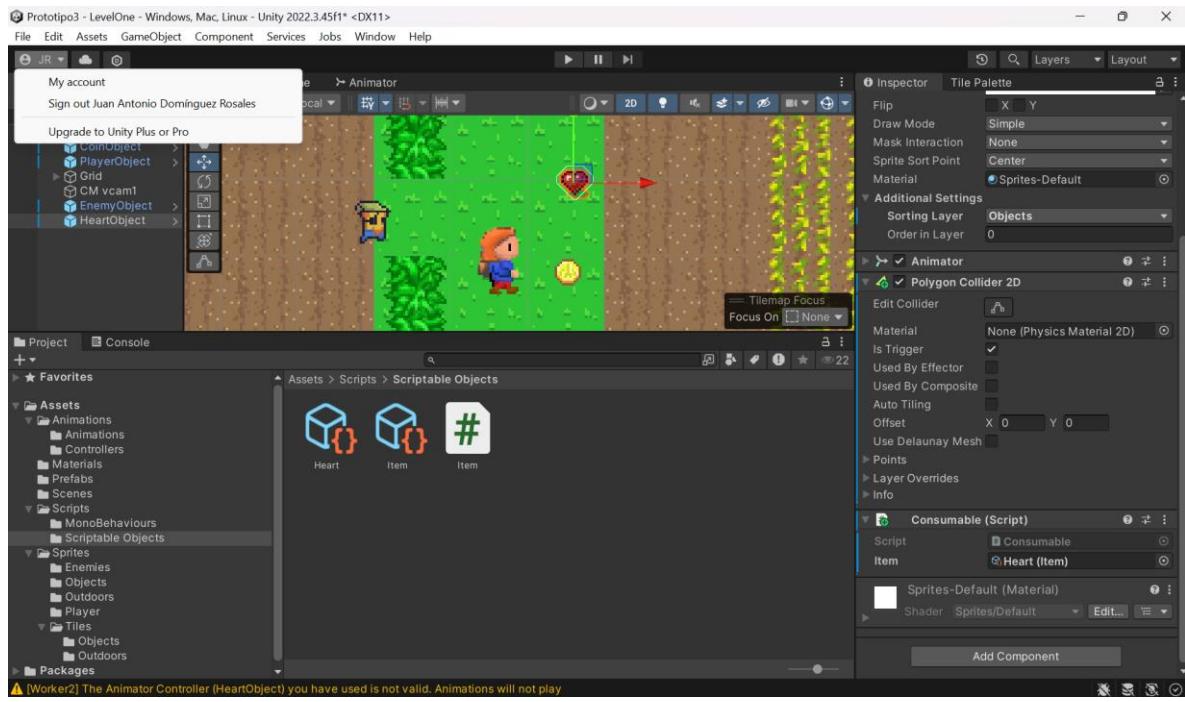
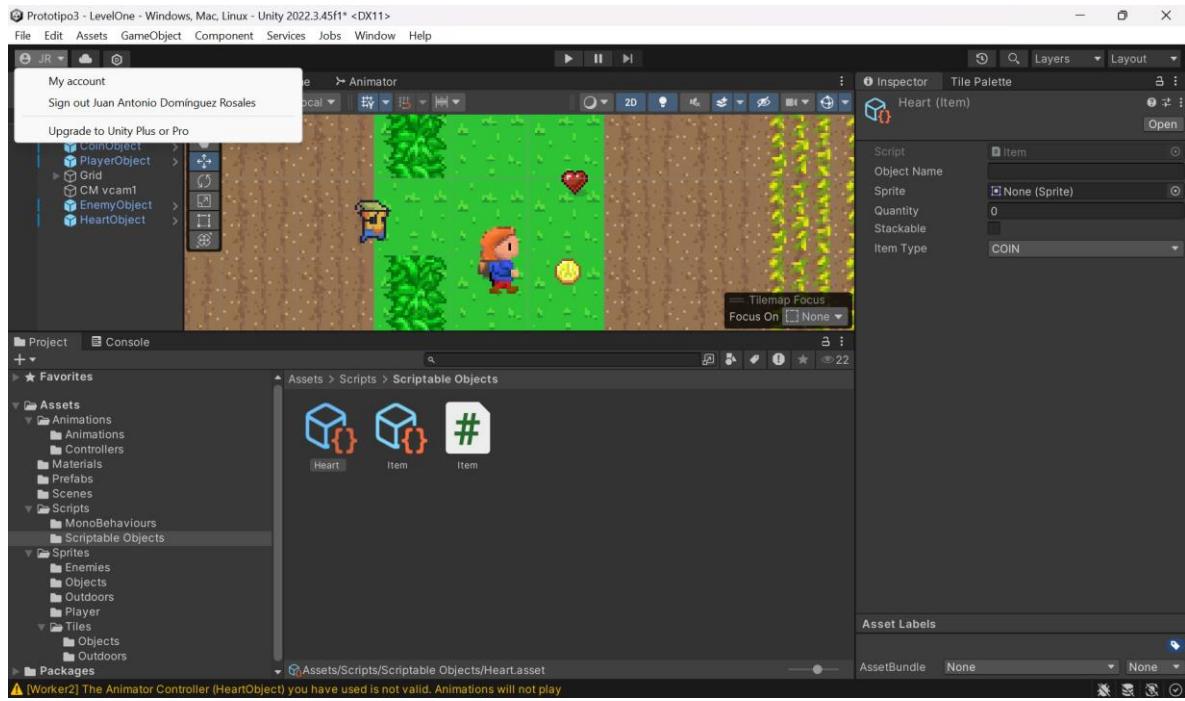
```
Assets > Scripts > MonoBehaviours > C# Player.cs > Player > OnTriggerEnter2D

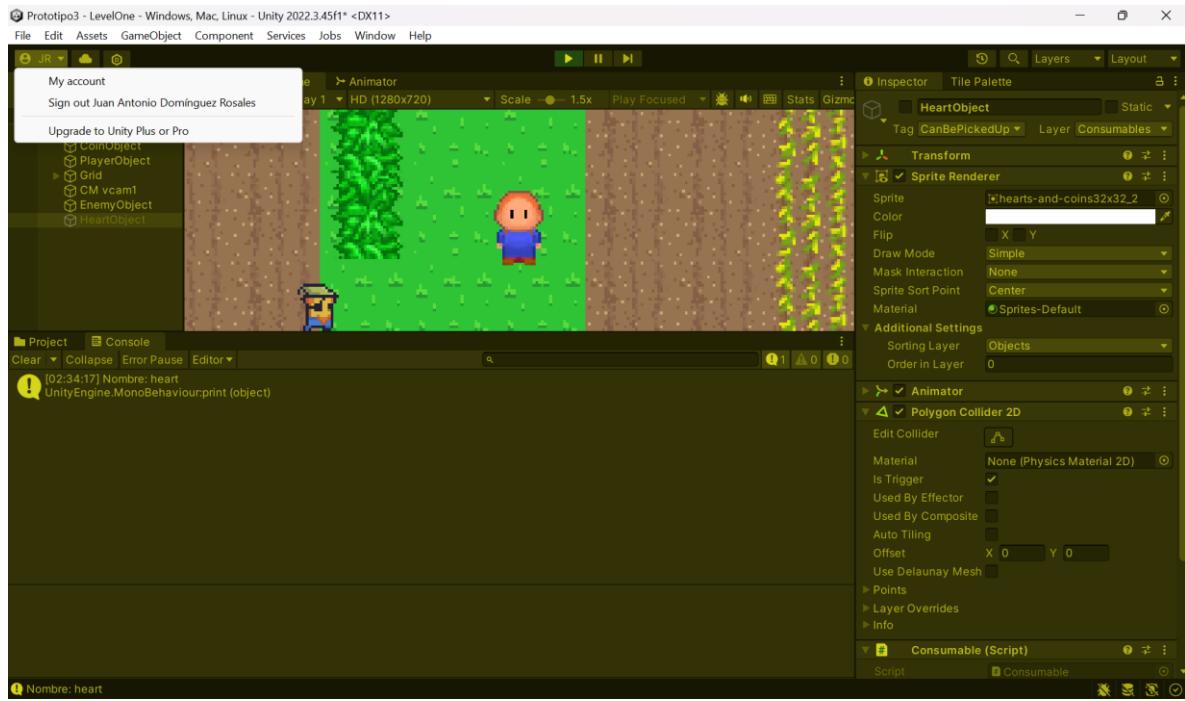
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 public class Player : Character
6 {
7     private void OnTriggerEnter2D(Collider2D collision)
8     {
9         // Verifica si el objeto colisionado tiene como etiqueta CanBePickedUp
10        if(collision.gameObject.CompareTag("CanBePickedUp"))
11        {
12            Item hitObject = collision.gameObject.GetComponent<Consumable>().item;
13            if(hitObject != null)
14            {
15                print("Nombre: " + hitObject.gameObject.name);
16                collision.gameObject.SetActive(false);
17            }
18        }
19    }
20}
```









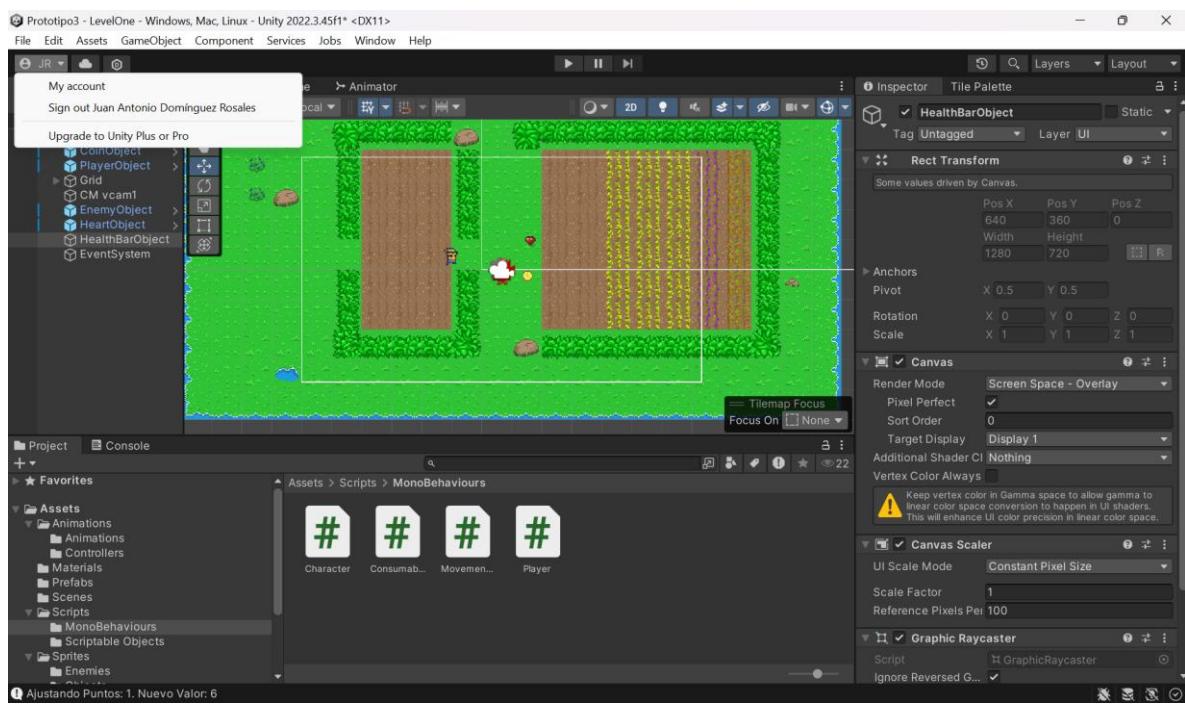
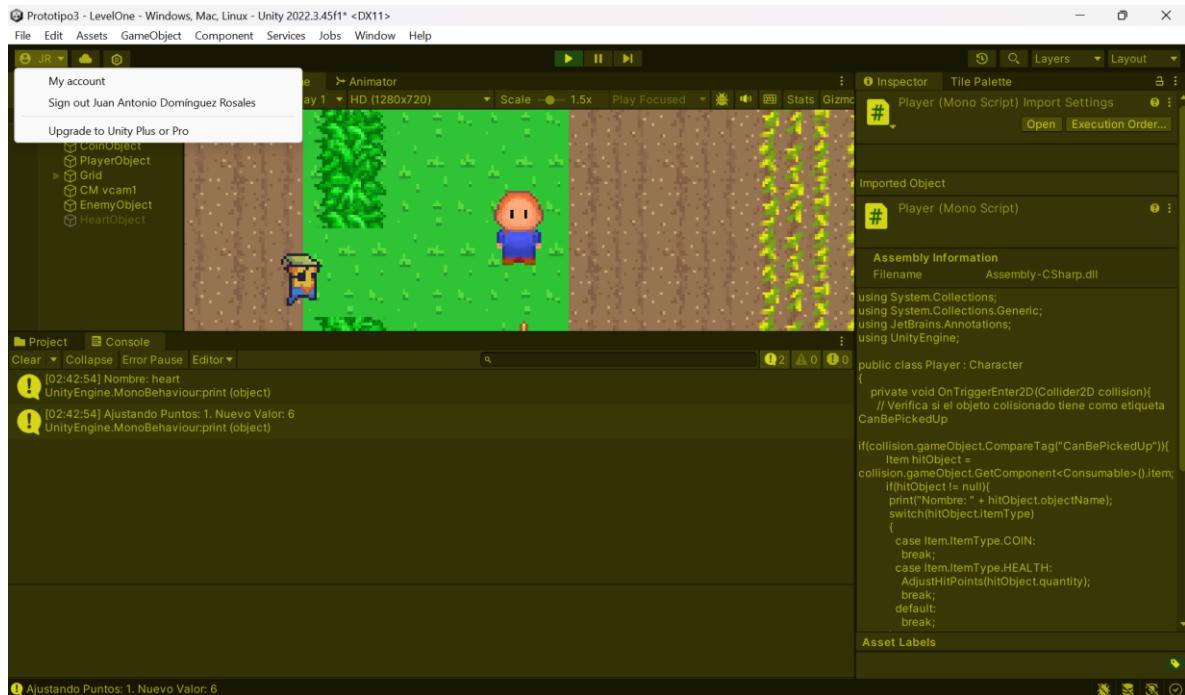


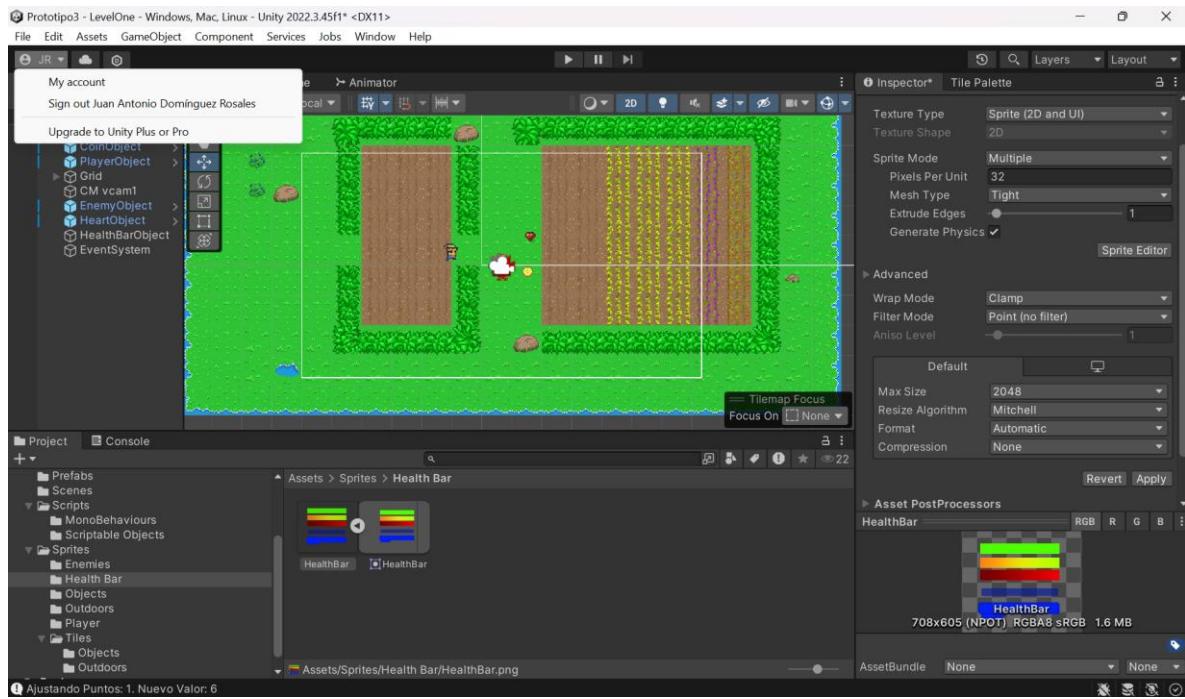
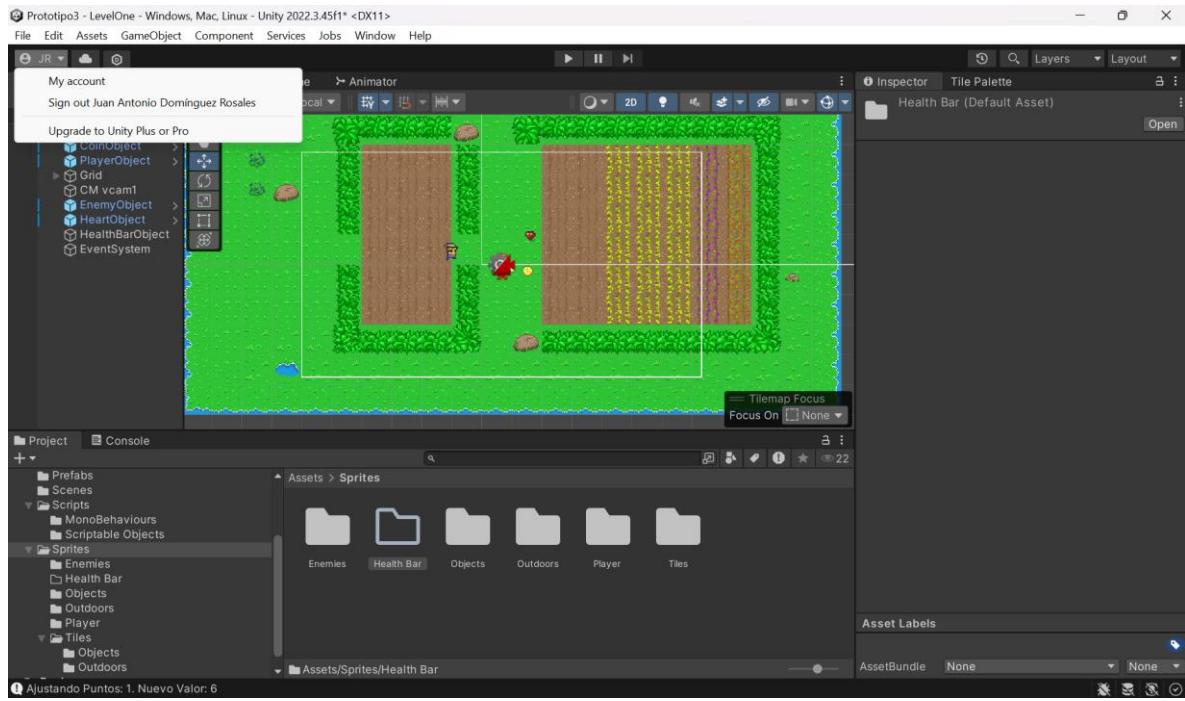
```

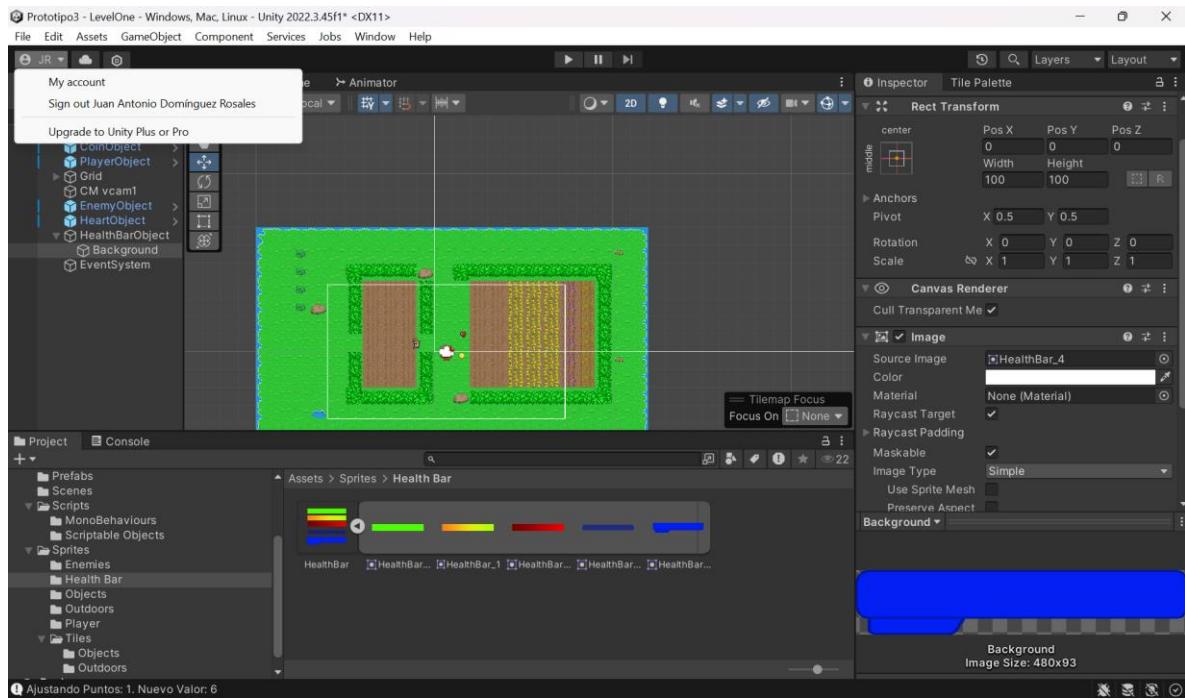
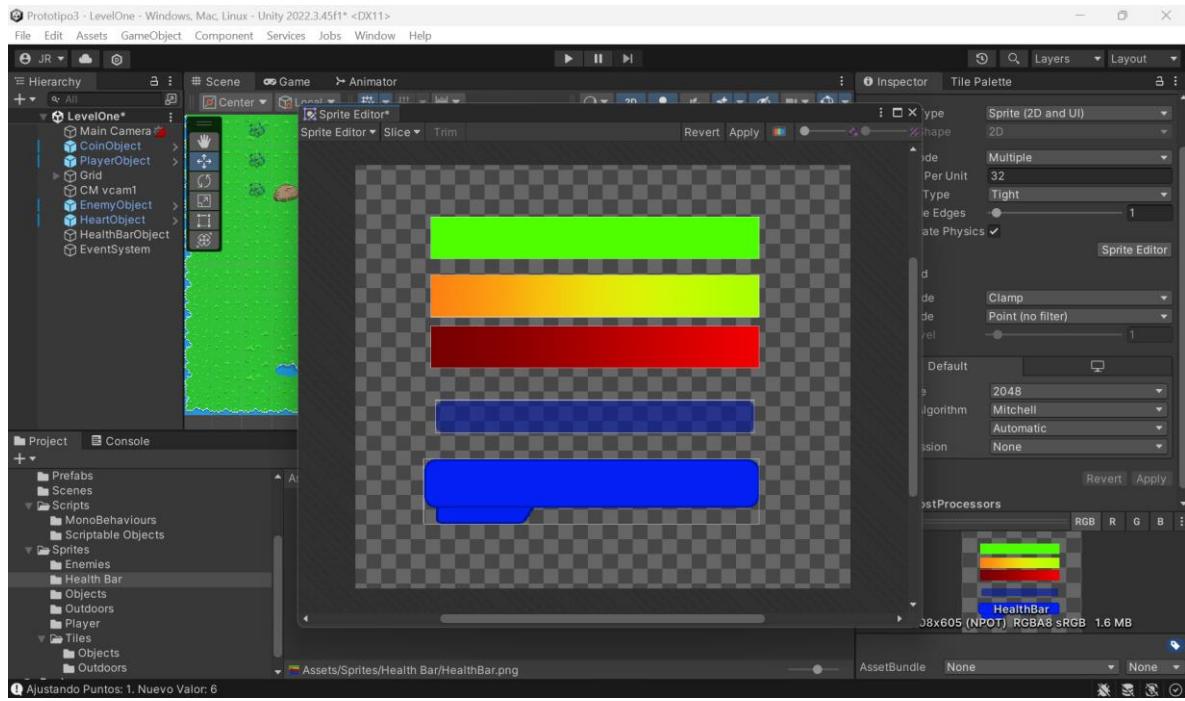
File Edit Selection View Go ... Prototipo3
EXPLORER Player.cs ...
Assets > Scripts > MonoBehaviours > Player.cs > OnTriggerEnter2D
4     using UnityEngine;
5
6     public class Player : Character
7     {
8         private void OnTriggerEnter2D(Collider2D collision)
9             // Verifica si el objeto colisionado tiene como etiqueta CanBePickedUp
10            if(collision.gameObject.CompareTag("CanBePickedUp"))
11                Item hitObject = collision.gameObject.GetComponent<Consumable>().item;
12                if(hitObject != null)
13                    print("Nombre: " + hitObject.objectName);
14                    switch(hitObject.itemType)
15                    {
16                        case Item.ItemType.COIN:
17                            break;
18                        case Item.ItemType.HEALTH:
19                            AdjustHitPoints(hitObject.quantity);
20                            break;
21                        default:
22                            break;
23                    }
24                    collision.gameObject.SetActive(false);
25                }
26            }
27        }
28        public void AdjustHitPoints(int amount)
29        {
30            hitPoints += hitPoints + amount;
31            print("Ajustando Puntos: " + amount + ". Nuevo Valor: " + hitPoints);
32        }
33    }
34

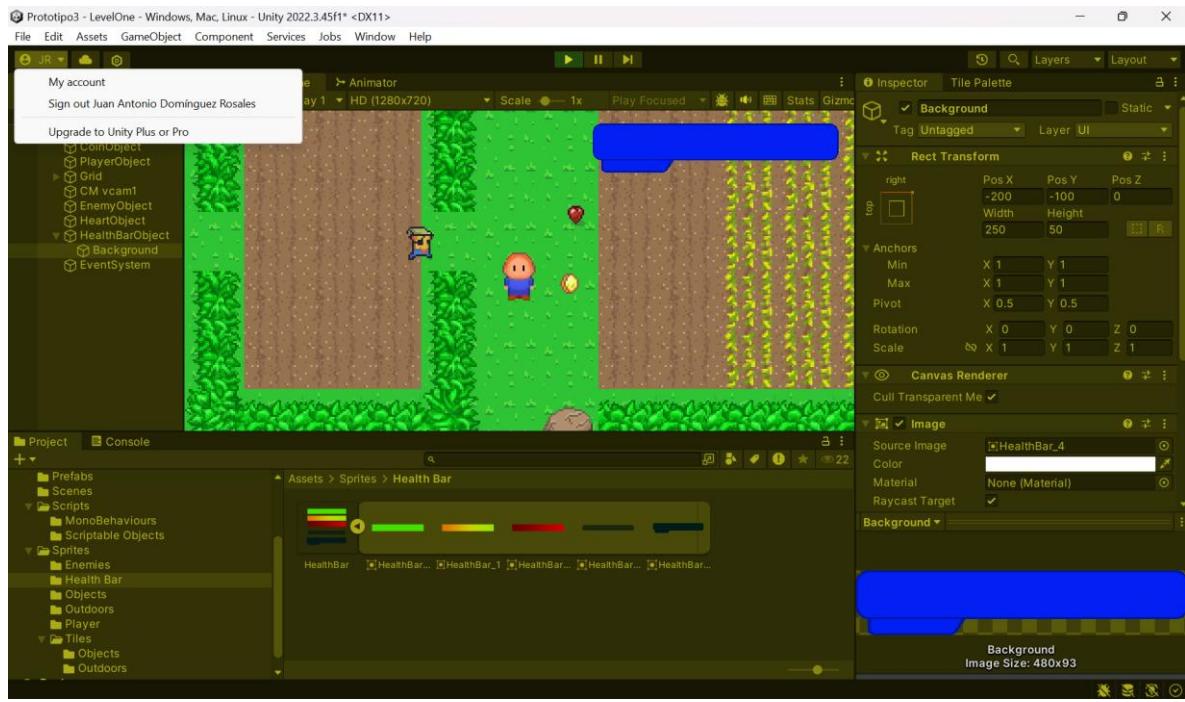
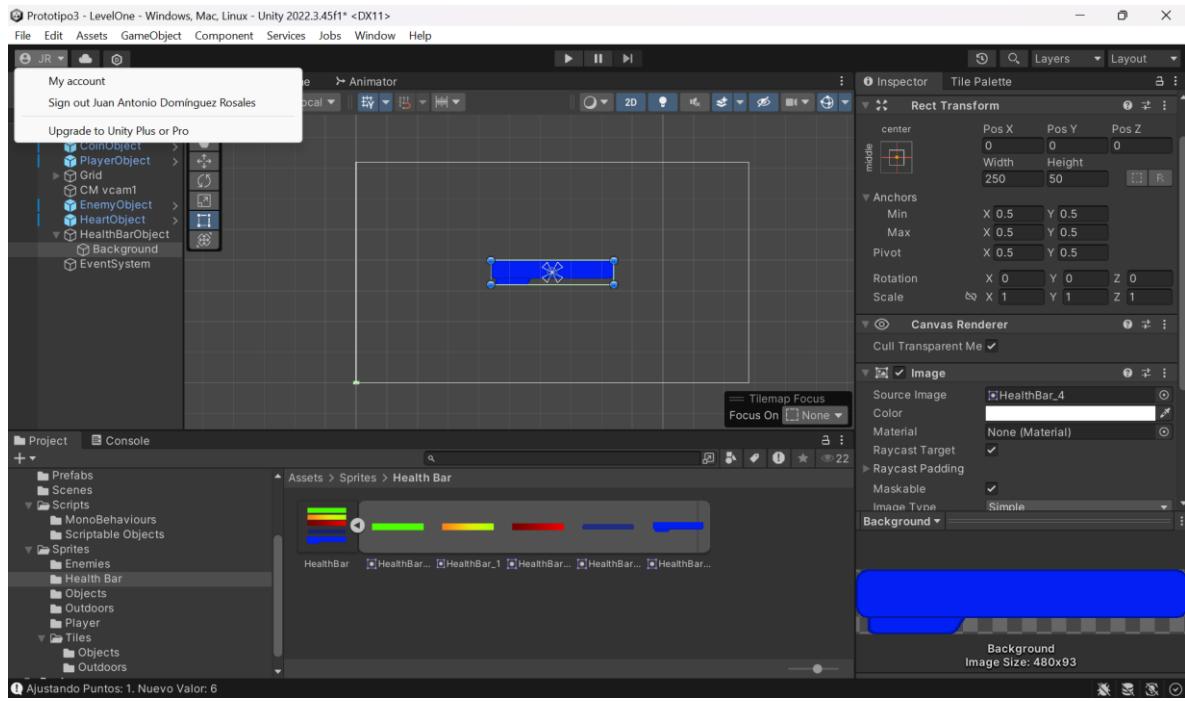
```

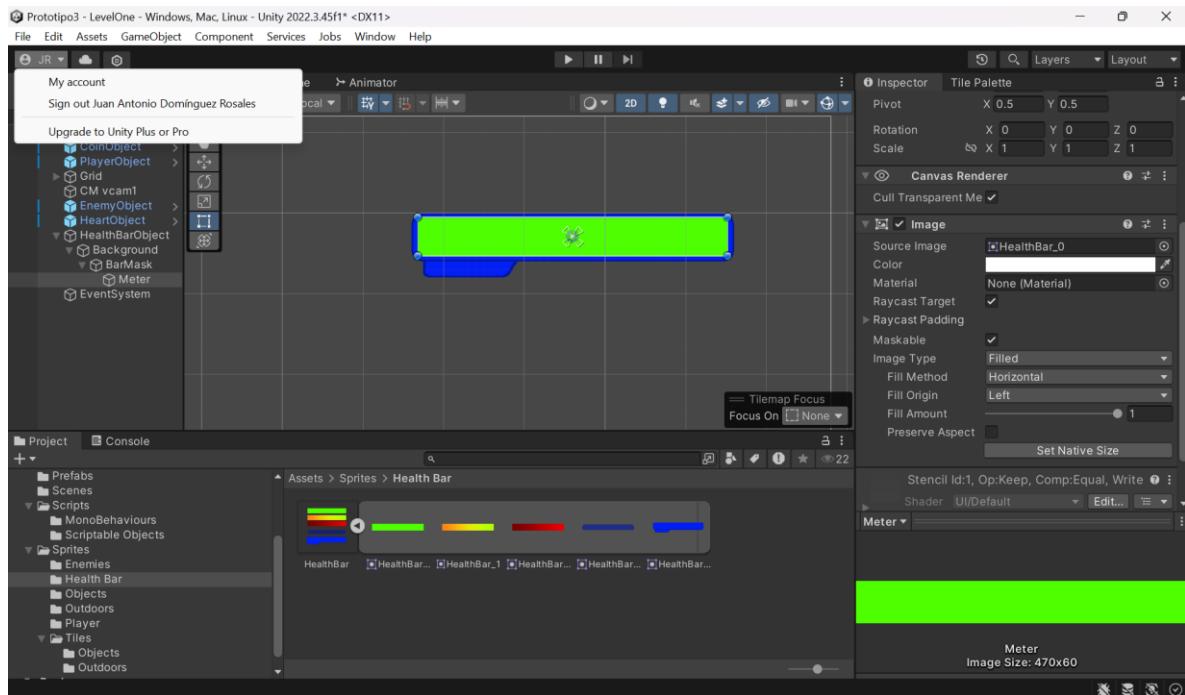
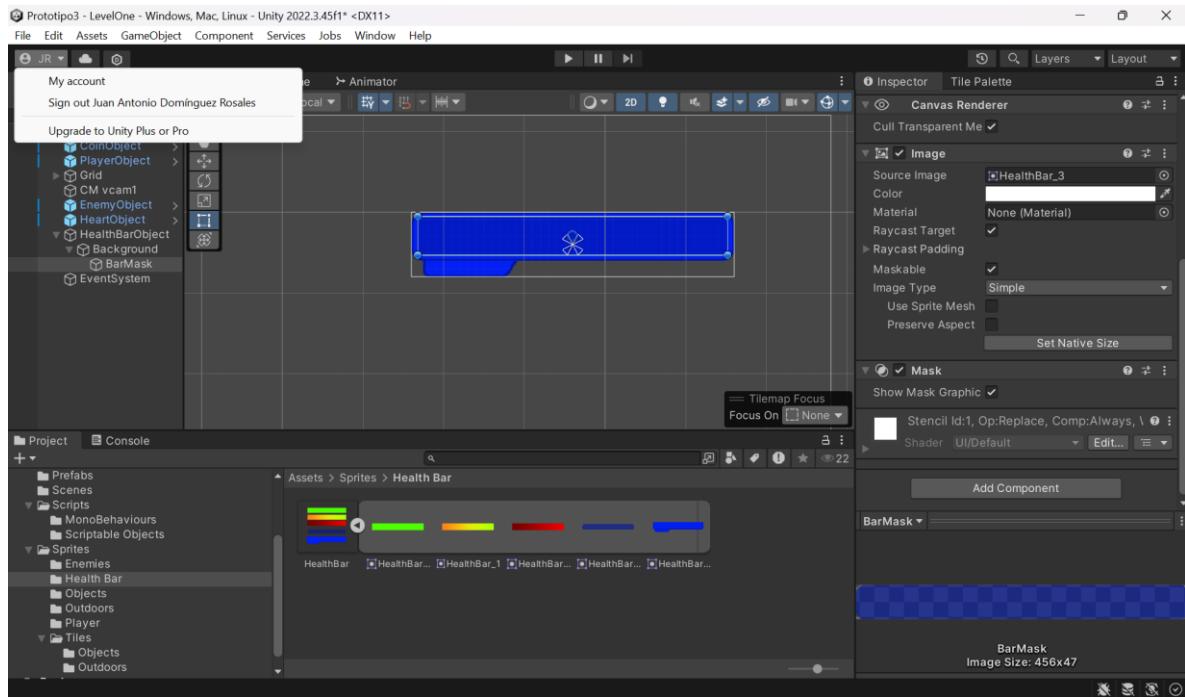
The screenshot shows the VS Code editor with the "Player.cs" script open. The script contains C# code for a "Player" class that inherits from "Character". It includes an "OnTriggerEnter2D" method which checks if a colliding object has the "CanBePickedUp" tag. If so, it retrieves the item component and prints its name. It then uses a switch statement to handle different item types (COIN or HEALTH) by calling the "AdjustHitPoints" method. The "AdjustHitPoints" method adds the specified amount to the current hit points and prints the new total.

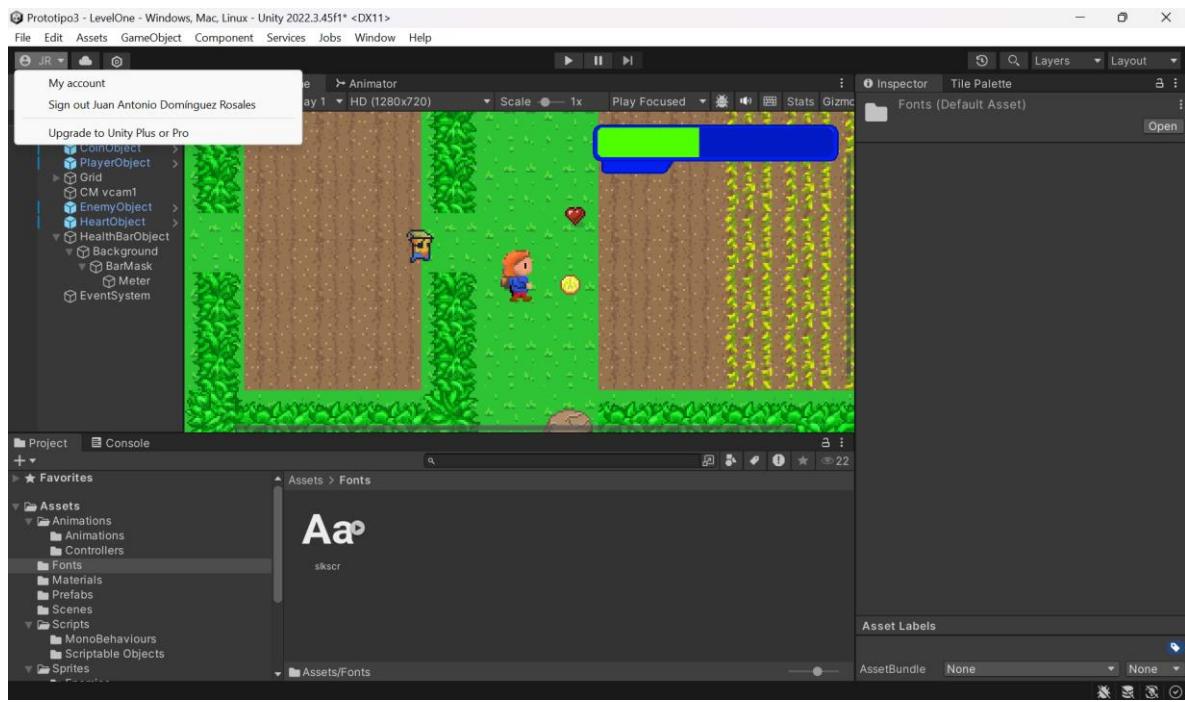
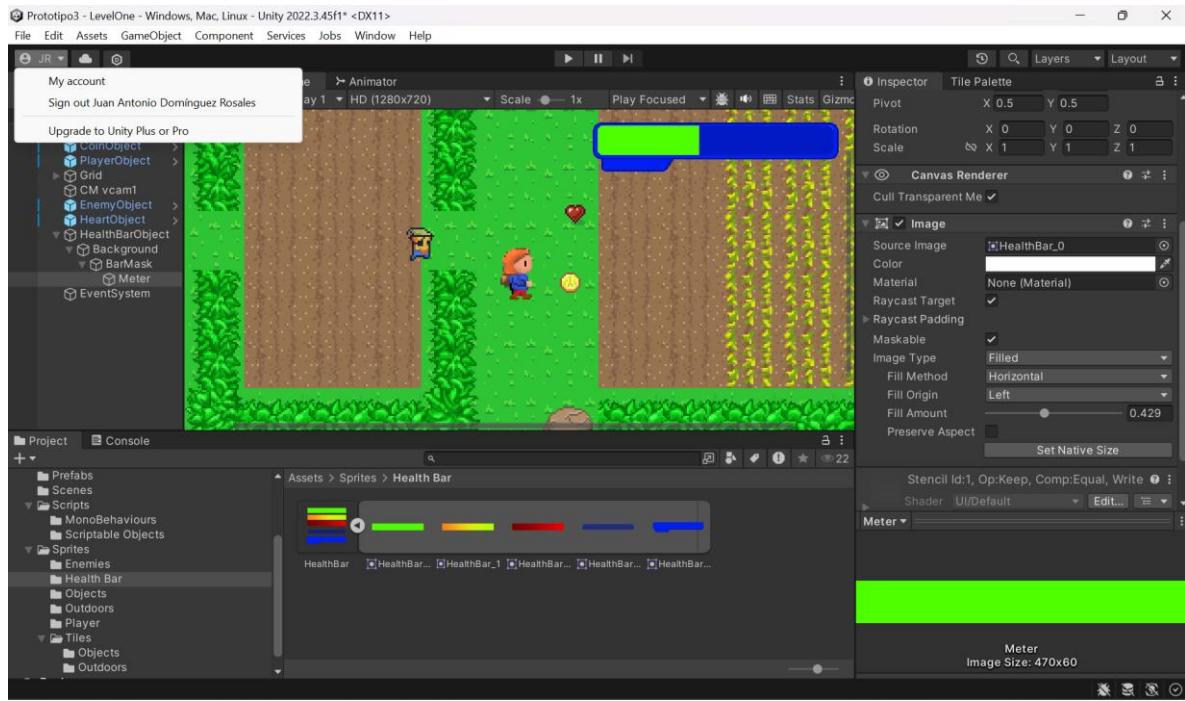


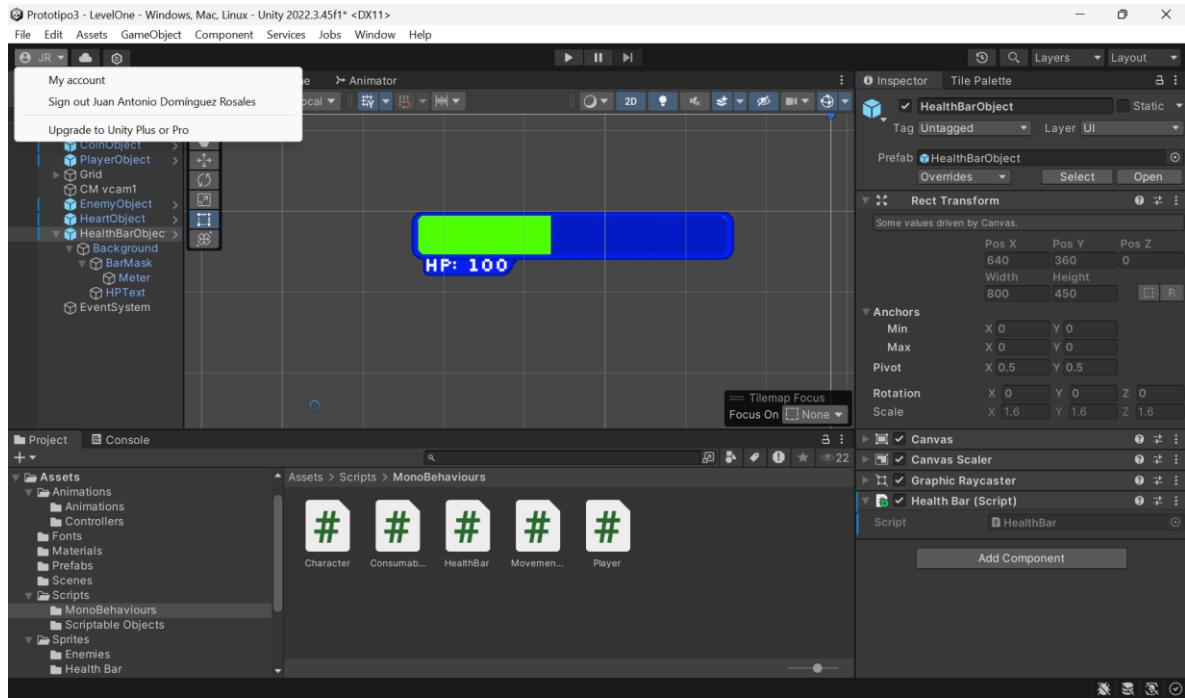
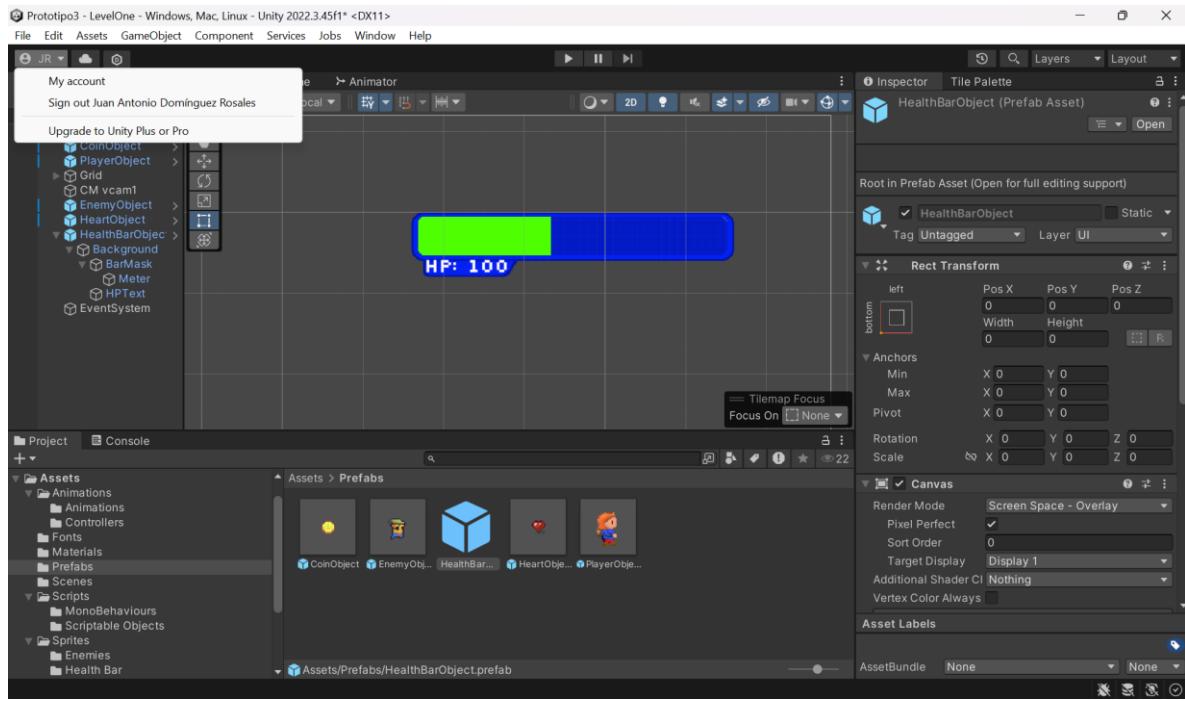


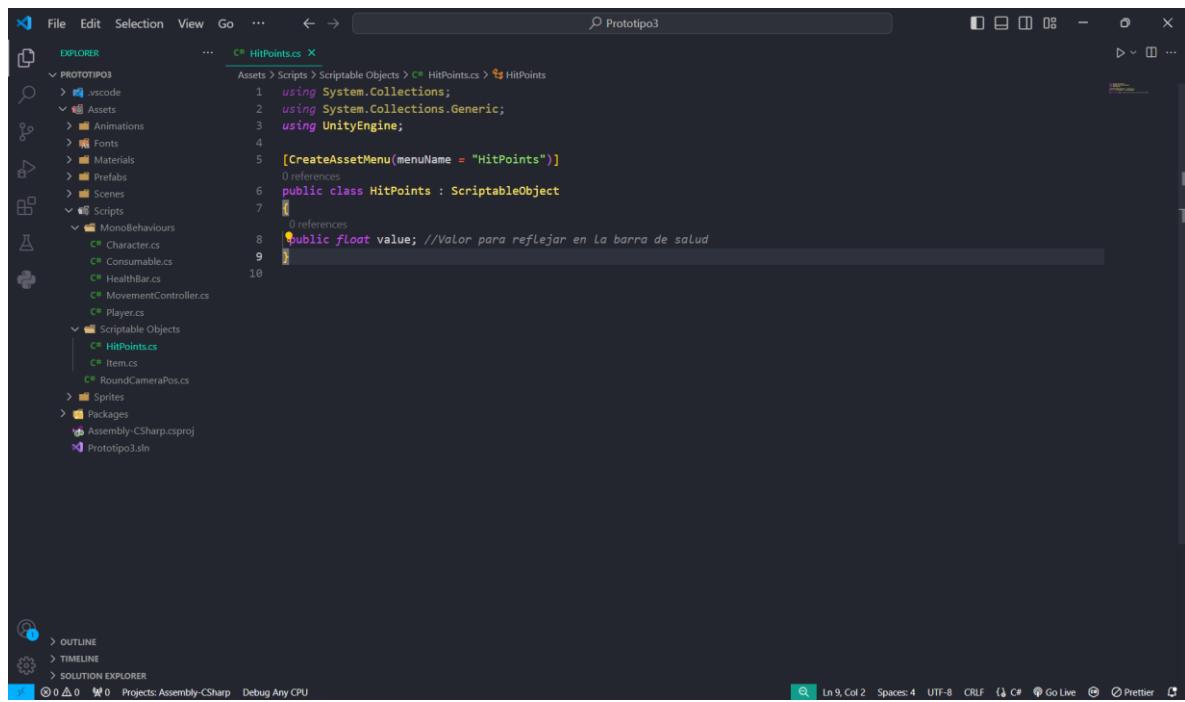
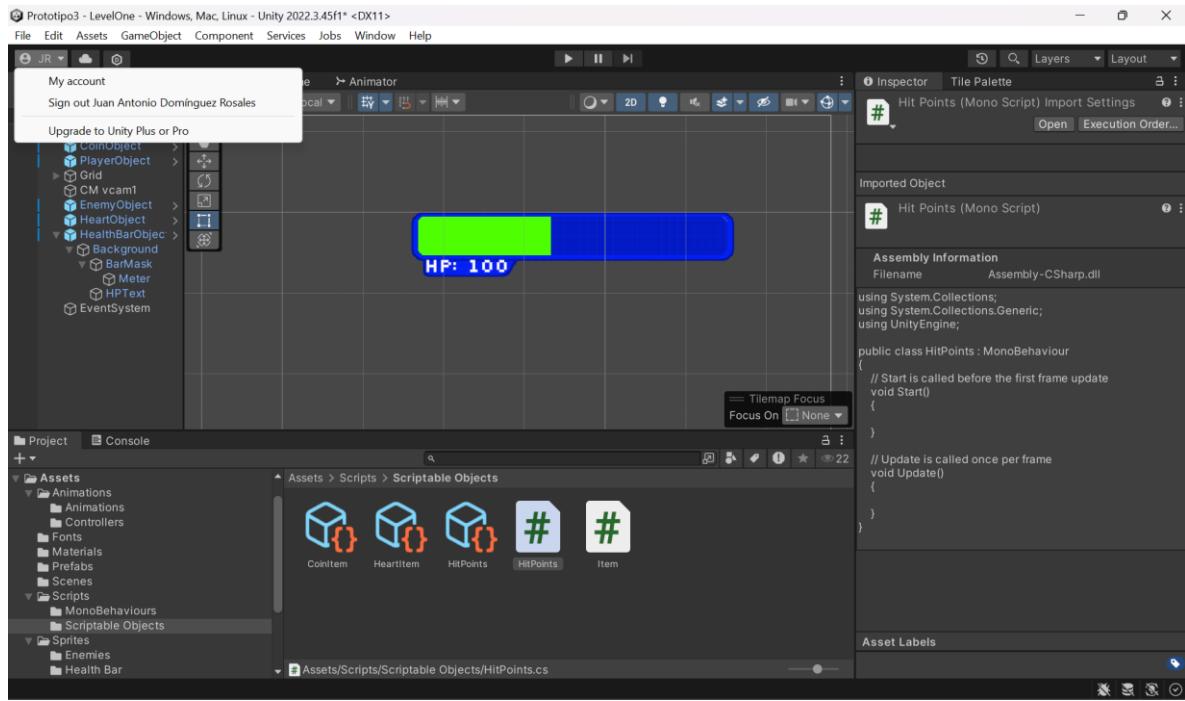












The screenshot shows the Visual Studio Code interface with the file `Player.cs` open in the editor. The code is a Unity MonoBehaviour script for a player character. It includes logic for handling consumable items and adjusting the player's health bar.

```
public class Player : MonoBehaviour
{
    public HealthBar healthBar; //Copia de referencia de HealthBar Prefab
    void Start()
    {
        healthBar = Instantiate(healthBarPrefab); //Instanciar HealthBar
        healthBar.character = this; //Referencia del Player en HealthBar
    }
    public void OnTriggerEnter2D(Collider2D collision)
    {
        if (collision.gameObject.CompareTag("CanBePickedUp"))
        {
            Item hitObject = collision.gameObject.GetComponent<Item>();
            if (hitObject != null)
            {
                Debug.Log("Nombre: " + hitObject.objectName);
                bool shouldDisappear = false;
                switch (hitObject.itemType)
                {
                    case Item.ItemType.COIN: //Moneda
                        shouldDisappear = true;
                        break;
                    case Item.ItemType.HEALTH://Barra de Salud
                        Debug.Log("Cantidad a Incrementar: " + hitObject.quantity);
                        shouldDisappear = AdjustHitPoints(hitObject.quantity);
                        break;
                }
                if (shouldDisappear)
                {
                    collision.gameObject.SetActive(false); //Desaparecer
                }
            }
        }
    }
}
```

The screenshot shows the Visual Studio Code interface with the file `HealthBar.cs` open in the editor. The code is a Unity MonoBehaviour script for a health bar. It updates the meter image based on the player's current hit points.

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

public class HealthBar : MonoBehaviour
{
    [HideInInspector]
    public Player character; //Referencia al jugador
    public Image meterImage; //Medidor Meter de La salud
    public Text hpText; //Texto en barra de salud

    void Start()
    {
        character.hitPoints.value = 0;
    }

    void Update()
    {
        if (character != null)
        {
            //Modifica barra de salud
            meterImage.fillAmount = character.hitPoints.value / character.maxHitPoints;
            //Texto a mostrar
            hpText.text = "HP:" + (meterImage.fillAmount * 100);
        }
    }
}
```

File Edit Selection View Go ...

Prototipo3

EXPLORER

PROTOTIPO3

Assets

- Scriptable Objects
- Monobehaviours
- Player.cs

```

Assets > Scripts > Monobehaviours > Player.cs > Player > Start
1  using System.Collections;
2  using System.Collections.Generic;
3  using JetBrains.Annotations;
4  using UnityEngine;
5
6  1 reference
7  public class Player : Character
8
9  1 reference
10 public HealthBar healthBarPrefab; //Referencia HealthBar Prefab
11
12 2 references
13 private HealthBar healthBar; //Copia de referencia de HealthBar Prefab
14
15 0 references
16 private void Start()
17 {
18     healthBar = Instantiate(healthBarPrefab); //Instanciar HealthBar
19     healthBar.character = this; //Referencia del Player en HealthBar
20 }
21
22 0 references
23 public void OnTriggerEnter2D(Collider2D collision)
24 {
25     if (collision.gameObject.CompareTag("CanBePickedUp"))
26     {
27         Item hitObject = collision.gameObject.GetComponent<Consumable>();
28         item;
29         if (hitObject != null)
30         {
31             Debug.Log("Nombre: " + hitObject.objectName);
32             bool shouldDisappear = false;
33             switch (hitObject.itemType)
34             {
35                 case Item.ItemType.COIN: //Moneda
36                     shouldDisappear = true;
37                     break;
38                 case Item.ItemType.HEALTH://Barra de Salud
39                     Debug.Log("Cantidad a Incrementar: " + hitObject.
40

```

OUTLINE

SOLUTION EXPLORER

Projects: Assembly-CSharp Debug Any CPU

Ln 10, Col 13 Spaces: 2 UTF-8 CRLF ⌂ Go Live ⌂ Prettier ⌂

