Objective Manager and Quest Engine

Introduction

Ready to use Objective Manager and Quest Engine Package for Unity. You can create all your objectives and quests for your any kind of Pc, Console or Mobile games and add them to Objective Manager easily.

The package is very easy to use and it supports 5 different type of Objectives:

- **Time:** To do something for a certain of period. (Example: Don't die for 30 Seconds, Swim for 60 Seconds, etc...)
- **Kill:** To destroy or kill something a certain number of times. (Example: Kill 10 Enemy Soldiers, Hunt 10 Animals, Destroy 5 Enemy Tanks, etc...)
- **Collect:** To collect something for a certain amount (Example: Collect 30 Magical Mushroom, Find and Collect 5 Keys, Collect the missing parts of puzzle, etc...)
- **Go:** To go somewhere or move to specific position. (Example: Go to Chief, Find the Mystical Portal, Go to Lobby, Find the Hostages, etc...)
- **Speak:** To speak with target and have dialogue with it. (Example: Go to Seller and talk with him, etc...)

The package has got also extra features such as:

- **Show Waypoint Marker:** If you activate this feature for an objective, an arrow will direct you to the target's position on your camera while the player is on this objective.
- **Dialogue System:** The package has got embedded dialogue system. So, the target can have multiple dialogues with the player.
- **Events to Trigger when Objective is Done:** You can assign any kind of Unity Event or set GameObject name and Method name for Objectives. So, if player completes an objective, this specific GameObject will be found and Event will be invoked automatically.

Installation

Open your project and then open Package Manager from Windows > Package Manager. Download Objective Manager and Quest Engine Package and import it into your project. After importing process, a new folder called "ObjectiveManagerandQuestEngine" will appear in your Asset Directory.

There you can find all the materials, scripts and everything about this package. Everything is prepared as Prefab and Scriptable Objects. So you can easily use this package and add your Objectives for your games.

How to use it?

The main component of this package is "Objective Manager". So,

1. Go to Assets > ObjectiveManagerandQuestEngine > Prefabs directory.
2. Find "ObjectiveManager" prefab there
3. Drag and Drop it into your Scene.

All Objective Panels, UI elements, Managers, Way Pointers are contained in this prefab and they are ready to use.
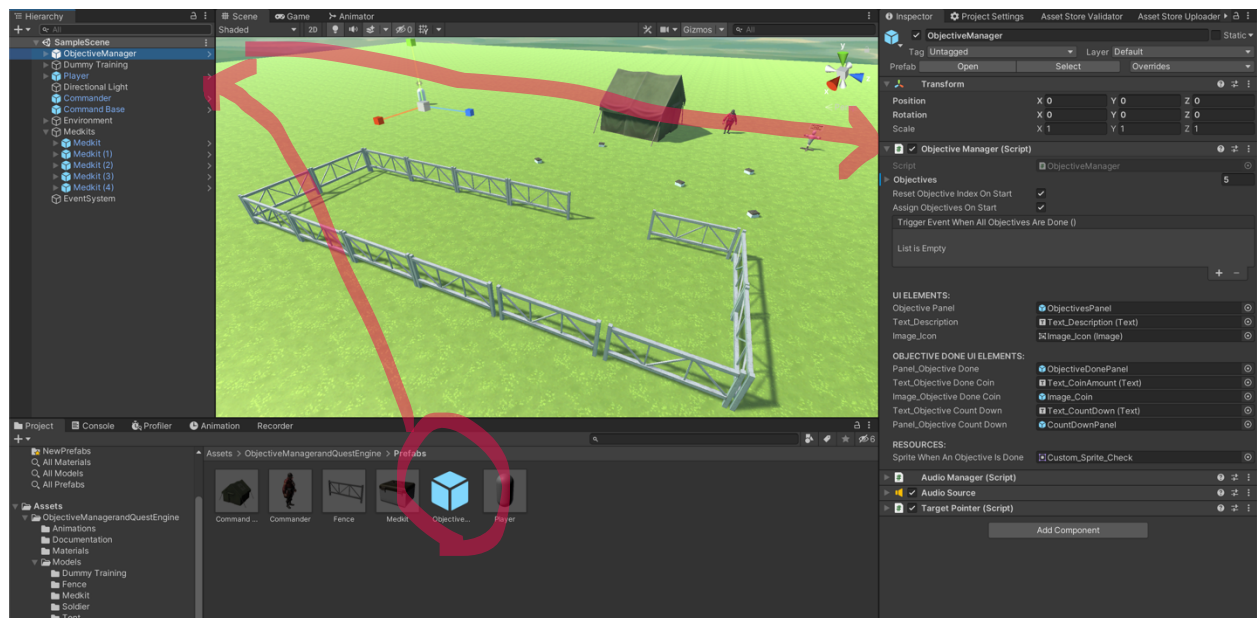
Let's explore the properties of Objective Manager by checking on Inspector area:
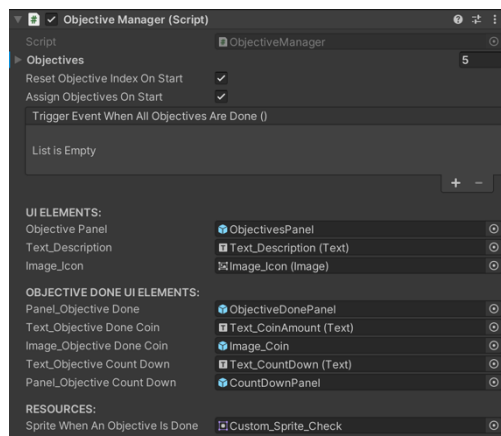
➢ **Objectives:** All Objectives and Quests will be stored in this Array. If your game has 30 different Objectives, there should be 30 Objective Item in this array.

➢ **Reset Objective Index on Start:** If this feature is checked, all objectives will be reset and player will start to play the game from beginning when player launches the game. If this feature is not checked, this means that when the game is launched, the player will continue to the objective where he left uncompleted before.

➢ **Assign Objectives on Start:** If this feature is checked, objective manager will assign the next objective to the player as soon as the scene is started.

➢ **Trigger Event When All Objectives are Done:** You can add Unity Events and functions as many as you want. All the events will be triggered in order when the player completes all the objectives.

Objective Manager and Creating Objectives

The most of the games have got Objectives in their story and players must complete the objectives. This package has got an easy to use but powerful Objective System. So, you can easily create objectives in your game for different scenarios. The package supports 4 type of main Objectives types. These are:

- **Time**: To do something for a certain of period. (Example: Don't die for 30 Seconds, Swim for 60 Seconds, etc...)
- **Count**: To do something a certain number of times. (Example: Collect 30 Flowers, Kill 10 Enemy Soldiers, etc...)
- **Go**: To go somewhere. (Example: Go to Chief, Find the Mystical Portal, etc...)
- **Speak**: To speak with target. (Example: Go to Seller and talk with him, etc...)

You can check Objective Manager component on Game Manager object in Sample Scene. You can create a new Objective by simply right click on Project Panel > Create > Scriptable Object > Objective Item.
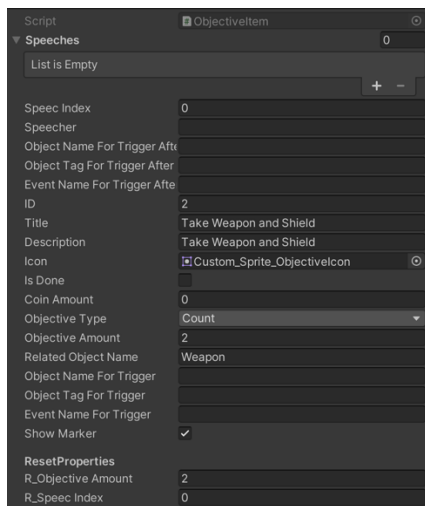
- **Speeches:** Add conversations here if you have want to make your character have conversation with someone before taking the objective.
- **Speecher:** Add related Game Object name here (Who will we talk with)
- **Object Name for Trigger After Speech:** Type GameObject name here if you want to trigger any function on a Game Object.
- **Object Tag for Trigger After Speech:** Type GameObject tag here if you want to trigger any function on a Game Object which has this tag.
- **Event Name for Trigger After Speech:** Type function name here that will be triggered right after the conversation.

An example scenario:
Speech 1: Hello!
Speech 2: Take the car. Drive it and find my missing daughter please!
Object Name For Trigger After Speech: GarageDoor
Event Name For Trigger After Speech: Open
As soon as the conversation ends. The Objective Manager will find the game object called "GarageDoor" and trigger a function called as "Open". So the garage door will be opened and your player will be able to drive it.

- **Title, Description and Icon:** These texts will appear on Objective Panel on the Right side:
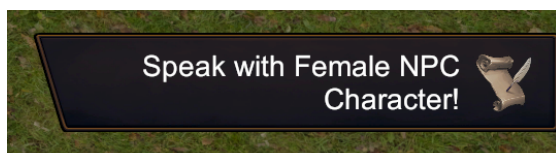
- **Objective Type:** You can select the objective type from here. Go, Speak, Time or Count.
- **Objective Amount:** The amount of objective. How many times the objective needs the Related Object Name in order to complete the objective.

- **Object Name For Trigger:** When you complete the objective, this object will be searched on the scene with GameObject.Find method.
- **Object Tag For Trigger:** When you complete the objective, this object will be searched on the scene with GameObject.FindByTag method.
- **Show Waypoint:** If you want to point the way and direct the player towards to the objective target, you can use this feature.

After creating all your objective items, you should add them to your Objective Manager component on Game Manager object:

Example Objectives

You can find some example objectives in the package. They are stored in the Assets > ObjectiveManagerandQuestEngine > Scripts > SampleObjectives directory.