Potato Game

A staging on the potato industry in 19th century Europe.

Developed with Unreal Engine 4.27.1, 5.0.3 and 5.3.1

How to Setup and Run The Game

Networked Execution Modes

Learn different network execution mode execution_jeu_reseau_sous_unreal_engine.md

Exercices

Introduction

Do the basic setup of the project while getting familiar with FStruct, UObject, AActor, AActorComponent and assets

```
git checkout exercice1
```

See exercice1.md

Gameplay Framework

Put in place the Gameplay Framework to get familiar with APlayerState, APlayerController, AGameState and APlayerController

```
git checkout exercice2
```

See exercice2.md

Network

Make the game function on network to allow multiple player to join in

```
git checkout exercice3
```

See exercice3.md

Protagonists

Potato Planter

A selfless worker farming the next harvest of potatoes.

Source: *L'Homme à la houe* by Jean-François Millet

Potato Gatherer

A swift worker carrying potatoes from the fields to the consumers.

Source: *October* by Jules Bastien-Lepage
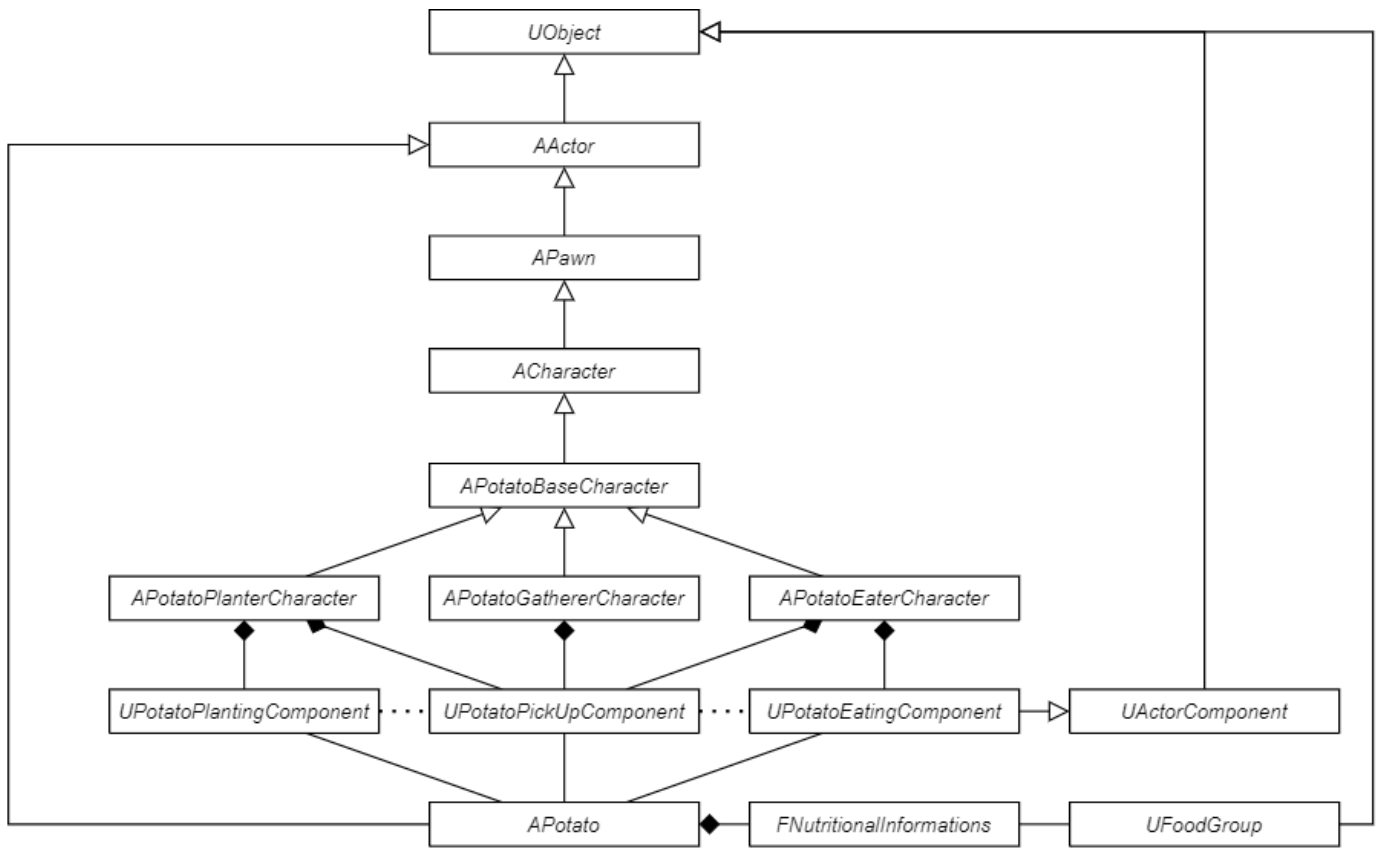
Potato Eater

A lazy upper class eating potatoes.

Source: *The Potato Eaters* by Vincent van Goth

Structure

Main Objects and Actors

Gameplay Framework Usage

APotatoGameState

- GameEnded: bool

+ void Authority_SetGameEnded()

+ bool GetGameEnded()

APotatoGameMode

- Roles: FPotatoGameRole[]

- PotatoTypes: TSubclassOf<APotato>[]

+ void Tick(dt)

+ bool ChangeRole(playerController)

+ bool SpawnPotato(transform, velocity)

APotatoPlayerState

- CurrentRole: FPotatoGameRole

+ void Authority_SetCurrentRole()

+ FPotatoGameRole GetCurrentRole()

APotatoPlayerController

+ void Server_ChangeRole()

+ void Server_QuitGame()

APotatoPlanter/Gatherer/EaterCharacter

APotatoPlantingComponent

- SpawnSocketName: FName

- SpawnVelocity: float

+ void Server_PlantPotato()

APotatoPickupComponent

- HeldPotato: APotato*

- HeldSocketName: FName

+ void Server_PickupPotato()

APotatoEatingComponent

- CaloriesEaten: float

- CalogiesNeeded: float

void Server_EatHeldPotato()