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SE

BLOODLINES SURVIVAL ENGINE BY LSXGAMING

SINGLE PLAYER EDITION

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OVERVIEW

LSX BLOODLINES SURVIVAL ENGINE (LBSE) is Simple Template to Start your Open World Survival Game , with a set of gameplay mechanics

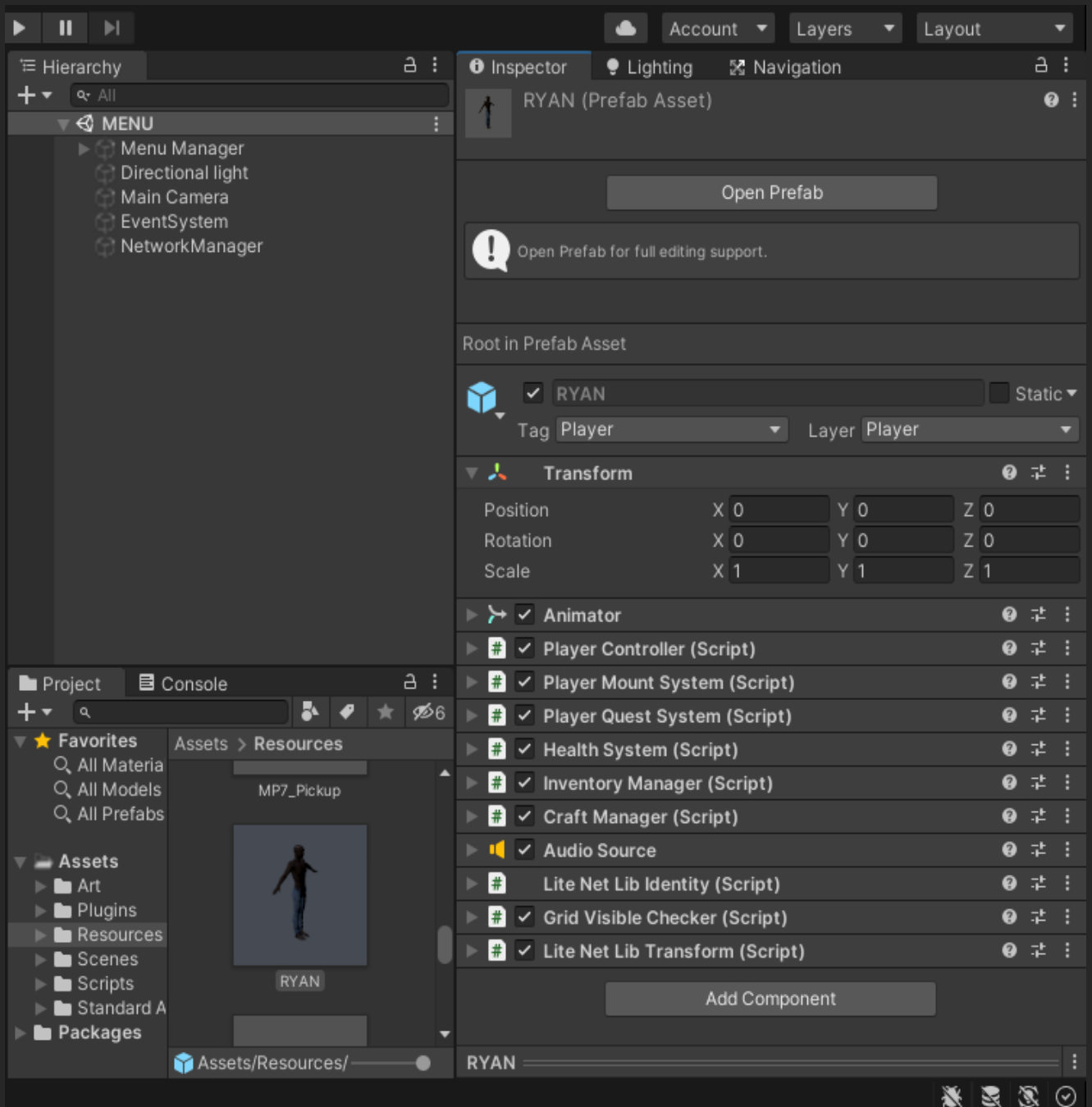
- Save & Load Player State System
- World Items (Shops & Vendors & Banks & Spawners & NPCs)
- Player Mechanics (Inventory & Crafting & Driving & Vehicles Mount & Quests & Building)
- Player Realistic Health & Life Behavior (Diseases & Medicines)
- Weapons (Melee & Raycasted & Projectiles)
- Vehicles (Cars & Air Jets & Helicopters)
- Items (Weapons & Consumables & Wearables & Materials)
- AI (Human & Zombie & Bosses & WildLife)

And a lot more you will discover in the project & many new systems coming over updates.

- This Offline / Single Player Version of the Project

PLAYERS

The Main Player Prefab can be accessed from the “Resources” Folder



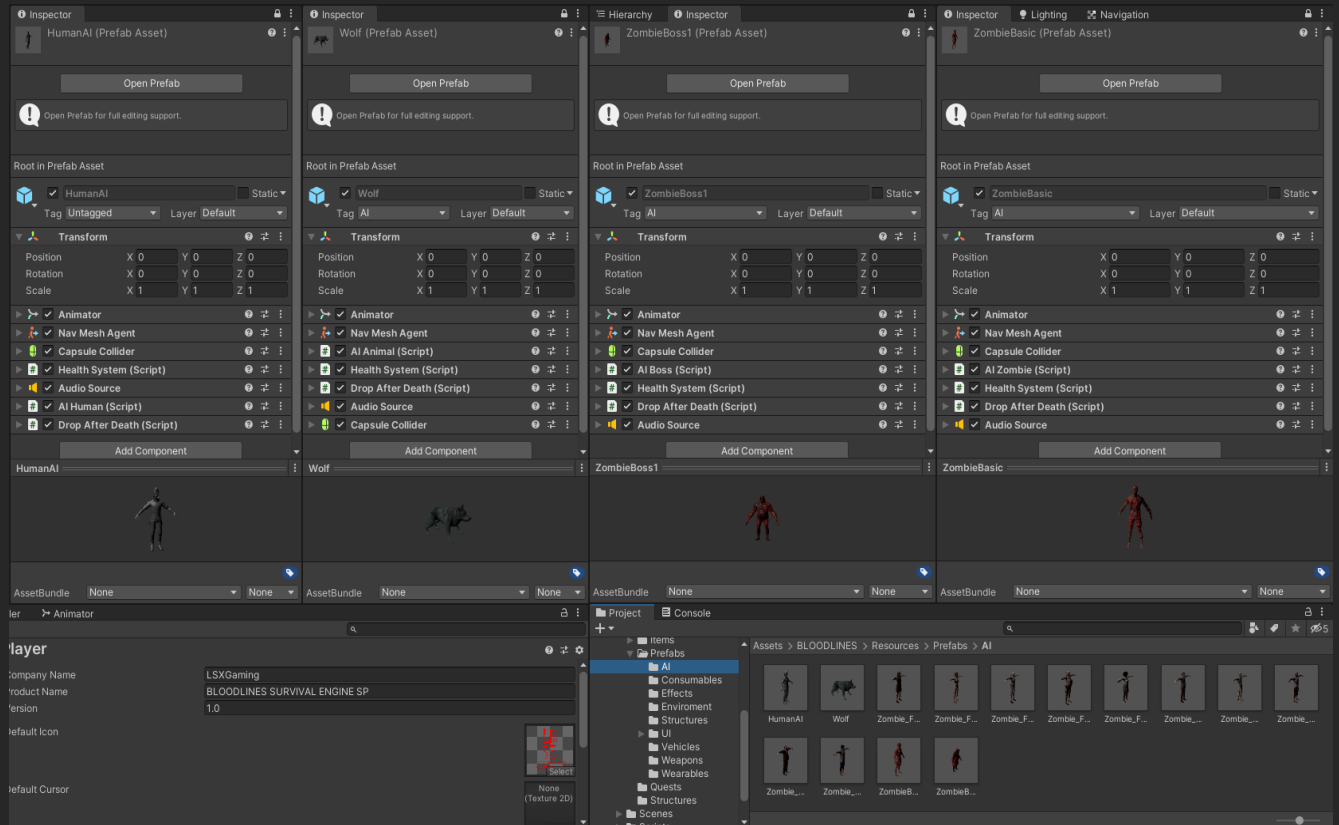
You can modify the player's scripts in the inspector without need to modify the code , the player uses Character Controller for Movement.

You can create new Player in 30 seconds using BLOODLINES Manager just assign it to GameData after finishing.

Currently Bloodlines Support only one Player Prefab but you can extend the code easily as you like to support many player prefabs & classes.

WILD LIFE & ZOMBIE AI

The Main AI Prefabs can be accessed from the “Resources” Folder



You can modify the AI scripts in the inspector without need to modify the code , AIs uses NavMeshAgent for movment which means you will need to rebuild the NavMesh each time you edit the Enviroment.

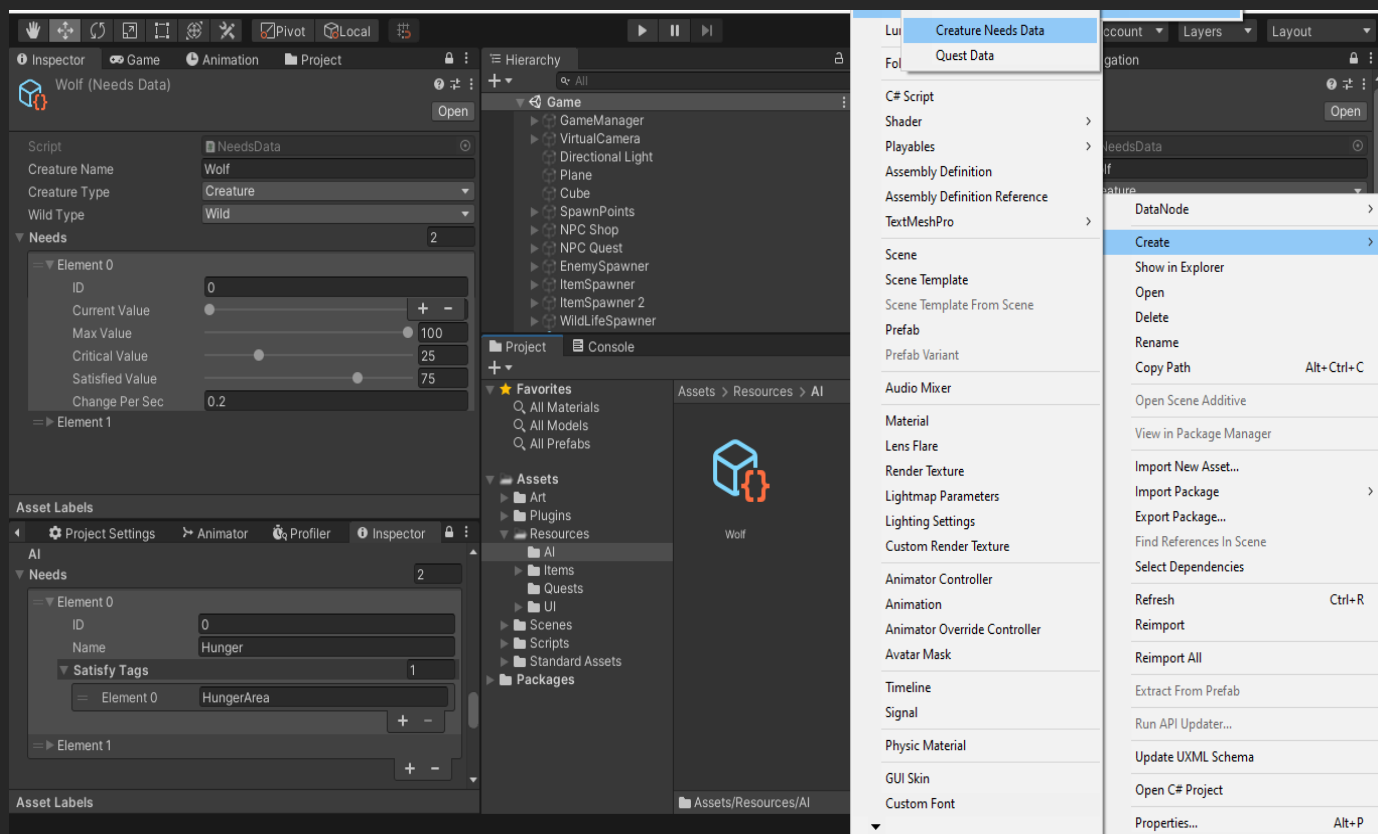
You can create new AI (Zombie - Boss - Human) in 10 seconds using BLOODLINES Manager just assign it to GameData Zombies List after finishing.

All you need to create new Animals is Duplicating an Existing Animal & replace it's Model & add “HitSpot” script and

Trigger Collider to the Bones ,then play around the Inspector as you would to change it's power or speed or animations.

- ANIMALS

Animals have some more Advanced Behavior than Zombie AI as they still Alive (if you want Infected / Zombie Animals then create them like any other zombie not like animal) then they have Needs like real ones (Hunger, Thirst, Sleep, etc..) so we created some Needs System , after creating the Animal you will Go To Folder “Resources/AI” then Add a new “Creatures Needs Data”



“INFO”

- Creature Name: the new Animal Name
- Creature Type : always on Creature
- Wild Type : Friendly or Wild
- Needs : List Contains the alive Animal Needs

“Creature Data Needs INFO”

- ID : the Need ID from GameData Needs List
- Max Value : the Value where Need becomes fully Satisfied Statue
- Critical Value : the Value where Need becomes in Critical Statue
- Satisfied Value : the Value where Need becomes in Minimal Satisfied Statue
- Change Per Sec : how much the Need Current value Increase/Decrease per Second

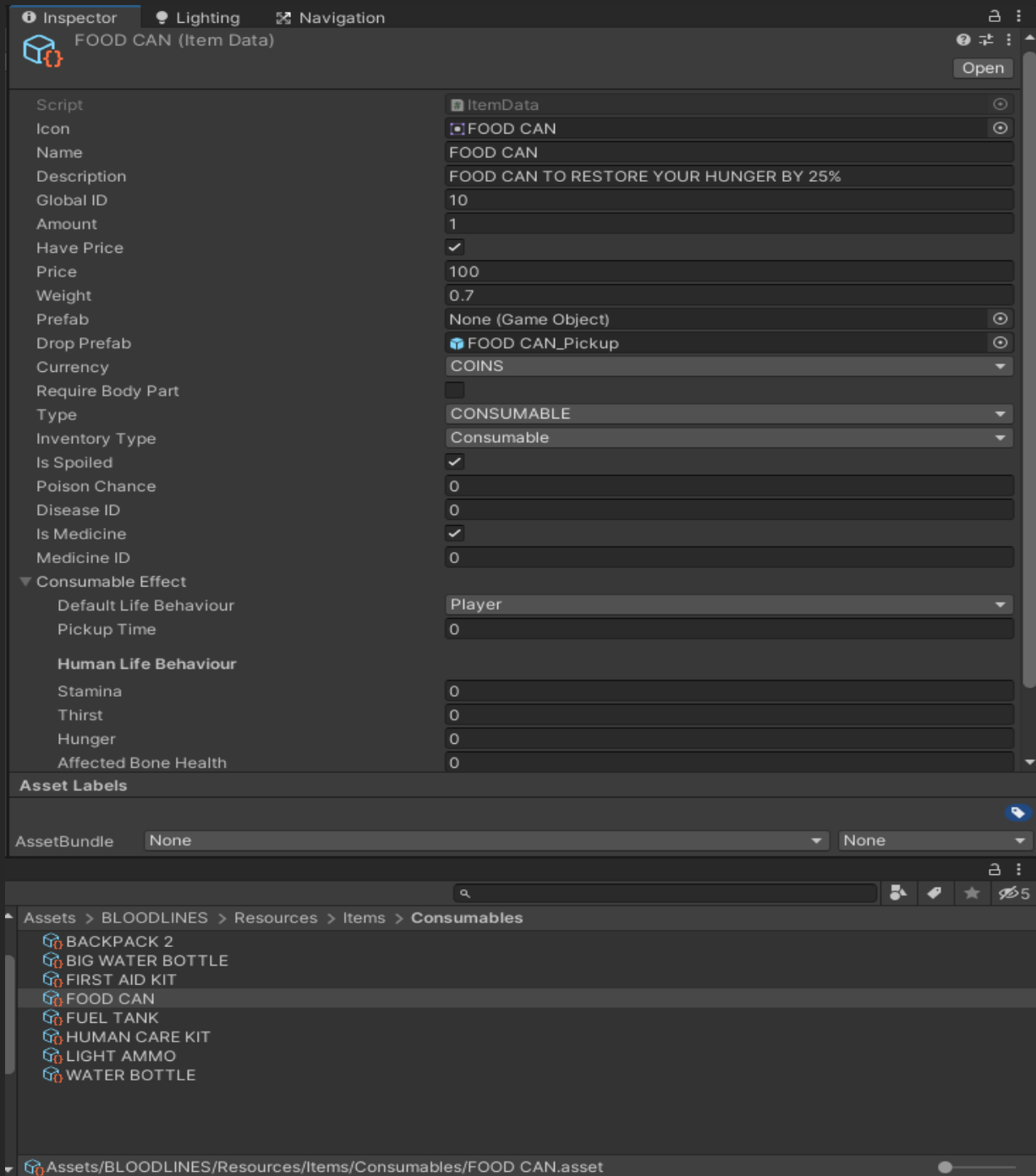
When creating a New Need you should add it first in the GameData , in Needs List

“GameData Needs INFO”

- ID : the Need ID you will set in CreatureData Needs
- Name : a Name that Describes this Need
- Satisfy Tags : Tags of Satisfy Areas for this Need

ITEMS

All Items Prefab can be accessed from the “Resources” Folder
& Items Data can be accessed from “Resources/Items” Folder .



- You Can Duplicate & Modify Any ItemData while creating new Item or just use the Auto Tools in Bloodlines Manager.

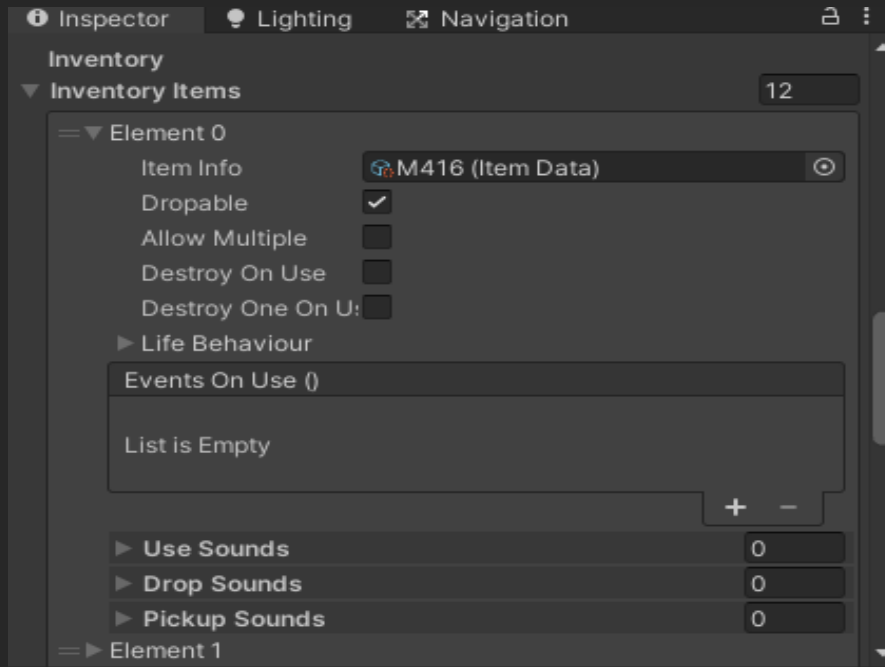
“INFO”

- Icon : the Item Icon which you see in Inventory
- Name : the Item Name which you see in Inventory
- Description : the Item Description which you see in Inventory
- Global ID : Item Unique Global ID , should be different from others
- Amount : Item's Default Amount, which player's get when he pickup this item
- Price : How Much the NPC Vendors sell this Item, player can sell it to vendor for Half the Price
- Weight : How Much this items take from the Backpack Capacity
- Prefab : if item was weapon, this is The Main Weapon Prefab & if was wearable this is the prefab with WearableItem script
- Require Body Part : is the specific body part should be healthy to use this item
- Currency : the Currency the player pay with for this item
- Type : Pickup Item Type
- Inventory Type : this item sort in Inventory
- Wearable Type : Animated item have it's rig & will get spawned in player root & be synced with animator & Static item will be spawned in Bone as child & Weighted

- item is the pre rigged with character & should be assigned to InventoryManager WeightedWearables List
- Ammo Type : if this Item was Ammo, then what Type of it
 - Is Spoiled : Can this item make player get poisoned on consuming it
 - Poison Chance : Chance for player to get Poisoned by this item from 1 to 100
 - Disease ID : what disease player will get when he get poisoned, ID can be Overviewed from GameData
 - Is Medicine : Can this item medicine on consuming it
 - Medicine ID : what medicine player will get when he consume it, ID can be Overviewed from GameData
 - Life Behavior : use for Consumables Items that affecting player needs (Hunger , Thirst , Stamina , Body Part Health) or Vehicles Needs

- INVENTORY ITEMS

After create an Item using the Bloodlines Manager you should go to GameData Inventory Items List to check if it was added .



“INFO”

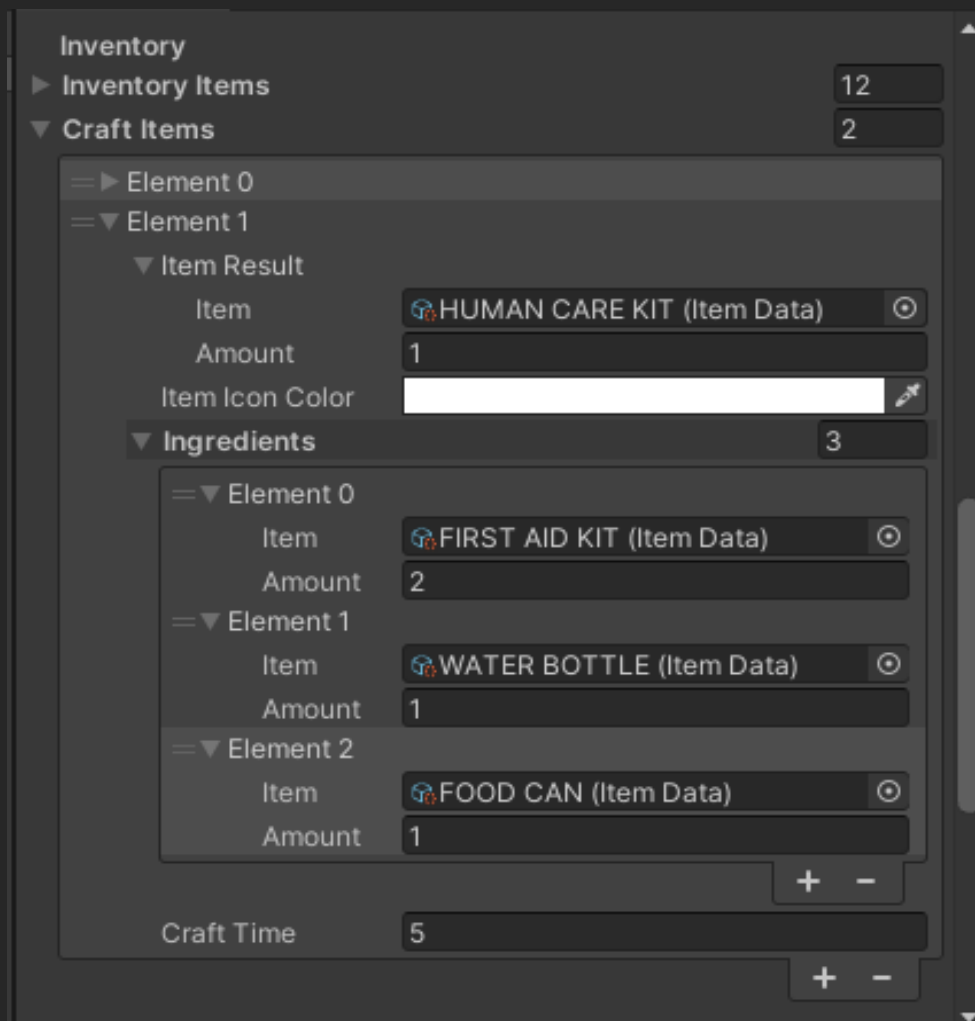
- Item Info : the ItemData object “Resources/Items”
- Droppable : can this Item be Dropped from Inventory
- Allow Multiple : can player pickup more than 1 from this item
- Destroy On Use : should this Item be completely removed (all item amount) from Inventory on use

- Destroy One On Use : should this Item remove one item amount from Inventory on use (useful with ammo / Life Behavior Items)
- Events On Use : Invoke an Event on use this Item

- CRAFT ITEMS

All Craft Items can be accessed from the GameData in “Resources” Folder.

Bloodlines Contains Item Crafting In Game so you can Craft any Inventory Item you would from Mixing the Ingredients.



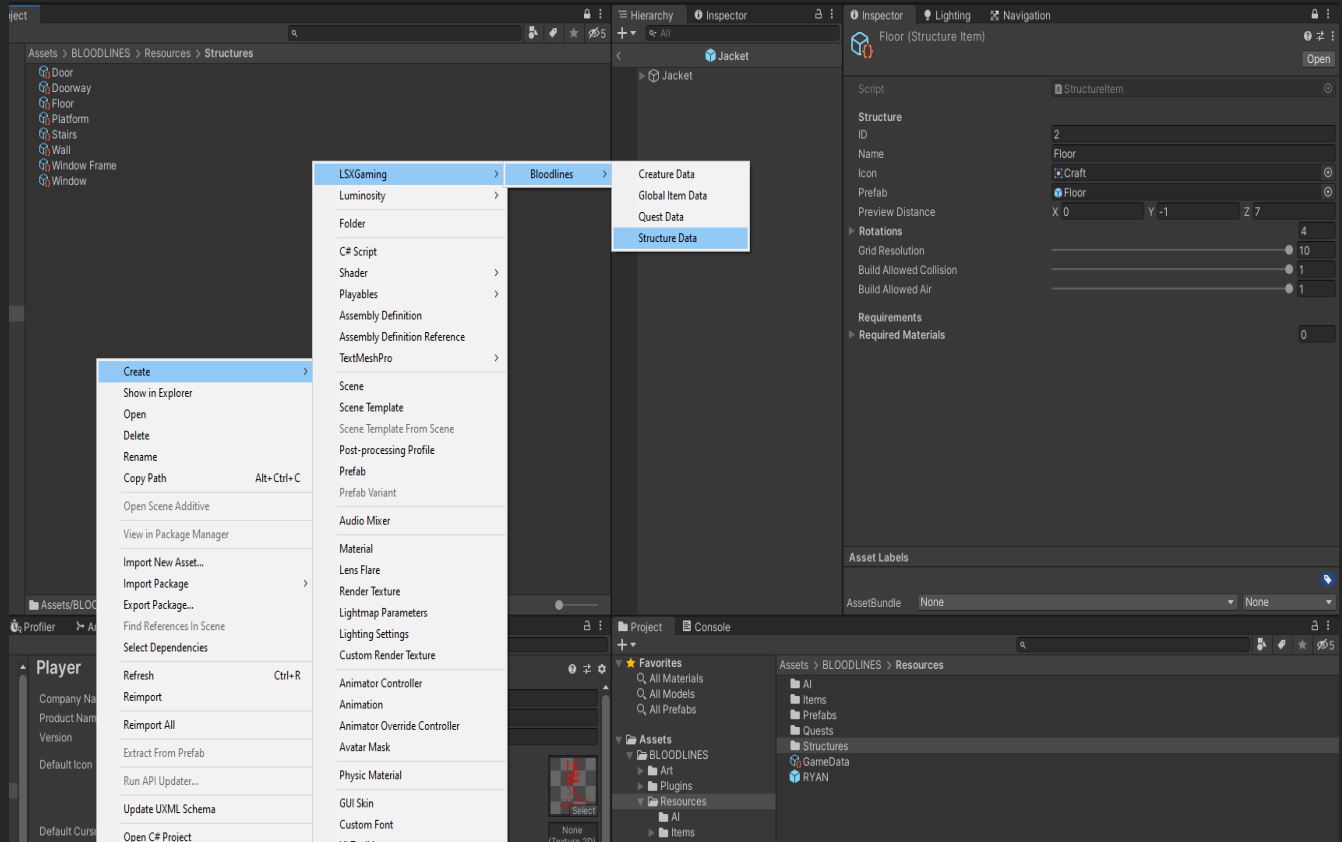
“INFO”

- Item Result : The Item We Get after Crafting
- Ingredients : The Items we will mix to get the Item Result & should be exist in our Inventory before
- Craft Time : The Needed time to Craft this Item

Player Can Craft anything he wants from the Inventory Crafting Panel after Picking up the Ingredients from the Game World or from the NPC Shops / Vendors.

STRUCTURES

All Structures can be accessed from the GameData & “Resources/Structers” Folder.



You can create new Quest by
“Create>LSXGaming>Bloodlines>Structure Data”
“INFO”

- Icon : the Quest Icon
- ID : the structure Unique ID
- Prefab : structure prefab / gameobject to be spawned in world

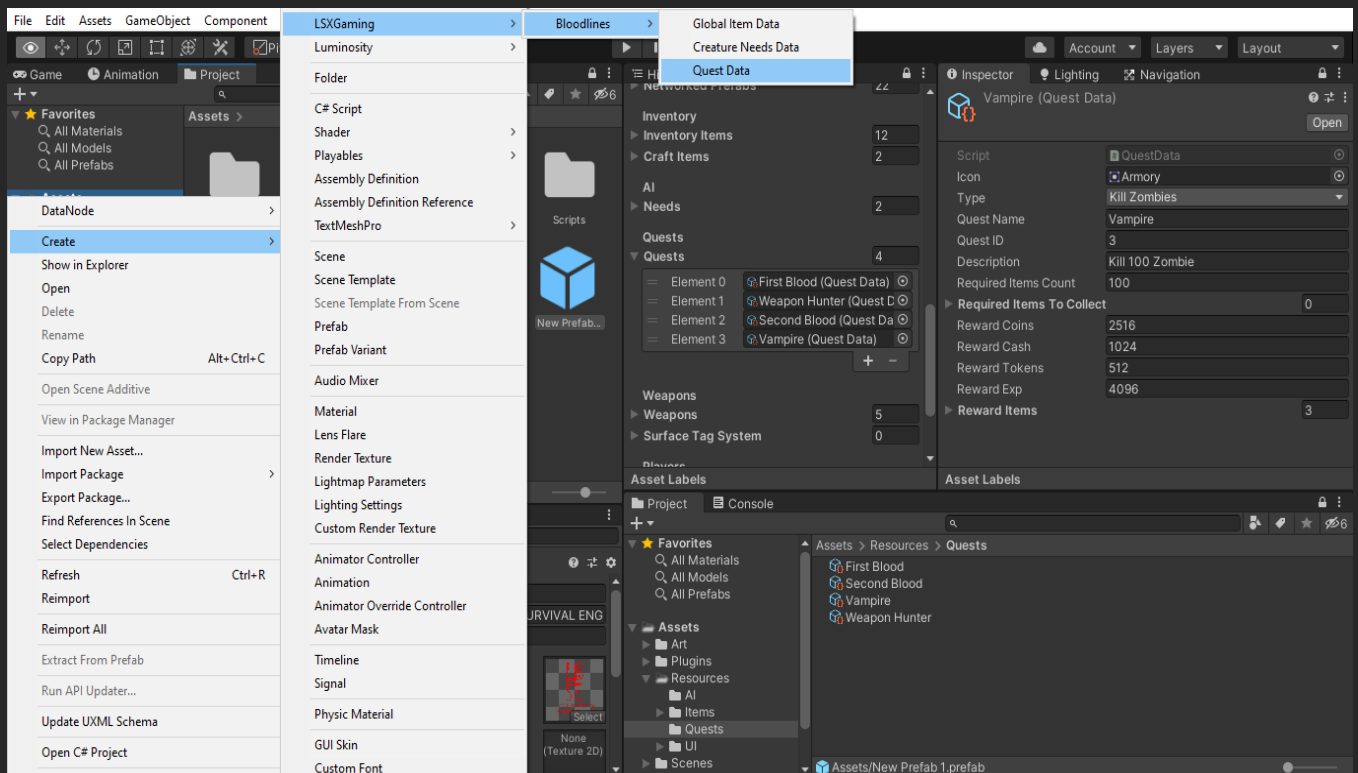
- Preview Distance : Distance / Offset from camera while preview
- Rotation : available rotation to for structure

After you finish Creating a new Structure you should add it to the GameData Structures List.

QUESTS

All Quests can be accessed from the GameData in “Resources” Folder.

& Quests Data can be accessed from “Resources/Quests” Folder



You can create new Quest by
“Create>LSXGaming>Bloodlines>Quest Data”

“INFO”

- Icon : the Quest Icon
- Type : Quest type (Kill Zombies, Kill Player, Collect Item)
- Quest ID : the Quest Unique ID

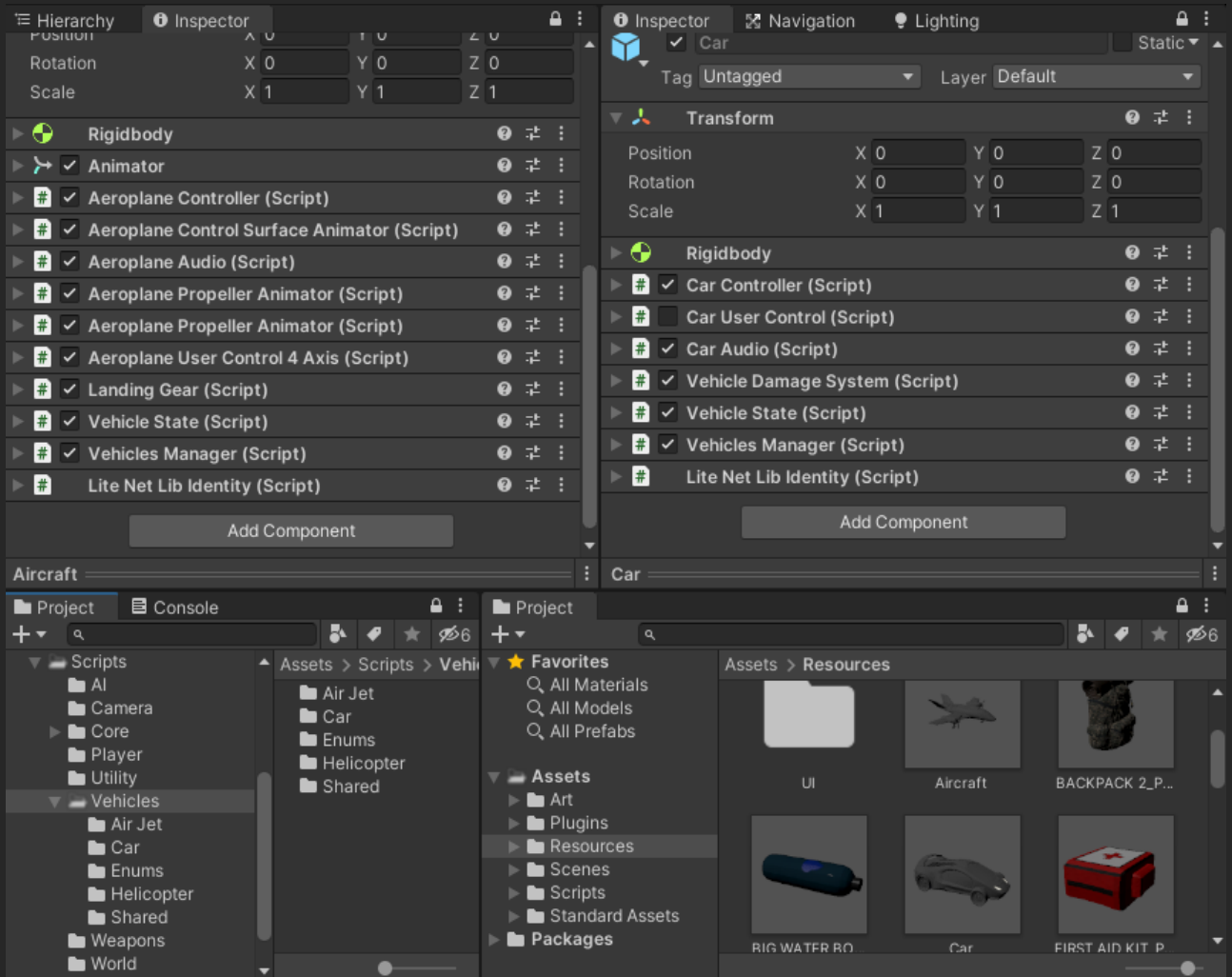
- Required Player Level Range : What Min & Max Player Level to get this Quest
- Required Items Count : How Much Players / Zombies / Items should the Player Kill / Collect
- Required Items to Collect : if the Quest was to Collect specific items then what items should player collect
- Reward Coins, Cash, Tokens, Exp : How much player will be Payed in game after Completing this quest
- Reward Items : the Inventory Items player would get after Completing this quest

After you finish Creating a new Quest you should add it to the GameData Quests List.

Player can get Quests from Quests NPCs in the Game World.

VEHICLES

All Vehicles Prefabs can be accessed from the “Resources” Folder, Player can use them freely in the Game World.



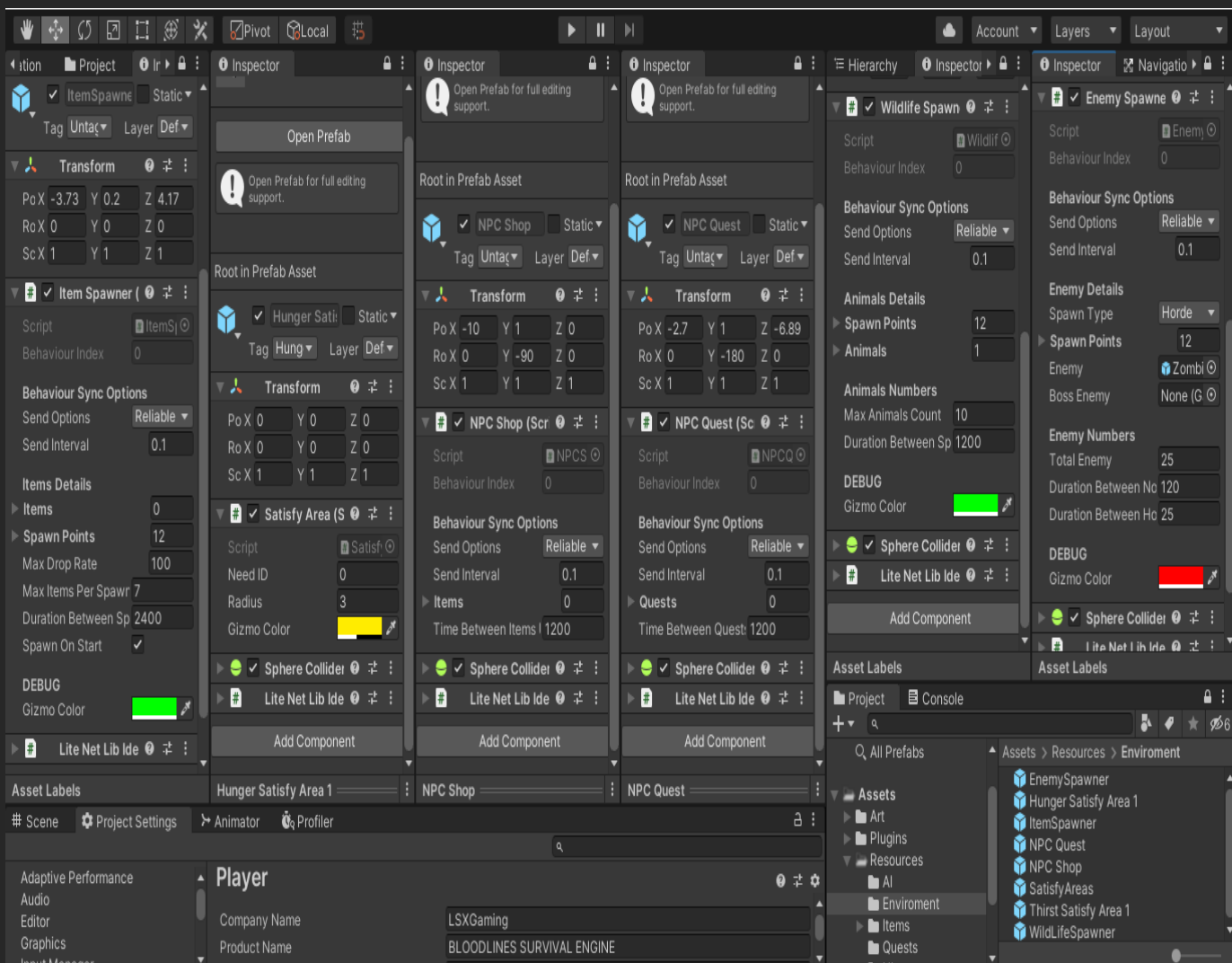
You can use the BLOODLINES Manager to create new Vehicles for now it Supports (Car , Airplane , Helicopter)

You can replace the Vehicle Physics by editing the VehicleManager & BloodlinesManager Scripts.

ENVIROMENT

You can modify Game World as you like just Remember to Rebake the NavMesh cause AI needs it for Movement.

There's a lot of elements in game world you can use , check examples in “Resources/ Enviroment” Folder.



- ITEM SPAWNER

Spawner Script that Spawn Random Items in it's assigned Spawn Points every "Duration Between Spawns"

- ENEMY SPAWNER

Spawner Script that Spawn Zombies in it's assigned Spawn Points every "Duration Between Spawns" & can spawn Normal or Zombie Hordes or Boss Zombie when Player come Near to the Sphere Collider Trigger Area

- WILDLIFE SPAWNER

Spawner Script that Spawn Animals that assigned in the Animals List in it's assigned Spawn Points every "Duration Between Spawns" when Player come Near to the Sphere Collider Trigger Area

- SATISFY AREA

AREA that SATISFY Animals Needs when Animals come Near to the Sphere Collider Trigger Area

You should Set Need ID to match the Need from GameData & the Satisfy Area GameObject Tag should match the one in the Need SatisfyTags from GameData

- NPC SHOP

VENDOR NPC that You can buy Items (Weapons, Consumables) from or sell you Inventory Items to

NPC Vendor / Shop Items changes every “Duration Between Items Change”

- NPC QUESTS

QUESTS NPC that You can get Quests from

NPC Quests changes every “Duration Between Quests Change” , but Players still have the Quests and it’s progress on the Database.

- BANK

BANK is the place that player can store his items in, instead of inventory or dropping them

- DOOR

Door is Interactable Building Piece to prevent strangers from entering our homes

- SLEEPING AREA

SLEEPING AREA is the places that player can rest in to regain his stamina like Beds & Sleeping Bags which detect player by colliders

- SWIMMING AREA

SWIMMING AREA is the places that player can swim like Sea or River which detect player by colliders

- TIME OF DAY

Game Time Cycle script that control world time & lighting & fog

FINAL THOUGHTS

Project is under Active Development and will get a lot of updates & a lot of new Features & top request ones.

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