

TED UNIVERSITY/CMPE 316

Game Project

Game Development Progress Report

Project Name: Stayin Alive

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Introduction

The project topic is a First Person Shooter(FPS) Survival Game , unique but inspired from Today’s popular survival games.The game will have mechanics which will include looting , crafting , weapon usage ,random spawns and drops all over the map design.The game will have npc enemies that the player must defend itself from with weapons and other tools.

Project Overview

The game is created using an accepted Modern version of Unity with Csharp,without making more complexity and avoiding mis simplicity caused from the newest versions.The game will have simple Scripted AI instead of the AI that created by training process,which is a complicated process because of Unity ML Agents package and the Inheriting package which is Python and its ML activating other packages.Simple AI That doesnt use NN Model and training process.Starting point static location that is spawned in our Sample map. The game will aim the Survival interested gamers also the Starter Game Developer entuhaists. There will be a day/night cycle that will loop during game.The game will have sample Survival objects like Tent (used to sleep),campfire etc...

Accomplishments

During the developement process of the project, as a team we achieved these following sections in our project:

a) Concept and Design Phase:

In this phase we counducted brainstorming about what to implement add to our project which mechanics we should priotorize and focus on including concept core mechanics and play style of the game.In this faze that is also included is what kind of enemy we should add and how should it work and act how should the player be made and what kind of UI type the user should have and how should the control be like.

b) Development Phase:

In our development phase we did not had a game engine selection process because the design was already conducted over the Unity Engine and as assest to use Unity store page is used. Because of that all of the tools that are used in the project are from Unity itself.

All of the developed and implemented gameplay mechanics that are at the backend and frontend which are inventory , UI for player and inventory their scripts and mechanics that includes player and enemy movements and finally interaction with objects from inventory and environment. These are designed and implemented to areas to enhance gameplay variety and progression in the game which are supported by a basic save and load system from user panle as a UI.And we have conducted playtesting to debug our implemantation and iterate on the game mechanics so we can find and solve its errors easily and solve them faster before they snowball.

c)Roles and Responsibilities:

This the table for the Workload of the development of this Project

|  |  |  |
| --- | --- | --- |
| ROLE | RESPONSIBLERS | RESPONSIBILITY SPECIFICATION |
| Gun Layout and Script | Arda Şenbaklavacı | Gun holder , gun scripts and working principles. |
| Player Controller Script  Hotbar | Gökhan İrtem | Static player hotbar that is interactable and connected to the Dynamic Inventory |
| Interactable  Chest Interactable | Arda Şenbaklavacı | Basic interactable script to cause interactions between structures and player. |
| Enemy AI Script | Gökhan İrtem | Enemy AI script that has the ability to patrol chase attack and player detection in sight range. |
| Prefabs And Items(Orange potato...) | Arda Şenbaklavacı | Item prefabs scriptable objects.That are connected to the Item Database. |
| Save and Load System for the Game | Arda Şenbaklavacı  Gökhan İrtem | Basic save and load system for the player stats in the game that is writen in a text file which is set from Edit->Project Settings. |
| Static Inventory System  Dynamic Inventory System | Arda Şenbaklavacı  Gökhan İrtem | Inventory that kept in player Dynamicaly that can be accessed,edited,used etc... anytime the user requested. |
| UI Scripts | Arda Şenbaklavacı  Gökhan İrtem | The Scripts that User Experienced before and while playing the game. |
| Item Database | Arda Şenbaklavacı  Gökhan İrtem | The list of Items name and their ID’s to be accessed from the Database of Runtime during the game running. |

**Table1**

d) Art and Audio:

We have implemented several small visual assets from internet which are tent model campfire model and tree models.Also we have implemented several pixalated images that are act as a spaceholder for our items like potato and oranges.Some of them are gathered from internet as open source and some of them are hand drawn by using programs these are sprite images.The environment is built by using the Unity Engine directly without implemented any assets.

e) User Interface and Experience:

User interface has dynamic inventory slots after interactions a player backback that is connected to dynamic player inventory , pause menu that has resume,quit,delete,load and save.Weapon has UI.

Testing

Game functions are tested while implemented the needed scripts,assets and UI’s.

Time Management

The time management and the progress was made following the table1 and it shows the weekly progress of the project.

Future Goals

Our future goals for our game projects are ; Map design,Bug fixing,Better graphics,Car implementation , Player UI System ,Player Backpack and Inventory Items.

Conclusion

Overall,we made the base implementation of our Player Controller,Items and Inventory System to make a healty survival FPS Game.We will proceed.