# **Torpor Games Programmer Interview Assignment 2**

This is a continuation of Assignment #1. The duration of this assignment is **9 days**. You are required to use **Unity 2019.4.5f1**, **C#** as the choice of programming language, **JSON** files as the main data source, **Git** for version control and either **GitHub** or **BitBucket** as the Git platform. Make sure to use Git as if you are working on a real project. Use the same repository with the previous assignment.

## **Description**

Your task for this assignment will be to expand on the previous assignment and to create a 3D scene. For this assignment, an asset for a character model will be provided however, feel free to use assets you find online.

The scene for this assignment is a busy street. You can use assets from Asset Store or placeholder cubes for the planes, “buildings” and any other objects you would like to put in.

Do whatever is necessary to give the sense and feel of a busy street. If the time permits, feel free to improve and expand on the requirements.

## **Camera**

The camera will be Isometric and it should follow the player smoothly.

## **Movement**

Movement style will be Point and Click. Clicking on the walkable areas should move the player model to the location with the corresponding animation. Same as the NPCs, if the player gets too close to an NPC, pathing should change accordingly to avoid colliding with the object.

Assign a max distance for NPC interactions. Players shouldn’t be able to interact with NPCs from far away. Instead, interacting with such an NPC should automatically move the player closer to the NPC.

## **UI**

Create a simple button on the screen at all times to access the previous Codex and Notes panels built for Assignment #1. In addition, add a small list of text on the top right corner titled Quests. They do not need to persist between sessions however, it is a plus.

## **NPCs**

Using the same model as the player, fill the scene with the types of NPCs below. These NPCs should have their unique colours depending on their type.

1. Always have some NPCs walking on the sidewalk. The scene should not look empty at any time. Some NPCs should go from point A to point B in the scene. These points can be buildings next to the sidewalk or maybe just another location across the street.
2. Chatting NPCs are groups of 2 or more people talking with each other. As you approach closer to them, their small discussion should appear above their heads but you shouldn’t be able to overhear their conversation if you are far away.
3. Quest giving NPCs will have question marks above their heads and give 2 small quests which will be described below.

## **Quest**

Clicking on a quest giving NPC should bring up a small UI panel with a quick description text and Accept/Refuse buttons. Clicking Accept will add the description to the Quests panel on the top right corner.

The quest will be to talk to a specific person on the street. Assign a unique colour to this person. To finish the quest, the player will have to simply interact with this person.

Finishing the quest will add a new Codex Entry to the Codex Panel and add a new Note to the Notes Panel implemented in Assignment #1 as well as setting the objective as completed on the top right corner.

# **Test Cases**

Write appropriate test cases for various scenarios. These test cases should follow a step by step approach.

Use your own judgement to determine the level of detail required.

**Communication:** Add Kirutosan#8909, Irukesama#5282 and Mr. Nowak#8592 on Discord to communicate instantly. Use [contact@torporgames.com](mailto:contact@torporgames.com) email to reach out for misc comms or other situations as well.