

Game Design Document (GDD)

Poco (Save the world)

Created: 6 July 2021

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Tutorial: 5

<https://github.com/Bonasladybug/Poco-Game>

Version2.2 (**Update parts are highlighted**)



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1 Overview

Poco is a Role-Player Game (RPG) inspired by an American native quote ("The earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself." - Chief Seattle) and the story of the importance of the environment issue. The Player accomplishes story-based objectives while battling enemy creatures in a number of fantasy environments. The main target of the Poco game is kids and adolescent which challenged them to save the earth from Rubbish. This game, by advancing the story in addition to entertainment, makes the environmental problem more significant. And it can be said that it is a good way to predict the future of our story and the earth.

1.1 Game abstract

The game take place in the small village where Shabbish (who stole the soul of the earth hiding there) try to control the world and destroy it. Shabbish is producing rubbish every day. Poco and animals join together to fights and rebuild the nature with their power.

1.2 Objectives to be achieved by the game

- Rescue: The specific goal in this game is to find the Shabbish and take back the soul of the earth.
- Destroy: The Player destroys the rubbish bags.
- Exploration/Capture/Collect: The player explores different areas to find the animals and get different powers that help to rebuild the green area. The player collects the powers(Items) in her bag and use them in some places.
- Build: The player uses the Items to rebuild the village(earth)

1.3 Core gameplay

The main activity of the game is destroying rubbish bags by Throwing an arrow at them with a slingshot. Cleaning the land from pollution and rebuilding it by sowing seeds and etc.

The charm of the game is its friendly atmosphere and helping the ground. (The purpose of this game is to raise awareness to keep the ground clean). Feelings of usefulness, as well as friendship with animals, are notable

1.4 Game features

- Abilities(attack moves)
- Equipment(Slingshot,arrows)
- Characters(Poco,Shibbish,Rubbish bags,Animals)
- Buildings(Houses,Water well)
- Objects(Seeds,Water,etc.)
- Environments(Village,Green areas, path)

1.4.1 Genre

Poco is an RPG story adventure game made in a 3D model combined with 2D objects in the world's fantasy environment.

1.4.2 Number of players

One player game (Poco is the main character)

1.4.3 Game theme

The game is narrative-based with challenges in fantasy gameplay.

1.4.4 Story summary

The story begins where Poco goes to the village where Shibbish has gone. The village has become empty due to the prevailing conditions, and the people have taken refuge in other areas. Shibbish is getting angrier every day and trying to destroy the earth. As if bewitched, he is confused that there is no hope for the earth and must destroy it. He produces a significant amount of rubbish every day and leaves it like plastic waste.

Poco, with the help of the earth and her friends (animals), goes to war with the Shibbish. The animals are scared and hide behind objects to protect themselves from garbage, and each of them is waiting for Poco to help in this part of the village. They give some material to rebuild the environment, such as seeds, water, etc., to Poco to fight and produce green space.

Poco is unaware of the power that she has and gradually learns how to defend the earth with the guidance of his friends. She can plant a tree and revive the spirit of the earth.

2 Mechanics

2.1 Game elements categories

- Characters:

- Main Character: Poco

- NPC's:

- Animals(Rabbit, Cat, Dog , Hedheghog,etc.)

- Enemies:

- Shabbish , Rubbish bags

- Weapon:

- Slingshot(arrows)

- Power:

- Seeds,Water,etc.

- World game:

- Green area

- Houses

- Trees

- Water well

- Sounds:

- Background sound

- gameover sound

- Rebuild sound

- Slingshot sound



2.2 Rules

- Shot Arrows to destroy the rubbish bags.

- See the list of tasks

- Find the animals

- Collect powers

- Rebuild village

2.2.1 Interaction rules

- Shooting Arrows by slingshot

- Seeds power plant the trees

- Water power full again the Water well.

2.2.2 Artificial Intelligences

- Rubbish bags disappear by shooting arrows
- Trees are plants with seed power
- Water wells are full again with water power

2.3 Game world elements

There are some stones, grass, Bridge and river.

2.4 Game log elements

- Save
- Health
- Lives
- Map
- Tasks list
- Backpack



Health: By eating the heart, She boost her health.

2.5 Assets list

- Environment Background (village)
- Texture
- 3D Models
- Frames / Buttons
- Screen frame
- Frame Buttons
- Stats bar area
- Screen Buttons (Main, Reply, back, ...)
- Tasks
- Bag
- Conversations
- Screens
- Main Menu
- Loading
- Endingss
- Characters
- Main Character (Poco), Enemies (Shibbish, Rubbish Bags), Animals (Rabbit, cat, Hedgehog, ...)

- Weapon
- Slingshot
- Arrow
- Objects (Inventory)
- Seeds
- Water
- Objects (Worlds)
- Stones
- Houses
- Grass
- Water Well
- Music Track
- Background sound
- Sound Effects
- gameover sound
- Rebuild sound
- Slingshot sound
- Fonts

3 Dynamics

3.1 Game World

The world game start from small village with green area for all levels.

Graphics is based on 3D and 2D style.(Unity design+Photoshop design)



3.1.1 Game theme details

All inhabitants leave their houses due to the Shabbish, but a few Animals remain to help poco against the spell and save the soul of the world.

Green space with the sound of nature and birds. Grassland with local trees and houses.

The form of the landscape is based on typically seen features of village. The village represents the types of plants and trees that are common such as maple and pine Trees, houses and water well.

The weather represent a sunny day in spring.

The game is not representative of real-time in any way. The player can take as much or as little time completing tasks as they wish.

3.1.2 Missions/levels/chapters Flow

The game environment is limited to the village. The player cannot enter the house or use objects that are not assigned to him/her. He/She is limited to doing what they are asked to do. (Tasks). Missions complete by doing the Tasks and go through to the next levels.

3.2 Missions/levels/chapters elements

The slingshot and arrows destroy the Rubbish bags and Shabbish.

The Map guide to find animals.

The animals give the powers.

The Bag collect powers.

The Seeds plant the tree.

The Water full the water well.

3.2.1 Objectives

Fight: take shots to the rubbish bags and shabbish to destroy them with slingshot(arrows)

Find: Searching the village to find the hiding animals.

Tasks: Do the things that animals requested for.

Collect: Take powers from animals(collect them in bag).

Rebuild: Use powers to rebuild the earth.

3.2.2 Rewards

Having the powers(by doing the tasks)

3.2.3 Challenges

- Fight with rubbish bags/shibbush
- Find the animals
- Do the tasks

3.3 Special areas

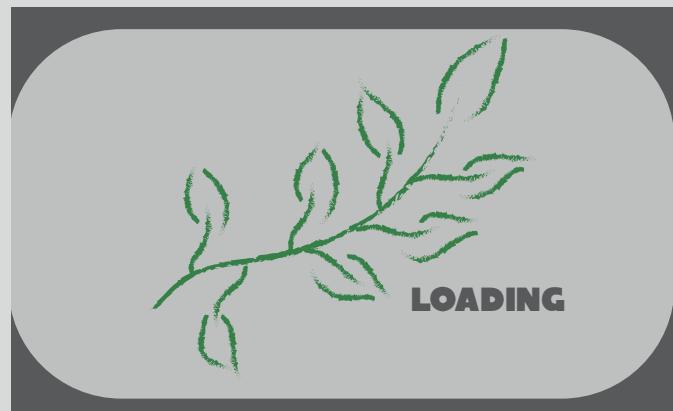
Beautiful view of the houses, trees and the bridge with the river flows.

3.4 Game interface

The main menu will appear once the game is loaded and the player has followed the "Play" prompt. This is a simple, minimalist screen, mainly consisting of the game logo, simple background imagery and plant.



Main Menu



Loading

3.5 Controls interface

Mouse:

-Left Click: Moving (Point anywhere)

Character will follow the point that mouse click it.

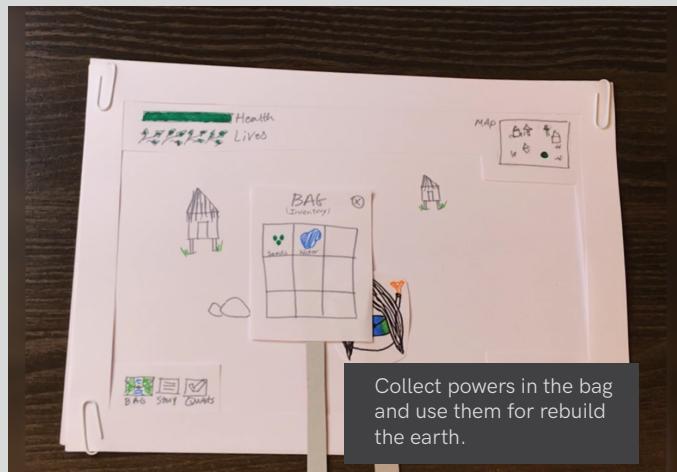
Character pickup items with Left click.



4 Visuals and Sounds

4.1 Game visuals

Poko tries to find animals by roaming the village. The animals are hiding from fear. She keeps the powers in her backpack. The arrows is fired at the rubbish and destroys it.



4.2 Game sounds

The background music is the nature sound.

-Sound effects: Planting the tree,destroy the rubbish bag/game over

5 Document information

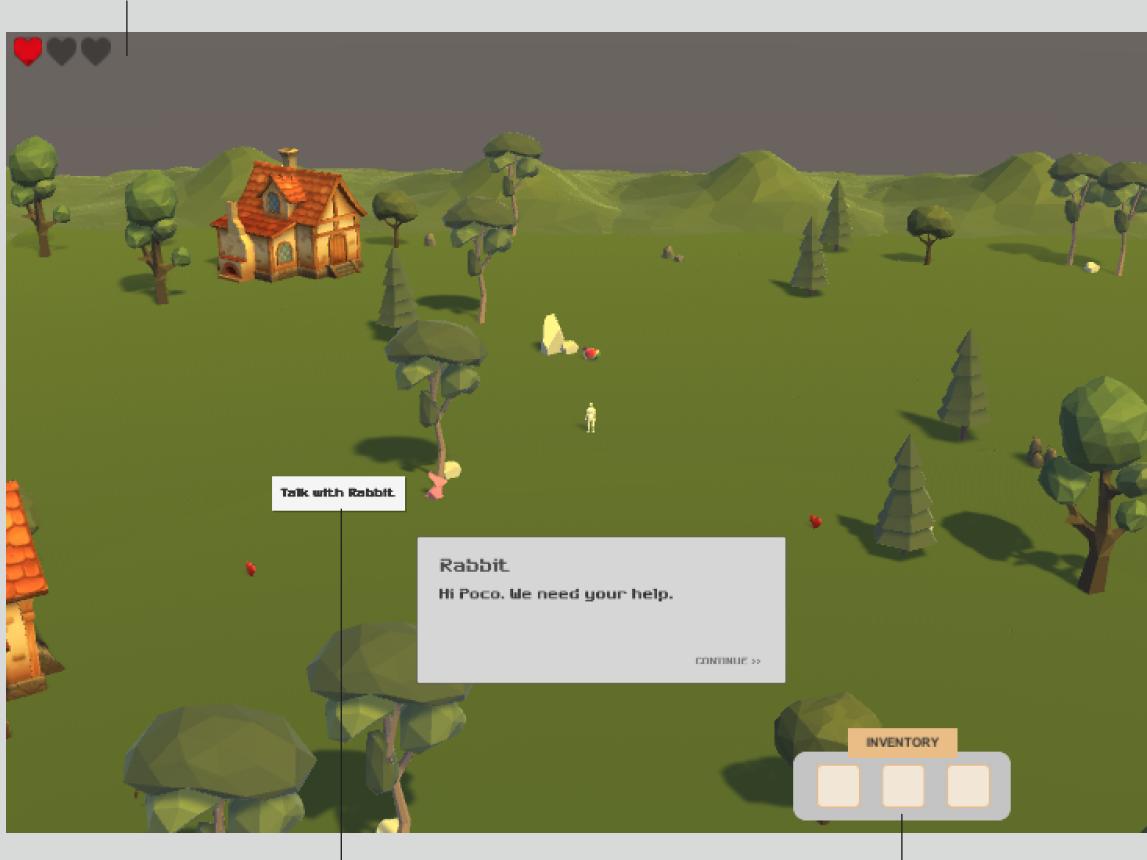
5.1 Document references.

All is listed in the first page.

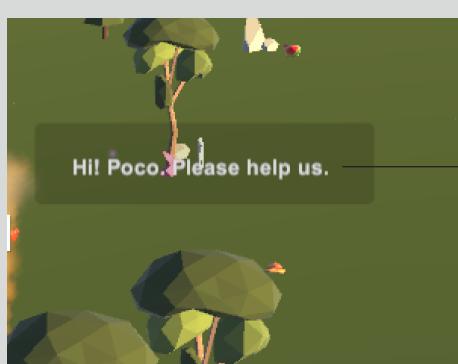
More Documents are adds in the github Poco Game.

<https://github.com/Bonasladybug/Poco-Game>

Health Bar : By eating the heart, She boost her health.



Talk(Quest): Click the button to talk with rabbit.



Inventory: Pickup the Items and select them.

Trigger: When you closer to the rabbit, the text will appears.

6. Milestone

- num1: 22,06,2021 (Interface,Codes)
- nume2: 30,06,2021 (Animation)
- num3: 15,07,2021 (Levels)
- num4: 30,07,2021 (Playable)

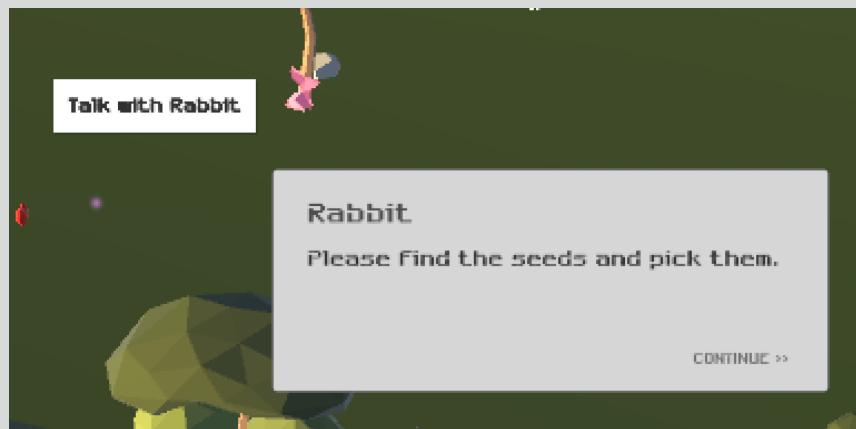
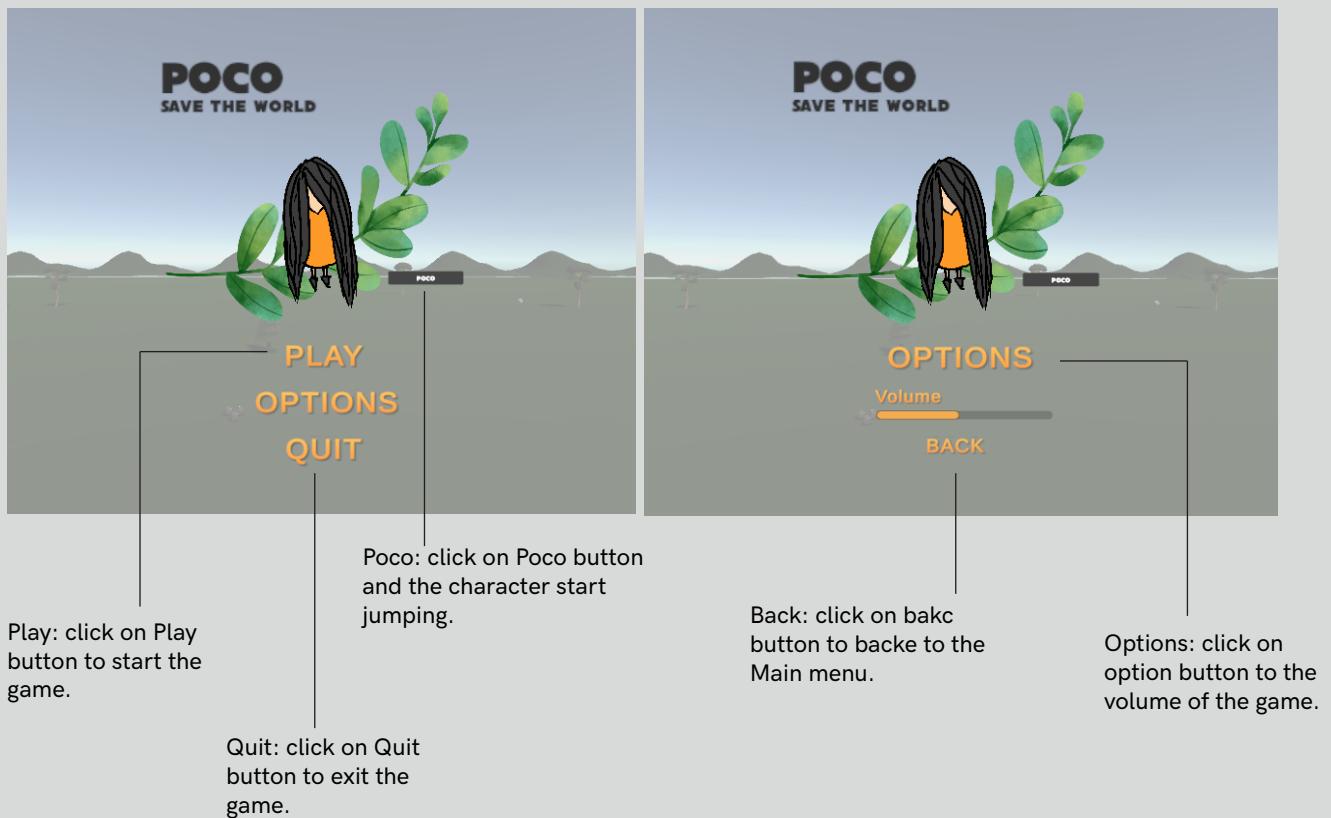
References:

- <https://assetstore.unity.com/account/assets>
- <https://www.youtube.com/watch?v=MFQhpwc6cKE&t=367s>
- https://www.youtube.com/watch?v=_nRzoTzeyxU
- <https://www.youtube.com/watch?v=2bR13zUsHT0&list=PLZ1b66Z1KFKgp-sjQ8ldU3eh8DoQ3a14P&index=4>
- <https://www.youtube.com/watch?v=CHV1ymlw-P8&t=221s>
- <https://www.youtube.com/watch?v=HQNI3Ff2Lpo&t=194s>

7 Animation part

1.1 Animate Interface

Scene > MainMenu



Talk with rabbit : click on Talk with rabbit to see the animate text and continue to see more texts.

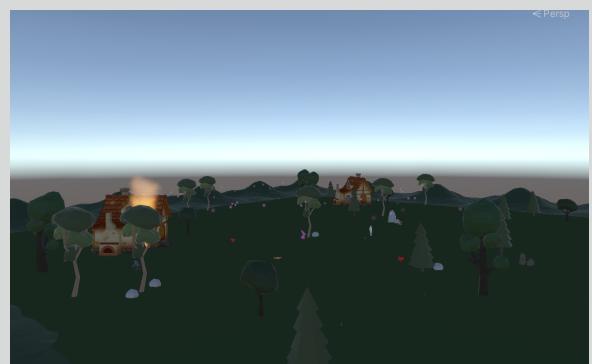
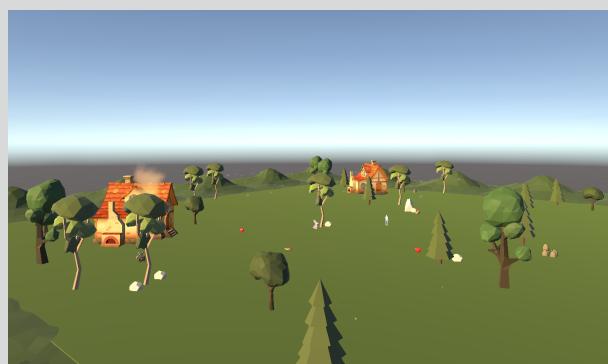
7 Animation part

1.2 Animate Environment

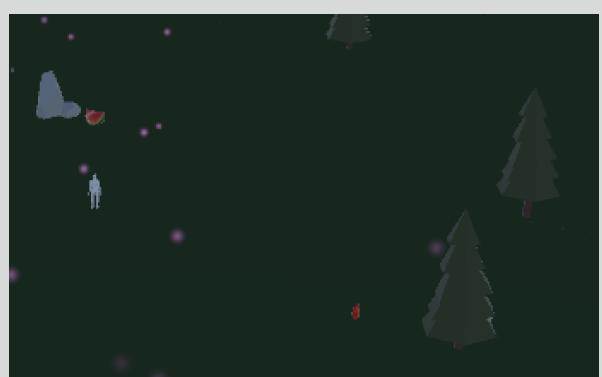
Scene > SampleScene



Campfire: Fire and smoke animation.



Daycycle: Day and night animation.

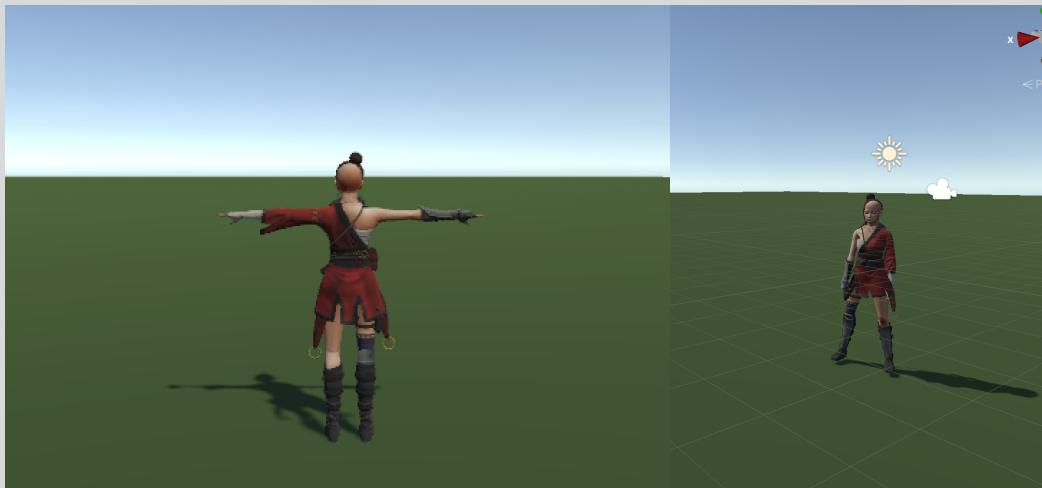


Dandelions: Pink dandelions on the air animation.

7 Animation part

1.3 Animate Character

Scene > Animate Character



Character Animation: Idle,Walking,Running,Jumping,Shooting Arrow.

W: Go forward , S: Go backward, Shift+W: Run, Rotating mouse: Rotate character, Click mouse: Shooting arrow.

Scene > SampleScene

Character Animation: Idle,Running. (with mouse)



1.4 References:

- https://www.youtube.com/watch?v=_nRzoTzeyxU
- <https://www.youtube.com/watch?v=YqMpVCPX2ls>
- https://www.youtube.com/watch?v=zc8ac_qUXQY
- <https://www.youtube.com/watch?v=OjNW9G9nVoc>
- <https://www.youtube.com/watch?v=SXF1YSf3aGk>
- <https://www.youtube.com/watch?v=xxM6D6coDAU>
- <https://www.youtube.com/watch?v=qc0xU2Ph86Q&t=1042s>

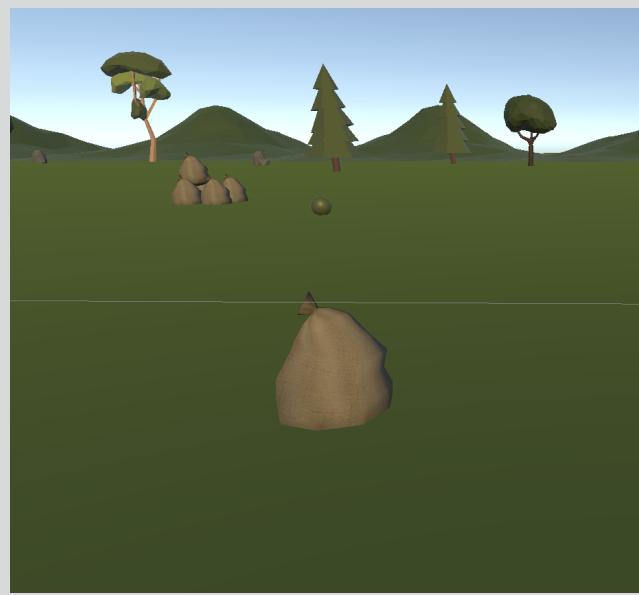
8 Game AI

1.1 Follower NPC



The NPC's (Dog) follow the character.

1.2 Garbage Bag



There is a range for patrolling the garbage bag. If the character gets close to him, he follows him and attacks him. And if it maintains a sufficient distance from that area, the garbage will return to its original location.

8 Game AI

1.3 Horses



Horses have a leader (black horse).

If the character approaches them, they disperse and also follow the path of their leader.

1.4 Clouds



Clouds Cubes that follow a 3D noise function

8 Game AI

1.5 References:

- <https://www.youtube.com/watch?v=NEvdyefORBo>
- <https://www.youtube.com/watch?v=KcyO1biSIOw>
- <https://www.youtube.com/watch?v=RCfBtN5ZAtA>
- <https://www.youtube.com/watch?v=Zjlg9F3FRJs>
- <https://www.youtube.com/watch?v=Mx9M0ieR1M0>