City Subway Collection - Elevator

Getting to know this product

The city subway collection contains a fully working subway elevator, complete with ground level framework, subway level framework and elevator car.

The product is provided as a working prefab but can be customised to suit your specific game environment.

The **subway_sample** demo scene uses the **FPS controller** from **Unity Standard Assets** for the Player movement.

You will need to import the Unity Standard Assets Package and add the FPS controller prefab to the scene.

You can switch this out for your own Player controller if required.

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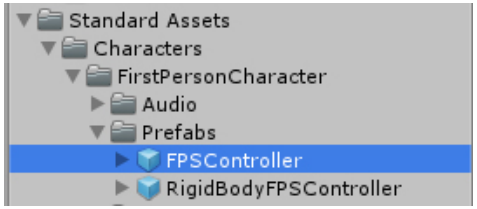
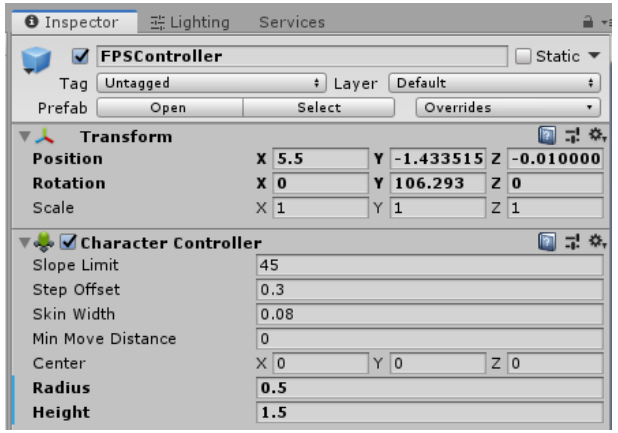
Setup

Add the **FPSController** from **Unity Standard Assets**.

You may want to use the transform and character controller values set here.



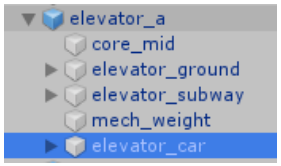


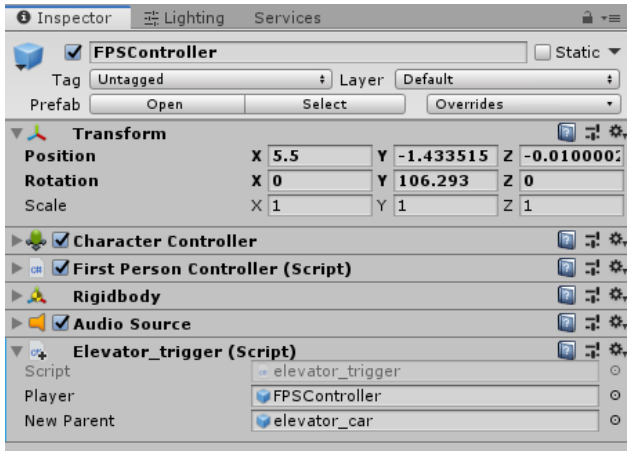
Add the Elevator_Trigger script as a component.

If you want to use your own Player Controller, add the elevator_trigger script to your Player instead.

Assign the FPSController to the **Player** slot and the elevator_car (found inside the elevator_a prefab) to the **New Parent** slot.

Note you can search for elevator_a in the hierarchy panel.





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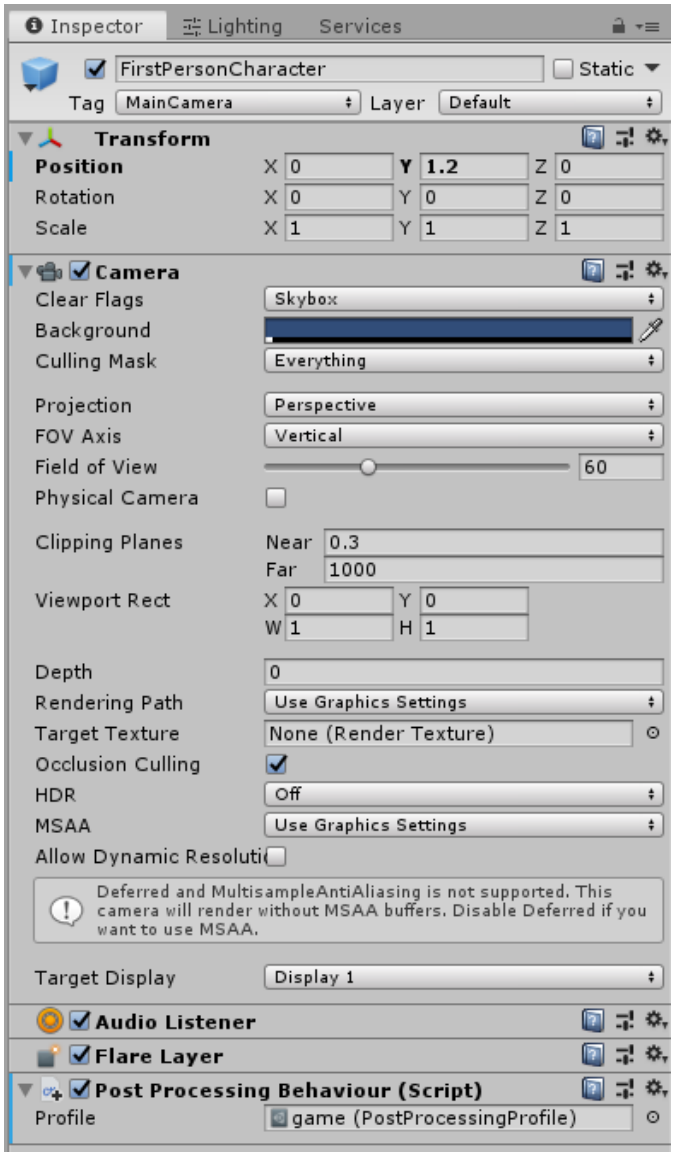
Setup

Add a camera under the FPS controller and set the Y position to 1.2 as shown. This sets the head height in the scene.

You may want to add the **game** post processing profile to this camera.



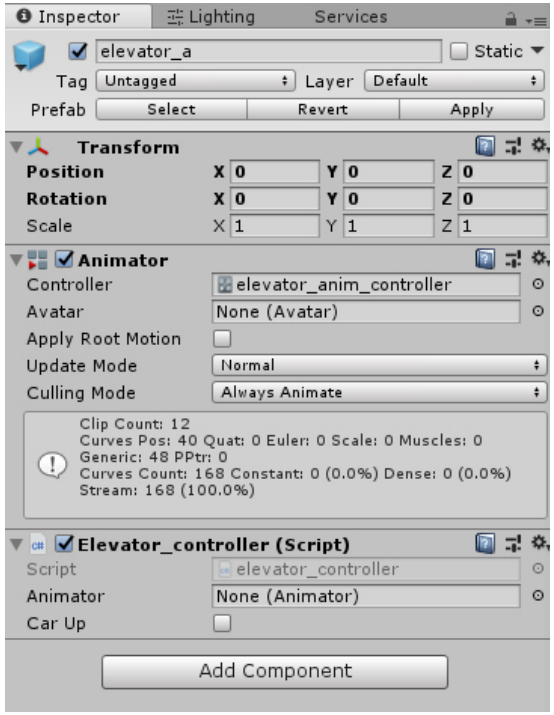
Setup

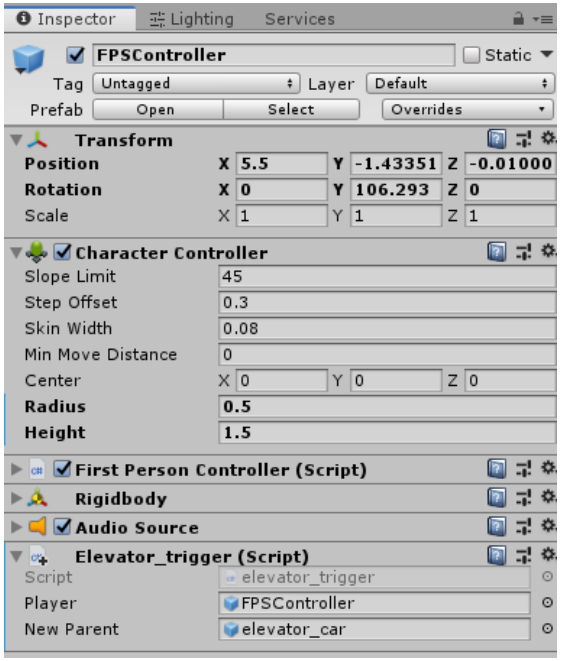
There are two scripts controlling the elevator:

- **elevator_controller:** this is attached to the parent object of the prefab 'elevator_a'. This controls the movement of the elevator.
- **elevator_trigger:** this is attached to the FPS controller. It determines the state of the player relative to the elevator.

There is also a **globals** script that stores some values to allow the above scripts to communicate with each other.

Note I changed the radius and height of the Character Controller inside the Unity FPSController (see right).

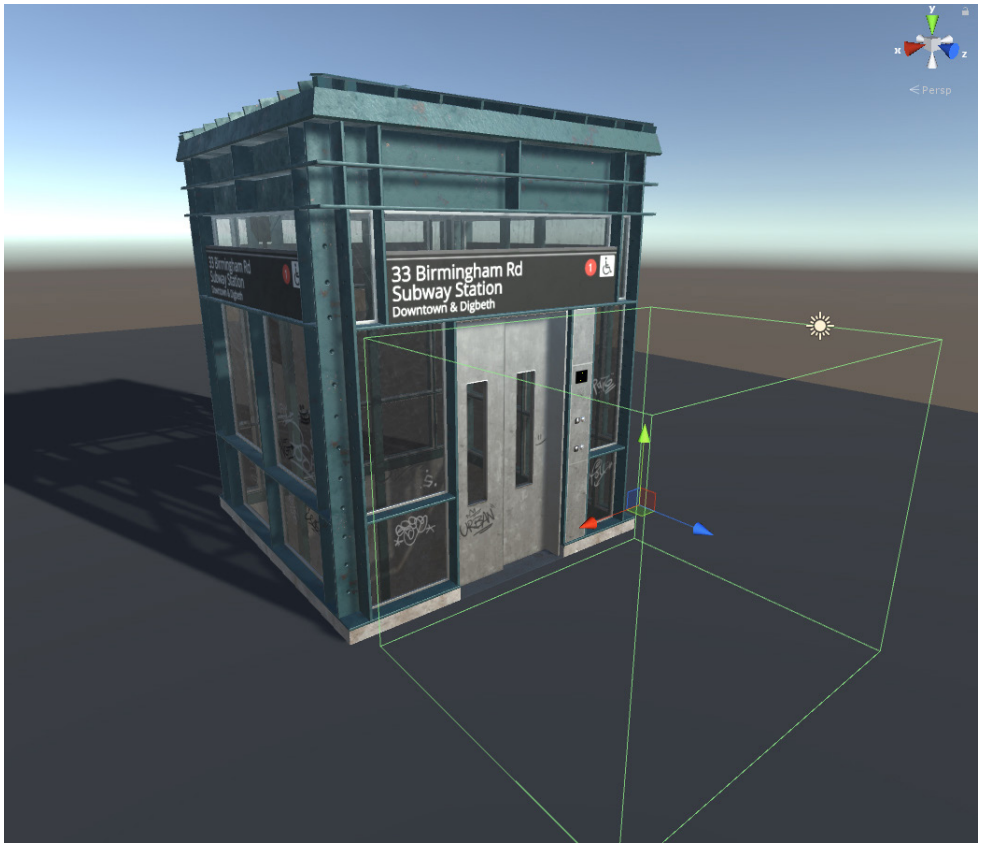


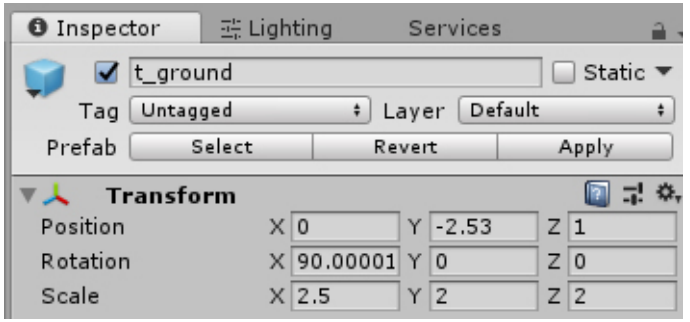


Trigger Zones

There are three trigger zones:

- **t_ground:** ground level trigger.
- **t_subway:** subway level trigger.
- **t_car:** this is inside the elevator car and sized to fit the inside space.





You can re-size the triggers by adjusting the scale value if you would like to call the elevator from a greater distance.

Be careful not to overlap the ground and subway level boxes with the car trigger or the scripts will get confused.

The current triggers have a space between them and the front of the elevators.

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Using the Elevator

Simply **Press Play** to run the demo. The elevator defaults to the subway level on startup.

Approach the elevator and press ‘e’ on the keyboard to interact with the elevator.

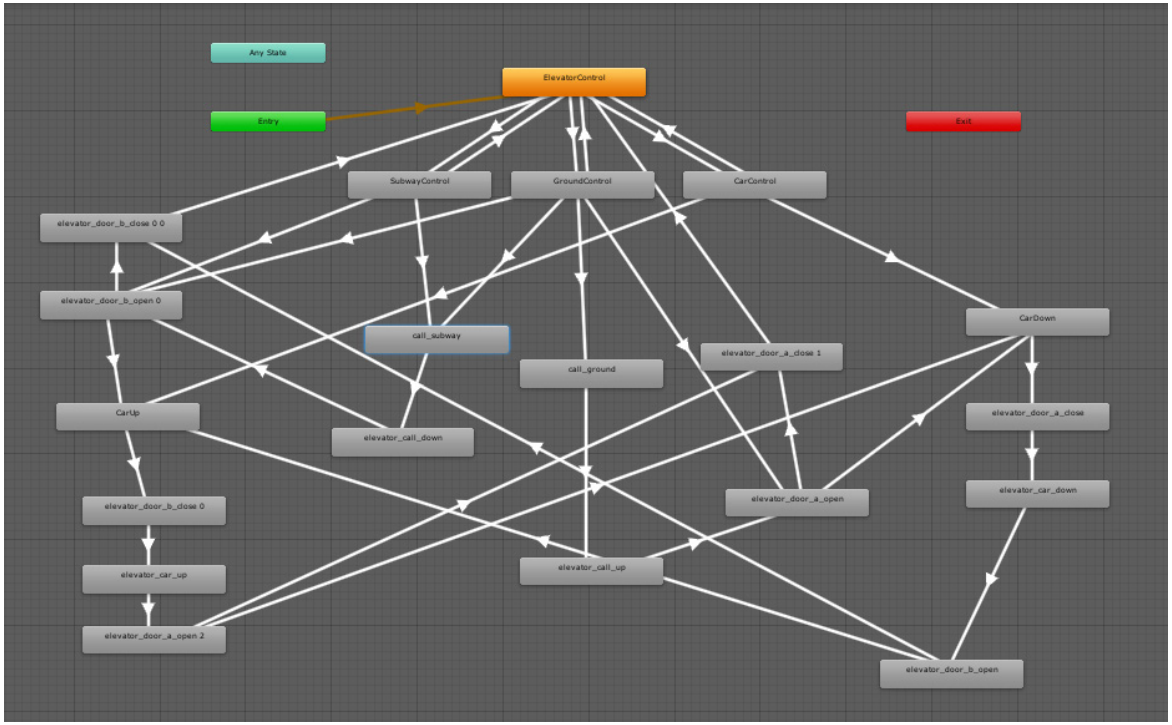
Enter the elevator car and press ‘e’ again to send the elevator to the next level. You can now exit the elevator, or press ‘e’ again to return to the previous level.

elevator_anim_controller

The elevator_anim_controller controls the motion of the elevator based on logic derived from the **elevator_trigger** and **elevator_controller** scripts.

All situations have been catered for. You can approach and call the lift from ground or subway.
If you call the lift and then walk away instead of entering, the doors will automatically close.

Looks crazy! Don't panic, you shouldn't need to edit it :)



Customising the height - model

The elevator is currently set to move a distance of 9m from ground to subway levels. You can update this height by changing some of the values in the animations and by altering the height of the **core_mid** object, and either the **elevator_ground** or **elevator_subway** parent object positions. The simplest is to move **elevator_subway** as its number matches the animation values.

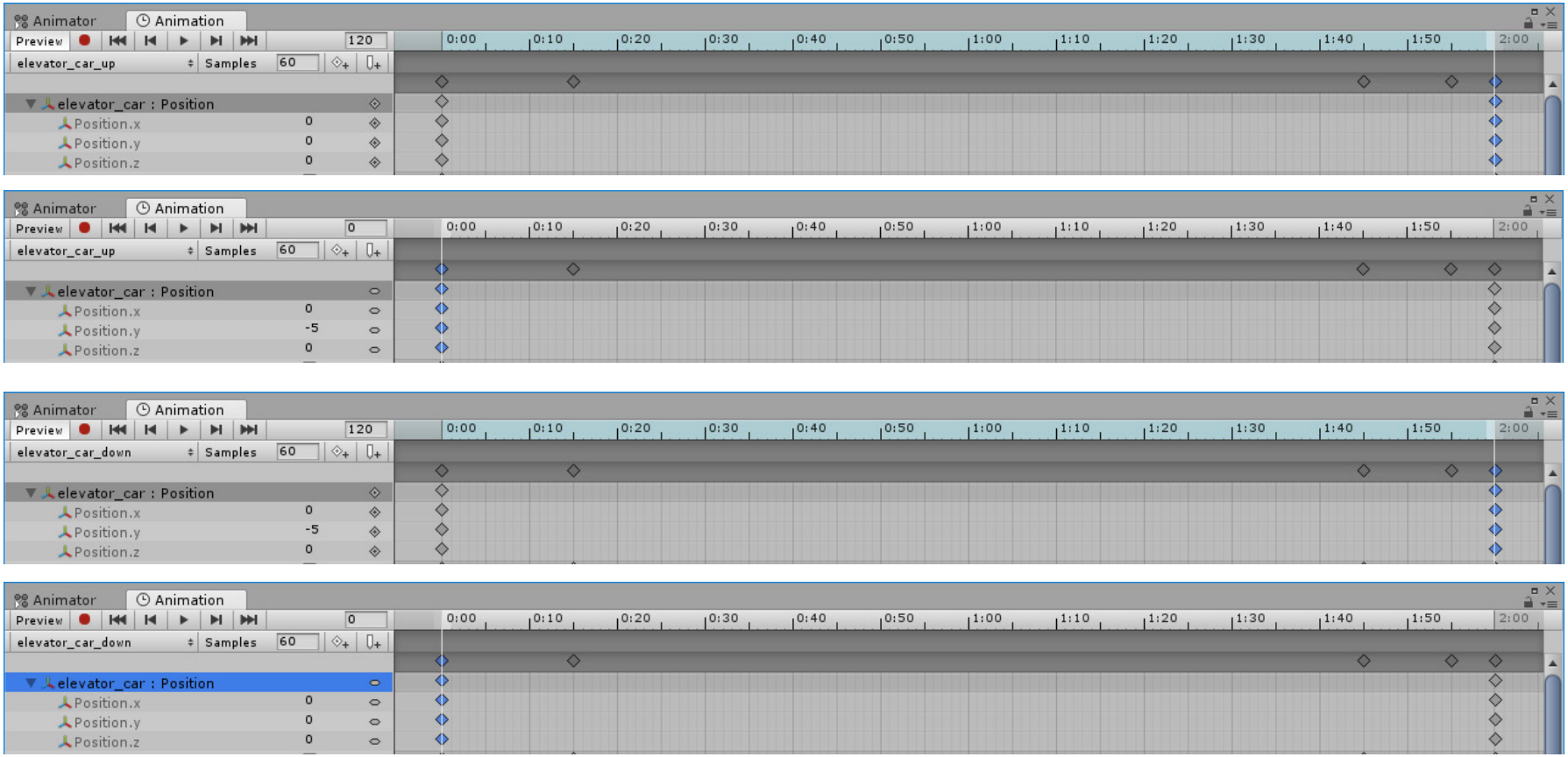
core_mid is the spacer object in the elevator shaft. This one will need to be scaled and positioned to fit your new height. If you need to move it by several metres then you may be better duplicating this object.

Alternatively, open the fbx in a 3D package and adjust the position of the lower vertices by the amount you wish to move elevator_subway. This is probably the easiest way to fit this object perfectly.

Customising the height - anims

Select the parent object **elevator_a**. Now open the animation window and in the drop down you can access all of the elevator anims. The only ones you need to modify are **elevator_car_up** and **elevator_car_down**.

Simply change the y position values to your new height value. For elevator_car_up this is the start position and for elevator_car_down, the end position.



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Customising the sign

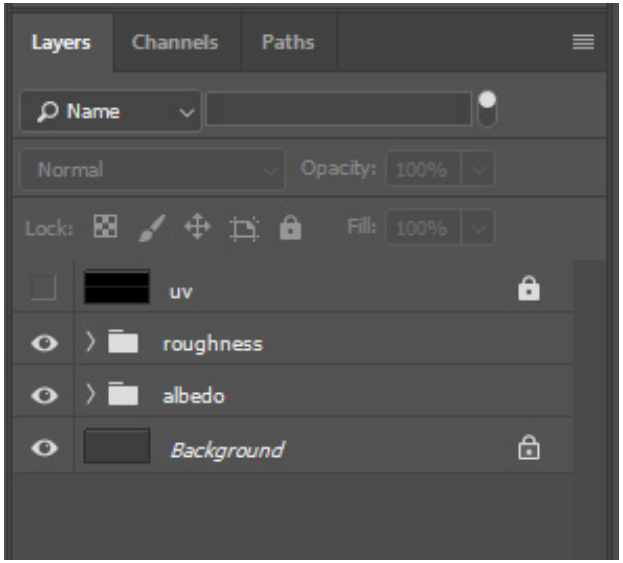
There is a PSD file included - **city_subway_collection\textures\subway_sign.PSD** to allow you to update the sign with your own text.

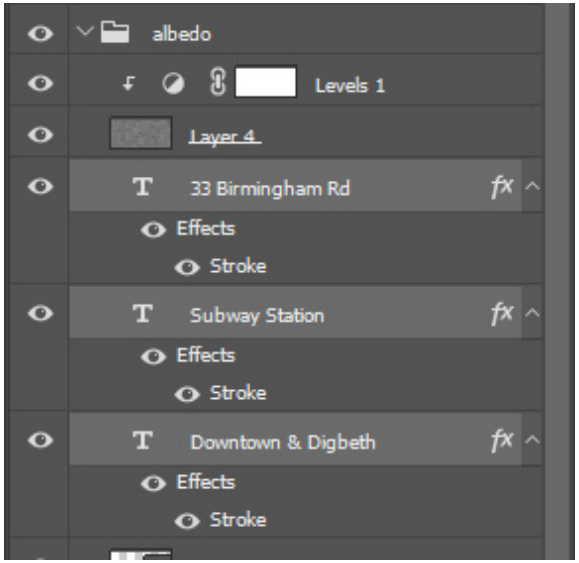
The sign uses a standard Google Font that you can download here for free...
https://fonts.google.com/specimen/Open+Sans?selection.family=Open+Sans

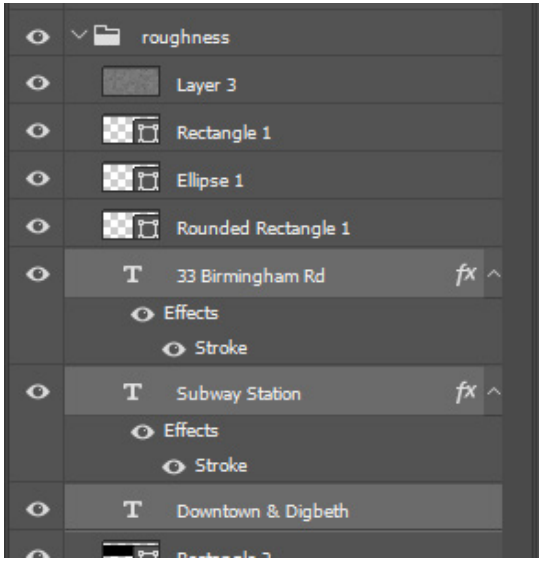
When you open the PSD you will see two folder groups; roughness and albedo.

If you open the albedo folder you will find 3 layers holding the text for the albedo map. Edit these using the type tool.

Now open out the roughness folder and edit the type for the three text layers on the roughness map.



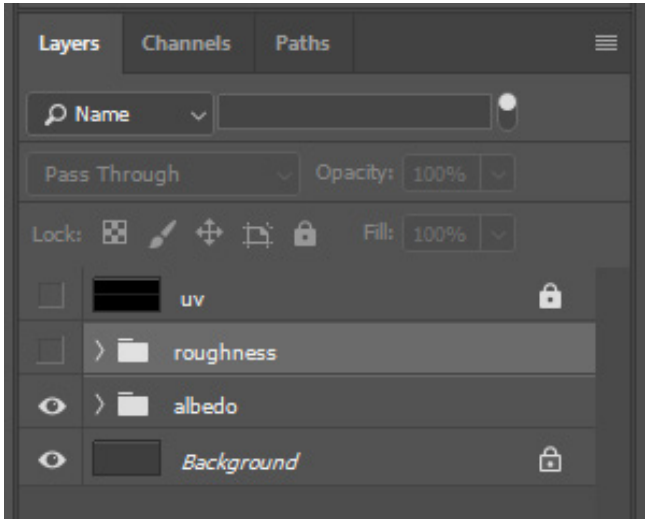


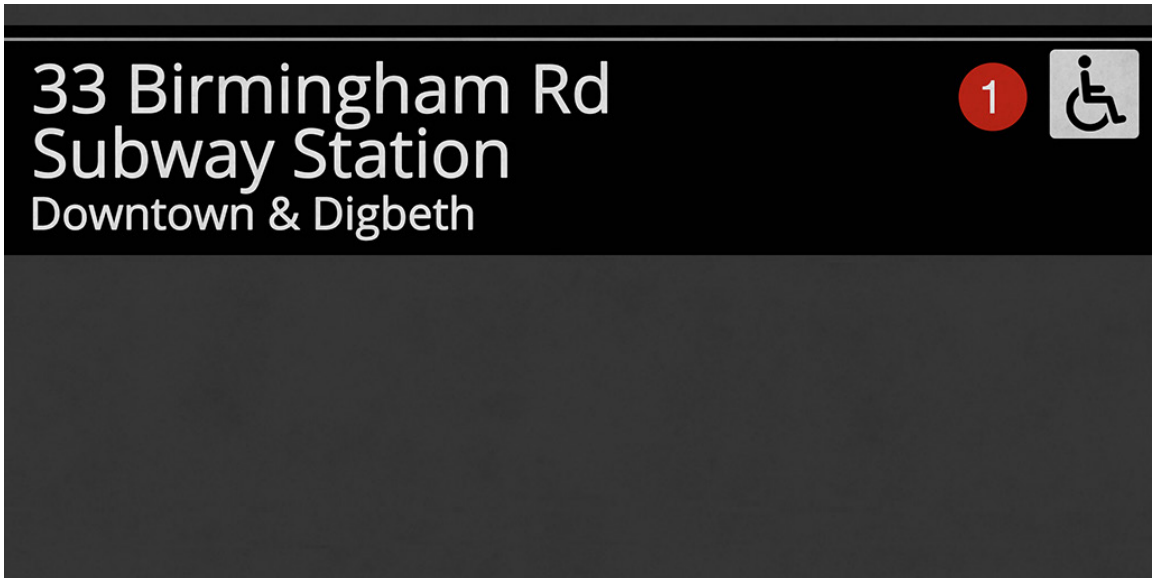


Saving the Sign textures - albedo

The albedo map is really simple. Hide the roughness folder by clicking the little eye symbol next to it. It should look something like the below.

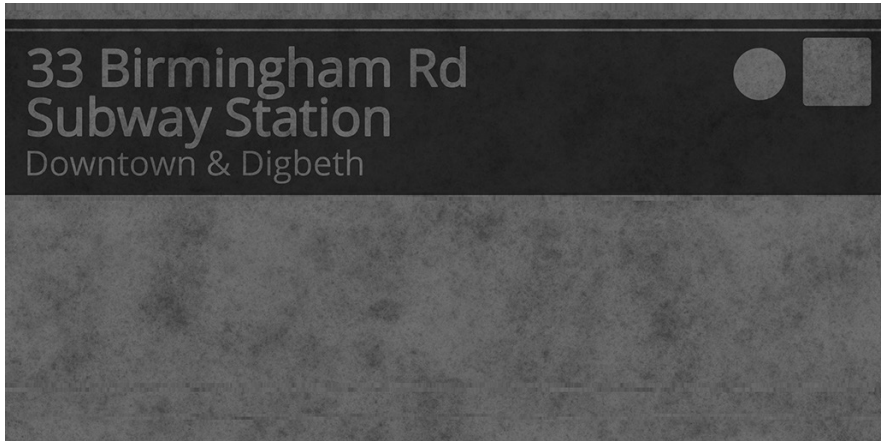
Now choose **Save As** and save the file as **elevator_sign_d.tga** into the textures folder of the Unity Package.





Saving the Sign textures - roughness

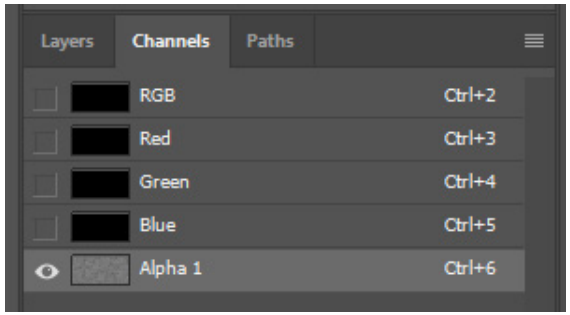
In the Sign PSD, switch on the roughness folder and do a **Select All** and **Copy.** It should look something like this...



Now open the existing **elevator_sign_m.tga** map in Photoshop. You will find this in the textures folder of the Unity package.

Select the alpha channel of this map.
Paste the copied roughness data from the sign PSD into the alpha channel.

Save and Close **elevator_sign_m.tga**



There are two more variants of the PSD in the textures folder; **subway_sign_a** and **subway_sign_b.** These can be used to edit some of the other side variants used in the scene.

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Support

If you have any problems with this Unity package please contact **epiccactusofficial@gmail.com**