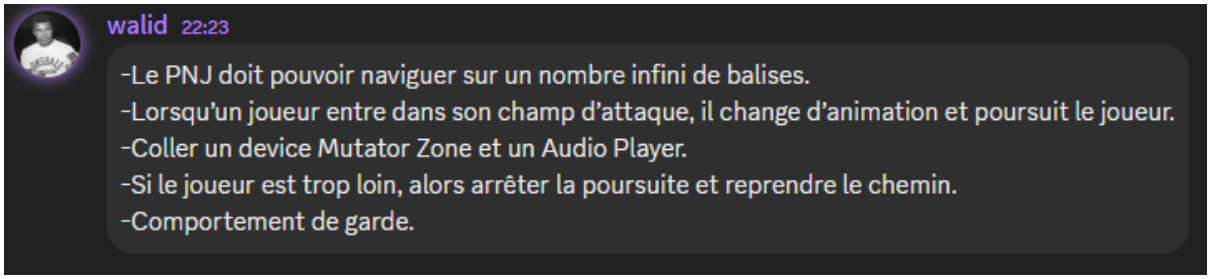
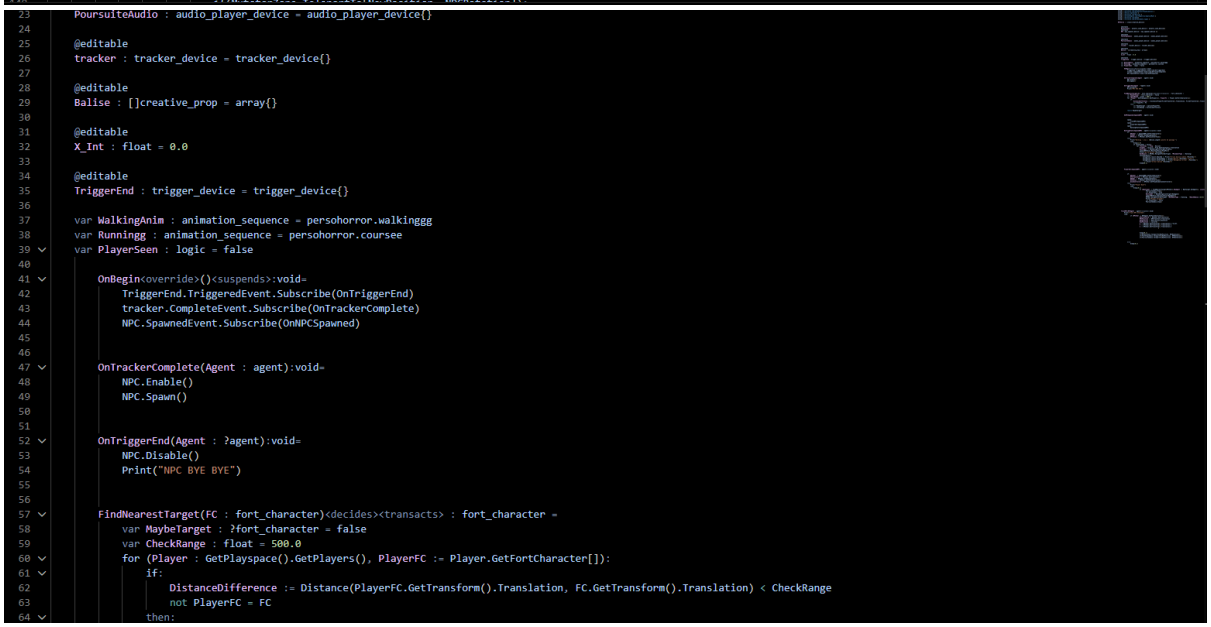
CODE IA PERSONNALISE FORNTITE

Premièrement, j’ai demandé à mon mentor de m’aider à construire la logique nécessaire pour créer le monstre, ainsi que tous les éléments dont il avait besoin pour fonctionner correctement. (C'est lui qui m'a appris le dev verse)

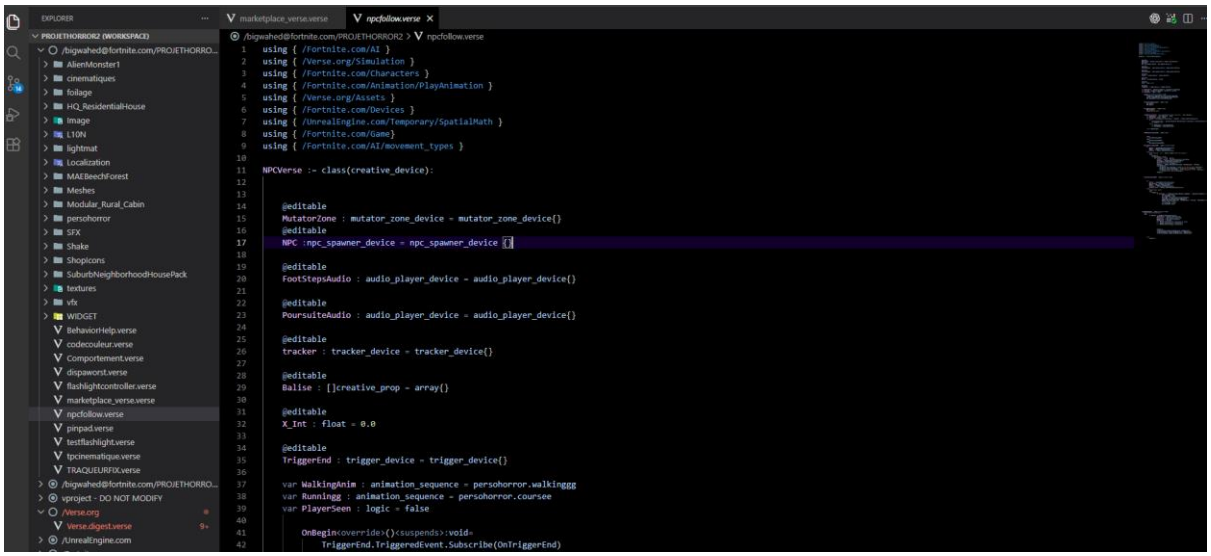


Une fois la logique comprise je peux commencer a dev

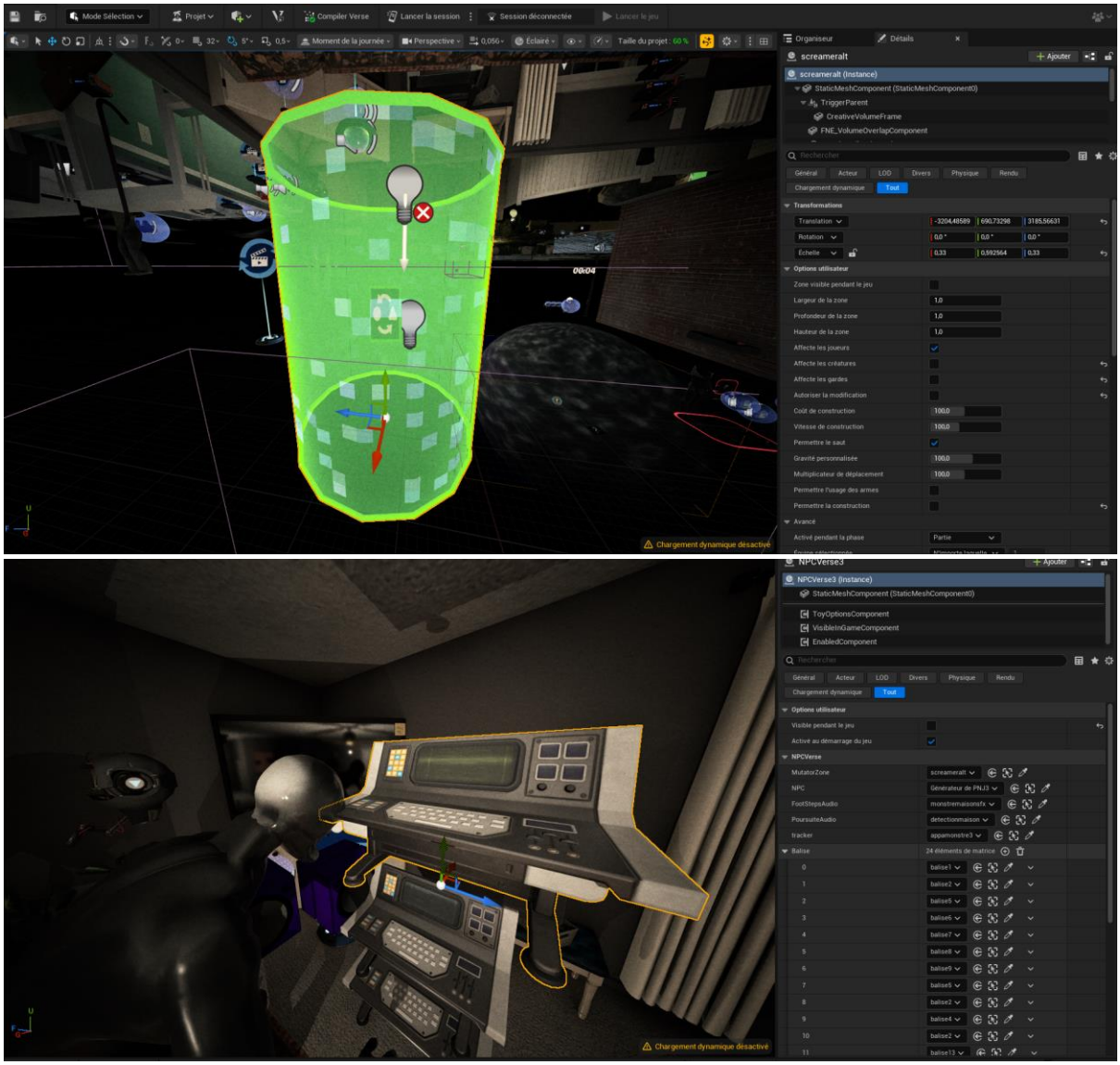
```
/bigwahed@fortnite.com/PROJETHORROR2 > npcfollow.verse
    PlayerGet(SpawnedNPC : agent)<suspends>:void=


        if:
            NPCChar := SpawnedNPC.GetFortCharacter[]
            NPCTransform := NPCChar.GetTransform()
            NPCNav := NPCChar.GetNavigatable[]
            NPCFocus := NPCChar.GetFocusInterface[]
            AnimController := NPCChar.GetPlayAnimationController[]
        then:
            Print("Player Walk")
            loop:
                Sleep(0.1)
                        if (NewTarget := FindNearestTarget[NPCChar],NewAgent := NewTarget.GetAgent[], Location := NewAgent.GetFortCharacter[] ):
                                PoursuiteAudio.Play()
                                set PlayerSeen = true
                                NavTarget := MakeNavigationTarget(NewAgent)
                                spawn{NPCFocus.MaintainFocus(NewAgent)}
                                NPCNav.NavigateTo(NavTarget, ?MovementType := Running,  ?ReachRadius:=20.0)
                                Print("Player Escaped")
                                set PlayerSeen = false
                                PoursuiteAudio.Stop()




TrackNPC(NPCAgent : agent)<suspends>:void=
    Print("Track NPC Started")
    loop:
            if (NPCChar := NPCAgent.GetFortCharacter[]):
                    NPCTransform := NPCChar.GetTransform()
                    NPCPosition := NPCTransform.Translation
                    NPCRotation := NPCTransform.Rotation
                    NewPosition := vector3{
                    X := NPCChar.GetTransform().Translation.X +X_Int,
                    Y := NPCChar.GetTransform().Translation.Y,
                    Z := NPCChar.GetTransform().Translation.Z
                                        }


                    Sleep(0.1)
```



```
    PoursuiteAudio : audio_player_device = audio_player_device{}

    @editable
    tracker : tracker_device = tracker_device{}

    @editable
    Balise : []creative_prop = array{}

    @editable
    X_Int : float = 0.0

    @editable
    TriggerEnd : trigger_device = trigger_device{}

    var WalkingAnim : animation_sequence = persohorror.walkinggg
    var Runningg : animation_sequence = persohorror.coursee
    var PlayerSeen : logic = false

        OnBegin<override>()<suspends>:void=
            TriggerEnd.TriggeredEvent.Subscribe(OnTriggerEnd)
            tracker.CompleteEvent.Subscribe(OnTrackerComplete)
            NPC.SpawnedEvent.Subscribe(OnNPCSpawned)


        OnTrackerComplete(Agent : agent):void=
            NPC.Enable()
            NPC.Spawn()


        OnTriggerEnd(Agent : ?agent):void=
            NPC.Disable()
            Print("NPC BYE BYE")


        FindNearestTarget(FC : fort_character)<decides><transacts> : fort_character =
            var MaybeTarget : ?fort_character = false
            var CheckRange : float = 500.0
            for (Player : GetPlayspace().GetPlayers(), PlayerFC := Player.GetFortCharacter[]):
                if:
                    DistanceDifference := Distance(PlayerFC.GetTransform().Translation, FC.GetTransform().Translation) < CheckRange
                    not PlayerFC = FC
                then:
```



```
EXPLORER
PROJETHORROR2 (WORKSPACE)
/bigwahed@fortnite.com/PROJETHORRO...
  AlienMonster1
  cinematiques
  foilage
  HQ_ResidentialHouse
  Image
  L10N
  lightmat
  Localization
  MAEBeechForest
  Meshes
  Modular_Rural_Cabin
  persohorror
  SFX
  Shake
  ShopIcons
  SuburbNeighborhoodHousePack
  textures
  vfx
  WIDGET
  BehaviorHelp.verse
  codecouleur.verse
  Comportement.verse
  dispaworst.verse
  flashlightcontroller.verse
  marketplace_verse.verse
  npcfollow.verse
  pinpad.verse
  testflashlight.verse
  tpcinematique.verse
  TRACQUEURFIX.verse
/bigwahed@fortnite.com/PROJETHORRO...
/project - DO NOT MODIFY
/Verse.org
  Verse.digest.verse
/UnrealEngine.com

marketplace_verse.verse
npcfollow.verse
/bigwahed@fortnite.com/PROJETHORROR2 > npcfollow.verse
using { /Fortnite.com/AI }
using { /Verse.org/Simulation }
using { /Fortnite.com/Characters }
using { /Fortnite.com/Animation/PlayAnimation }
using { /Verse.org/Assets }
using { /Fortnite.com/Devices }
using { /UnrealEngine.com/Temporary/SpatialMath }
using { /Fortnite.com/Game}
using { /Fortnite.com/AI/movement_types }

NPCVerse := class(creative_device):


    @editable
    MutatorZone : mutator_zone_device = mutator_zone_device{}
    @editable
    NPC :npc_spawner_device = npc_spawner_device {}

    @editable
    FootStepsAudio : audio_player_device = audio_player_device{}

    @editable
    PoursuiteAudio : audio_player_device = audio_player_device{}

    @editable
    tracker : tracker_device = tracker_device{}

    @editable
    Balise : []creative_prop = array{}

    @editable
    X_Int : float = 0.0

    @editable
    TriggerEnd : trigger_device = trigger_device{}

    var WalkingAnim : animation_sequence = persohorror.walkinggg
    var Runningg : animation_sequence = persohorror.coursee
    var PlayerSeen : logic = false

        OnBegin<override>()<suspends>:void=
            TriggerEnd.TriggeredEvent.Subscribe(OnTriggerEnd)
```



2. Les variables éditables (`@editable`)

```
@editable
NPC :npc_spawner_device = npc_spawner_device {}
```

Grâce à `@editable`, tu peux modifier les références directement dans l'éditeur UEFN sans toucher au code.

Pour relié :

- le spawner du monstre
- les audios
- les points de patrouille
- les triggers
- les trackers
- la mutator zone

3. Système d'événements

```
TriggerEnd.TriggeredEvent.Subscribe(OnTriggerEnd)
tracker.CompleteEvent.Subscribe(OnTrackerComplete)
NPC.SpawnedEvent.Subscribe(OnNPCSpawned)
```

Tu peux expliquer :

Le code écoute des événements du jeu

Quand :

- un objectif est terminé
- le trigger final est activé
- le NPC spawn

→ une fonction spécifique se déclenche automatiquement.

Ça montre une IA réactive et pas un simple script linéaire.

4) Spawn dynamique du monstre

```
OnTrackerComplete(Agent : agent):void=
    NPC.Enable()
    NPC.Spawn()
```

5. Le système de détection du joueur

Un des morceaux les plus intéressants.

```
FindNearestTarget
```