Hitman & the Guy in the Van



Anex 3

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Etiopia2

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- Annex 3: Codi i Disseny
 - Captures de pantalla amb peus de foto, no es requereix un text explicatiu
 - o Disseny de la lògica
 - Fragments de codi, especialment aquell codi complexe o que denoti ampli domini tècnic
 - Funcions o classes completes, no línies per separades
 - Codi correctament comentat
 - Disseny del Model de Dades
 - En cas de crear una BD, el seu model E-R
 - En cas de fer servir fitxers, l'estructura de fitxer
 - Implementació del Model de Dades amb fragments de Codi
 - Disseny de les interfícies
 - En cas d'haver fet modelat, rigging o desplegat dels models
 - Wireframe de la interfície
 - Si hi ha interfície web, fragments del css/js. Si hi ha canvas, components del canvas





1 Codi

1.1 Character Manager

```
D Script de Unity (7 referencias de recurso) | 3 referencias
■public class CharacterManager : NetworkBehaviour
     public GameObject currentCharacter;
     public List<GameObject> characters;
     public List<Transform> heads;
     public GameObject cam;
      [HideInInspector] public CinemachineVirtualCamera virtualCamera;
     PCPlayerControllerWithSM playerController;
     Skins current skin;
     public float transformationTime;
     bool transformed;
     public UnityEvent onStartGuardTransformation;
     public UnityEvent onEndGuardTransformation;
     4 referencias
     public override void OnStartLocalPlayer()
          GameManager.Instance.characterManager = this;
          cam.SetActive(true);
          GetComponent<PCPlayerControllerWithSM>().enabled = true;
          GetComponent<PCPlayerControllerWithSM>().SetCamera(cam);
          GetComponent<AudioListener>().enabled = true;
          GetComponent<FocusCameras>().enabled = true;
          GetComponent<FocusCameras>().ManualStart();
          if (MissionManager.istance != null)
              MissionManager.istance.StartPC(transform);
      Mensaje de Unity | O referencias
      private void Awake()
          playerController = GetComponent<PCPlayerControllerWithSM>();
```

Classe i atributs





```
1 referencia
public void ChangeCharacter(Skins skin)
{
    currentCharacter.GetComponent<Animator>().Play("Transformarse");

    StartCoroutine(TransformAnimation(skin));
}

1 referencia
IEnumerator TransformAnimation(Skins skin)
{
    StopCoroutine("TransformationDuration");
    playerController.GetComponent<PCPlayerControllerWithSM>().ChangeState(Estado.Interacting, false);
    yield return new WaitForSeconds(4f);
    Transformarse(skin);
}
```

Inici Event Tranformació

```
void Transformarse(Skins skin)
    playerController.GetComponent<PCPlayerControllerWithSM>().ChangeState(Estado.Standing, false);
    transformed = true;
    if (current_skin != skin)
        print("Transforming to " + skin);
        currentCharacter.SetActive(false);
        GameObject newCharacter;
        switch (skin)
            case Skins.Player:
                newCharacter = characters[1];
transformed = false;
                virtualCamera.Follow = heads[1];
                break;
            case Skins.Guard:
                newCharacter = characters[2];
                virtualCamera.Follow = heads[2];
                break;
            case Skins.Woman:
                newCharacter = characters[3];
                virtualCamera.Follow = heads[3];
                break;
            case Skins.Man:
                newCharacter = characters[4];
                virtualCamera.Follow = heads[4];
                break;
            case Skins.President:
                newCharacter = characters[5];
                virtualCamera.Follow = heads[5];
                break;
            default:
                newCharacter = characters[0];
                virtualCamera.Follow = heads[0];
                break:
```





```
newCharacter.transform.position = currentCharacter.transform.position;
newCharacter.transform.rotation = currentCharacter.transform.rotation;

currentCharacter = newCharacter;

current_skin = skin;

currentCharacter.SetActive(true);

playerController.animator = currentCharacter.GetComponent<Animator>();

this.GetComponent<NetworkAnimator>().animator = currentCharacter.GetComponent<Animator>();
}

if (transformed)
{
    GameManager.Instance.CooldownTransformation(transformationTime);
    GetComponent<PCPlayerControllerWithSM>().ChangeState(Estado.Standing, true);
    StartCoroutine("TransformationDuration");
}
StartCoroutine("TransformAlert");
}
```

1.2 Estats de NPCS

```
    Script de Unity | 10 referencias
    public abstract class TaskMirror : NetworkBehaviour
    {
        public string Tname;
        11 referencias
        public abstract void init();
        9 referencias
        public abstract void doTask();
        10 referencias
        public abstract void exit();
    }
}
```

Classe Base





```
Script de Unity (9 referencias de recurso) | 8 referencias
□public class TalkMirror : TaskMirror
      public delegate void turnToSpeak();
      public turnToSpeak tts;
      public Transform location;
      public Transform talkTo = null;
      List<AudioClip> audios;
      NpcMirror npc;
      public TalkMirror speakTo = null;
      bool doing , otherReady;
      public bool first;
      public int talkPosition = 1;
      [ServerCallback]
      Mensaje de Unity | O referencias
      private void Awake()
npc = this.GetComponent<NpcMirror>();
```

Exemple de Task: talk





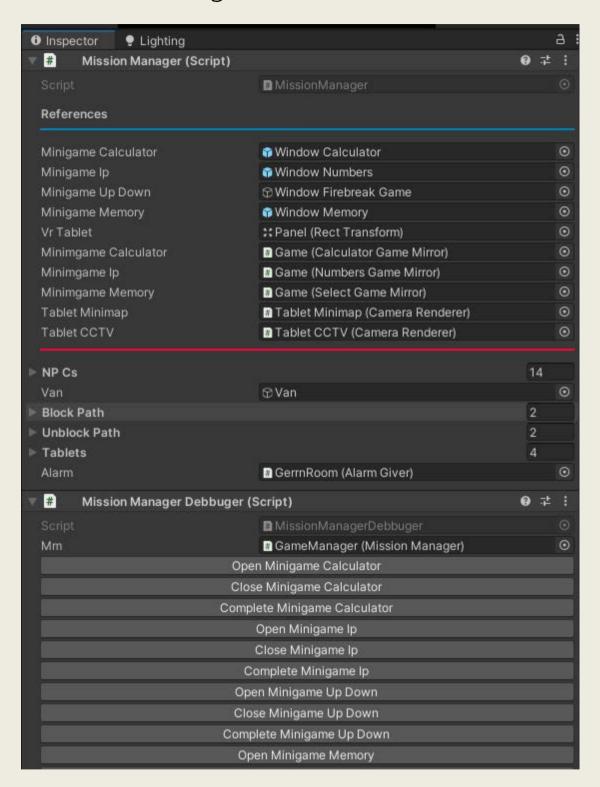
```
Jusing System.Collections;
using System.Collections.Generic;
 using UnityEngine;
using Mirror;
⊟public class GuardMirror : TaskMirror
     NpcMirror npc;
[SerializeField]
     Transform location;
     public Transform player;
     float rotationY;
     [SerializeField]
     LayerMask enemyLayer;
     bool looking;
     public override void init()
         looking = false;
         npc = this.GetComponent<NpcMirror>();
         npc.changeDestinatin(location.position);
     [ServerCallback]
     2 referencias public override void doTask()...
     public override void exit()...
     IEnumerator lookForPlayer()...
     IEnumerator talk()
         yield return new WaitForSeconds(Random.Range(3,11));
         npc.playAudio(npc.audios.GetAudioClip("Random", Random.Range(0, npc.audios.GetAudioClipCount("Random"))));
```







1.3 Mission Manager







1.4 Mirror

```
[Command(requiresAuthority = false)]
4 referencias | Añadido by angelgamo162@gmail.com on sábado, 28 de mayo de 2022
void Move(int move)
{
    MoveVisual(move);
    if (isClient)
        return;

    index += move;
    if (index < 0)
        index += parent.childCount;
}</pre>
```

```
[ClientRpc]
2 referencias | Añadido by angelgamo162@gmail.com on sábado, 28 de mayo de 2022
void MoveVisual(int move)
{
    for (int i = 0; i < 4; i++)
    {
        int a = (index + i) % parent.childCount;
        numbers[a].color = Color.white;
    }
    index += move;
    if (index < 0)
        index += parent.childCount;
    for (int i = 0; i < 4; i++)
    {
        int a = (index + i) % parent.childCount;
        numbers[a].color = Color.red;
    }
}</pre>
```





2 Format Dades

Dades a Guardar

```
Oreferencias
public static void SaveToJSON<T>(T toSave, string filename)
{
    string content = JsonUtility.ToJson(toSave);
    WriteFile(GetPath(filename), content);
}

1referencia
public static List<T> ReadListFromJSON<T>(string filename)
{
    string content = ReadFile(GetPath(filename));
    if (string.IsNullOrEmpty(content) || content == "{}")
    {
        return new List<T>();
    }

List<T> res = JsonHelper.FromJson<T>(content).ToList();
    return res;
}
```

Writer i Reader de JSON

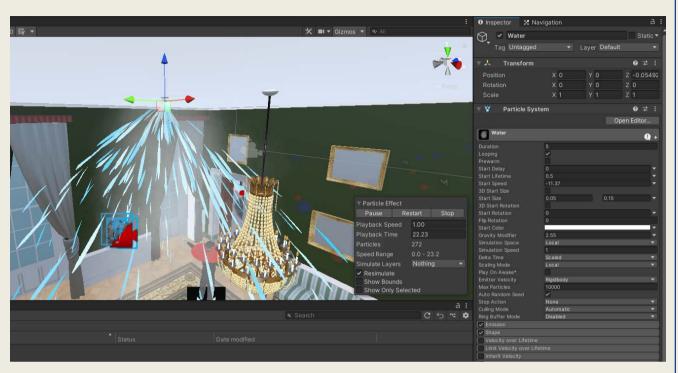






3 Gràfics

3.1 Particle System



Efecte d'aigua a l'alarma anti incendis





3.2 UI

Cooldown de la Transformació

