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420-JV8-AS C1_GAME ENGINE I

Cooking with Grandma

Final Assignment of Game Engine

Presented to Ms. Marc-André Larouche

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User Manual:

Rules to Win:

The player must collect 25 flowers, 3 liters of milk, 15 mushrooms, and one egg. In addition, it must be done in less than 5 min. Otherwise, the player will lose. Besides, in order for the player to win, the player must collect enough flowers and mushrooms to sell and get enough coins to buy the 3 liters of milk.

Default Controls:

Left-Click mouse → Shoot the Enemy (This option is only available when the enemy is trigger, which is trigger when the player collects an egg).

K → Opens and closes General actions.

G → Opens and closes Grandma Notes (game story).

I → Opens and closes the inventory.

E → Opens and closes conversations. Also, pick items when it is pressed on pickable objects.

ESC → Opens and closes Pause Menu.

User Stories

User Story 1

As a player, I want a terrain with space to constrain. So, I can know where I can play.

- [x] Create the terrain.

- [x] Create the script avoid water.

User Story 2

As a player, I want to be able to pick some flowers and eggs. So, I can fulfill the game requirements that allow me to win.

- [x] Add the flowers that can be picked from the terrain.

- [x] Add the eggs that can be picked.

- [x] Create an Inventory when you click it will show you your items.

- [x] Create Script Raycast and add to the main camera.

User Story 3

As a player, I want NPCs with animations. So, I can feel the game is alive.

- [x] Add townies.

- [x] Create Scrip WalkingNpc.

- [x] Add the talking functionality to the Script Raycast.

- [x] Change animation sit for male and female.

- [x] Create NavMeshSurface.

- [x] Add animations.

User Story 4

As a player, I want a main menu before I start my game. So, I can start my game easily

- [x] Add Main menu.

- [x] Add button Settings.

- [x] Add button Exit.

- [x] Add all settings.

- [x] Add Main menu Scripts.

User Story 5

As a player, I want a pause menu with a return button, a main menu button, and a settings button.

- [x] Add Pause menu.

- [x] Fix Inventory look.

- [x] Add Settings button.

- [x] Add MainMenu button.

- [x] Add settings.

- [x] Add all the functionality to GameManager Script.

User Story 6

As a player, I want a Timer and a way to win the game. So, the game is more exciting, and I have time to finish the game.

- [x] Add Victory and GameOver.

- [x] Polish game decoration.

- [x] Add timer.

User Story 7

As a player, I want an enemy. So, the game can be more intense and exciting.

- [x] Add a weapon, that just show up if the user the enemy appears too.

- [x] Add functionality shoot able only if the egg is got by the player.

- [x] Add an enemy to shoot.

User Story 8

As a player, I want a list of controls in my main menu and an easy way to always look at it. So, I know how to play the game.

- [x] Add a visual list of controls to the main menu.

- [x] Add a keycode to the player access list of controls.

User Story 9

As a player, I want a store in my game. So, I can sell my items and buy the last item. Therefore, I can win.

- [x] Add value for all objects.

- [x] Add a store.

- [x] Add coin counter.

- [x] Add constrains for sale

User Story 10

As a player, I want the game to have a story. So, I will feel more connected to the game.

- [x] Add all the story pop-ups.

- [x] Fix any bugs.

- [x] Create build game.

- [x] Add load scene.

- [x] Add more lights.

Bibliography

Unity Packages:

input system

terrain tools

Standard Assets (for Unity 2018.4)

2D Sprite

SimpleSky --> Sky prefabs

Stylized Grass Texture → Terrain paint

Stylize Water Texture → Terrain paint

Stylize Rock Texture → Terrain paint

RPG Poly Pack - Lite → Terrain prefabs

Polygonal Foliage Asset Package → Terrain prefabs

Low Poly Nature Assets Sample → Terrain prefabs

Lowpoly Medieval Peasants - Free pack → NPCS

Water Effect Fits For Lowpoly Style → Water prefab

Simple Low Poly Nature Pack → Terrain prefabs

Low Poly Fence Pack → Fence prefabs

Simplistic Low Poly Nature → Terrain prefabs

Fantasy RPG Cursor Pack → Cursor and crossair

Villager Animations Pack FREE → Animations / prefabs that NPC are interacting

Basic Motions FREE Pack → Animations

Everyday Motion Pack Free → Animations

Main Menu with Parallax Effect FREE → Main menu Background Assets

RPG inventory icons → Pause menu icons and Inventory icons

Food Icons Pack → Game icons

Low Poly Arsenal - Copper → Bow and arrow asset

Note: Every animation used in the game had a modification in the animator

Links for Music in the Game:

Relax by Derek Clegg→ https://creativecommons.org/licenses/by-nc-sa/4.0/

RainForest Sound → http://soundbible.com/1818-Rainforest-Ambience.html

Script:

User Story 1→ RigidbodyFirstPersonController Script → Credit: Standart Asset

User Story 1→ AvoidWater Script → Credit: Marc-André Larouche

User Story 4→ Main Menu Script part PanelToggle → Credit: Marc-André Larouche

User Story 4→ Loading Scene Code → Credit: Marc-André Larouche

User Story 4→ Script SetGFX → Credit: Marc-André Larouche

User Story 4→ Script SetResolution → Credit: Marc-André Larouche

User Story 7→ Bow Firing Logic and Code → Credit: Marc-André Larouche

Learning sources:

https://docs.unity3d.com/ScriptReference/Input.GetKeyDown.html → Getkeydown

https://docs.unity3d.com/ScriptReference/MonoBehaviour.Invoke.html → Invoke to disappear my texts

https://docs.unity3d.com/ScriptReference/Cursor-visible.html → Remembering how to use Cursor visible

https://docs.unity3d.com/ScriptReference/Rigidbody-interpolation.html → Understanding how to work with rigidbody

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https://docs.unity3d.com/Manual/InverseKinematics.html → Animations

https://docs.unity3d.com/ScriptReference/Time-timeScale.html → Trying to pause the game

https://docs.unity3d.com/Manual/Navigation.html → For NPC animation script/ about navigation system

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https://docs.unity3d.com/Manual/com.unity.kinematica.html → For NPC animation / Learning how to make it work

https://docs.unity3d.com/Manual/AudioMixer.html → For Music in Settings' panel

https://docs.unity3d.com/ScriptReference/Audio.AudioMixer.SetFloat.html → Understanding audiomixer

https://answers.unity.com/questions/1585291/how-to-load-audio-slider-values-from-playerprefs-a.html → Learning how to create an audio slider

https://docs.unity3d.com/ScriptReference/Mathf.Log10.html →Learning why use Mathf.Log10 to create script for audio slider

https://answers.unity.com/questions/1516472/spawn-an-object-at-the-location-of-an-empty-gameob.html → How to spawn things

https://docs.unity3d.com/Manual/UNetSpawning.html → Learning how to spawn things

https://answers.unity.com/questions/266239/spawning-ammo.html → Learning how to spawn things