[CBPS] **C**heckpoint **B**ased **P**rogression **S**ystem
Instructions and Setup Guide (rev 1)
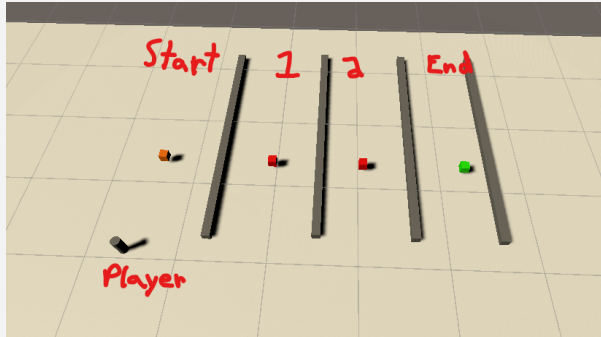Version 1.16   Date: 03-20-2021   Created and Developed by: Zachary Malta

Overview

This system has 4 main parts, **Progression Start**, **Progression Step**, **Progression End**, and the **Progression Manager**. Each part is accompanied by a script, this script needs to go on a GameObject. Below is an example of setting up the system.
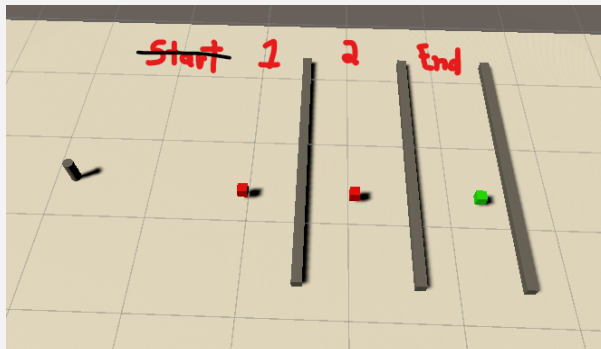

The **orange** block holds the **Progress_Start** script.
The **red** blocks hold the **Progress_Step** script.
The **green** block holds the **Progress_End** script.
The **player** holds the **Progression_Manager** script.

After reaching the start, the first barrier is destroyed. Now the player can progress forward.

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Reaching Step 1 destroys its respective barrier, this pattern continues for the rest of the progression system.

Implementation

Progress_Start

The system starts with outlining a Step_Sequence, this can be done on a GameObject that holds the **Progress_Start** script. This sequence is where you outline the full progression of the scene.
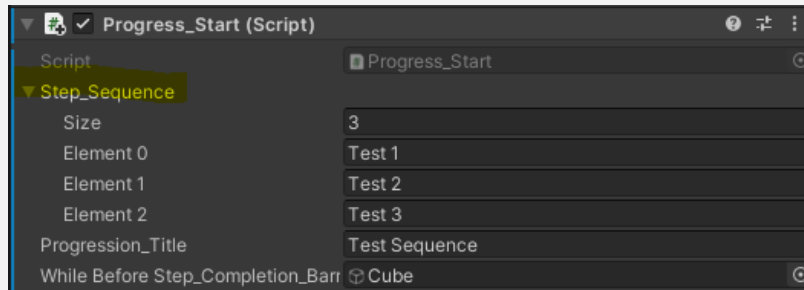
(before being able to add steps, a size must be set first, the size is just the number of steps)

NOTE:

- The text field **Progression_Title** is important to remember since it will be referenced throughout the rest of this system.

- This GameObject needs to have a tag that is named "Start_Sequence".

- The GameObject that holds the **Progress_Start** script needs to have a collider that is set as a trigger.
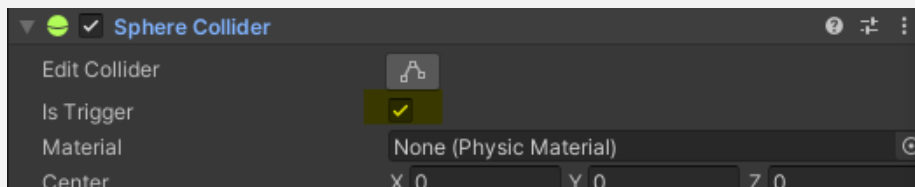
- The ***While Before Step_Completion...*** field is where you can assign a GameObject with colliders or another barrier that will be destroyed when the collider is reached by the player, this GameObject needs to be a child of the Gameobject that holds this script.

Progress_Step

This script goes on any GameObject that progresses the game. Progress is only achieved if the step reached is the next in the sequence defined in the **Progress_Start** and if the player reaches the collider(trigger) of the GameObject. When reaching this step, the barrier is removed and this GameObject is destroyed, the **Step_Sequence** is incremented and the next step is now active.
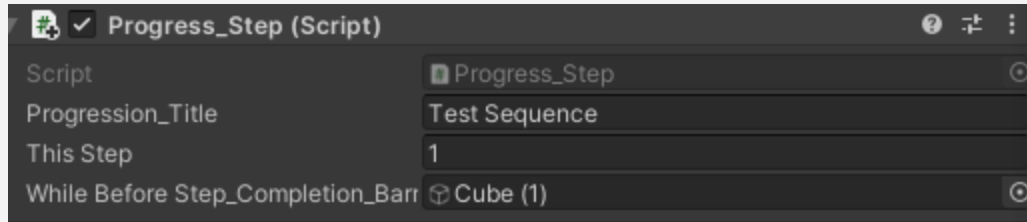
NOTE:

- The text field **Progression_Title** needs to match the one from the **Progress_Start** script.
- The **This Step** field is the number in the sequence that this step occupies, for example in the image this step is the 1st step(after the start).
- The *While Before Step_Completion…* field is where you can assign a GameObject with colliders or another barrier that will be destroyed when the collider is reached by the player. For example in the image below, the wall is the barrier but after the player reaches the next   step(the red box) the wall gets removed.


Progress_End

This script goes on the GameObject that marks the last checkpoint for progression. This GameObject needs to have a collider that is set to a trigger.
The setup here is the same as with the **Progress_Step** script, except that this object needs to have a tag that is named "End_Sequence".

Progression_Manager

This script goes on the player, the only setup is that the player needs to have some kind of collider(not trigger) on the same GameObject as this script.
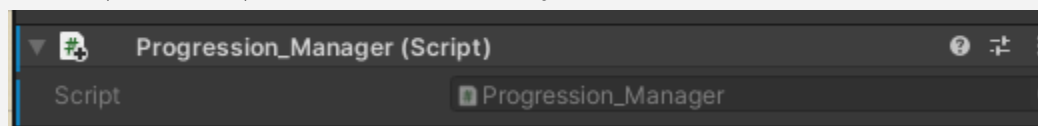
Suggestions

- Place the scripts on empty gameobjects. This way when they get destroyed the player won't notice.
- Remember the tags on the start and end steps.
- If it doesn't work make sure to check if the colliders are triggers.
- If the "Barriers" are rendered objects, don't bake their lighting otherwise it will look weird when they're destroyed.