

LETTER & NOTE INTERACTION SYSTEM V1.5.2  
DOCUMENTATION

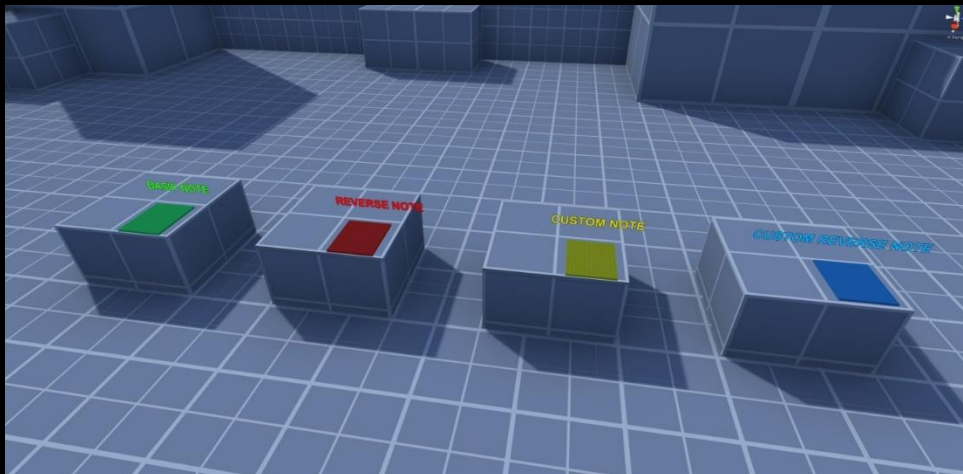
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## Introduction

Thank you for purchasing the “**Letter and Note Interaction System**”, it is a complete template for implementing your very own letter reading system within Unity. The system allows you to interact with a 3D object in your game world and bring up a larger, UI driven version of this object for the player to read. This package has 4 different types of note builder example scripts:

- ▶ **Basic Notes:** Add a pre-existing note texture and have it to appear in front of your player.
- ▶ **Reverse Notes:** Add a pre-existing note texture to allow a popup in front of the player but also a simple button press to show custom text UI, over the top of that original note texture.
- ▶ **Custom Notes:** Allows you to add a custom backing texture and text UI over the top to create a custom letter or note. (For easy note customisation that doesn't require a pre-built note)
- ▶ **Reverse Custom Notes:** A combination of both: Reverse and Custom, it allows for an entirely custom note and an overlay of the text overlay for easier reading!



The asset includes:

- ▶ *Raycast System*
- ▶ *Easily Customisable Note Controllers*
- ▶ *4 different note controllers for different note examples*
- ▶ *Change UI elements without having to create more than 1 UI Canvas for all notes*
- ▶ *Sample notes included*
- ▶ *Basic UI setup included*
- ▶ *Sound effects: Picking up note*
- ▶ *Full Documentation*
- ▶ *Full C# Source Code*

CHECK OUT THE ONLINE DOCUMENTATION HERE: <https://app.gitbook.com/@speedtutoruk/s/letter-and-note-system-doc/>

## FAQ

### Q). How do I Import the asset?

A). Go to the Unity asset store and visit your “**Download manager**”. Download the asset if not already downloaded and click “**Import**”, import all required features of the asset for your use. It should have appeared in your project under “**Note & Letter System**”.

### Q). Should I import “Project Settings” when choosing to import this asset?

A). It is always recommend NOT to import project settings unless important for your project, you can alternatively create an entirely new project and import this asset with the project setting, then transfer the package folder over to your current project. To save any issues! Always back up your project before importing any assets – If you have any issues, do let me know!

### Q). Before you start / Why isn't my character moving in the demo scene?

A). I have provided the FPSController in the package, but you can download it from the Unity Asset store, if you so wish. It will be called “Standard Assets”.

### Q). Is there an example of this asset working?

A). Yes, you can open the “**NotesScene**” to see the fuse box asset in action, or use this scene as your initial base of your project.

### Q). How can I manually setup this asset?

A). See the manual setup instructions on [“Page 2”](#).

### Q). Can I use this asset with a 3<sup>rd</sup> person character with this asset?

A). Yes, all you need is to use is a trigger event (Box collider set to “IsTrigger”) and add the “**NoteTrigger**” script and attach the specific note object which will have “**NoteController**” script attached. See additional note for details!

### Q). My managers don't stay between scenes properly?

A). Take make these work best, they shouldn't be in an empty game object, but loose within the hierarchy. This is just how the DontDestroyOnLoad works, I only put them with a managers parent gameobject to keep it looking neat and tidy!

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**Patch Notes**

Version 1.5.2 – June 2021

- Added photo examples to the note system
- Updated the raycast script for consistency

Version 1.5.1 – May 2021

- ResetNote() method should have a reset for the audio prompt
- Add the setup POF to the package, as it's missing in newer versions
- Changed some UI element names for consistency

Version 1.5 – April 2021

- Remove "Previous" button on the first note page when there is no page to move back
- Remove the "Next" button on the last page, when there isn't a page to move
- Renamed "Next" & "Previous" UI Buttons for ease of use
- Removed a key press from the script and changed to a Play/Pause UI Button
  - o New graphics added for the button
- Added a replay button for replaying spoken audio
- Changed the key press for reversing the note and changed this to a UI button
  - o All graphics changed to reflect this
- Anchored all new and old UI elements

Version 1.4 - April 2021

- New Additions
  - o Online documentation found here:  
<https://app.gitbook.com/@speedtutoruk/s/letter-and-note-system-doc/>
  - o Add multiple pages for notes, using an array to specify either images or text
  - o Added "Next" and "Back" buttons to navigate pages
  - o Added a close button for each pop-out, so notes can be closed with other actions
  - o Added a new UI Manager for each note type
  - o Created optimisations to refine the separate note controllers so UI's that are shared across multiple notes are controlled with one main UI controller, making the separate controllers more usable.
  - o Audio when you turn the pages for "Next" and "Previous" - Also added a variable in the inspector to change the audio more easily
  - o Added "EntireDemoScene\_Prefab" for those that want a really quick start to getting setup
- Minor Fixes:
  - o Added new information to included documentation
  - o Edited UI's and Canvas' to make them more optimised and view
  - o Reduced file size of the product by removing light baking data
  - o Fixed small issue with basic prefabs so "Press T" prompt didn't appear, when not wanting to play an audio clip

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- May need to edit the position of the note text boxes in the UI, if your image is different

### Version 1.3 – October 2020

- General Fixes
  - Refactored all code and variables to be consistent throughout all note scripts
  - Reformatted the inspector to make it easier to use across all scripts
  - Edited Layermask of the raycast manager to give easier control of cancelling raycasts
  - Updated all prefabs
  - Fixed an issue where the reverse and/or custom reverse notes which make one another activate, added a simple Boolean to check if the corresponding note is activate or not at any time. Also making it more efficient for all notes.
- General Additions
  - Added a simple Boolean check, and audio clip slot in the inspector. If you want to add an audio clip to read your note (As part of your gameplay)
  - Added functionality to allow a button press and Boolean check to be added if you want the player to activate an audio clip on viewing the note
  - Both of the above features can be used together or separately, I have added a basic audio example for testing. Please see the demo scene for more!

### Version 1.2 – July 2020

- UI Changes:
  - Edited the canvas layout and the way it is display in Unity
- Scripting Changes
  - Added a new Audio Manager, so more sounds can be added and called within script
  - Added a new input manager, which allows easy control of all inputs from one place
  - Refactored the Raycast, NoteController, ItemControllers and more!
  - Add additional check to the trigger interaction so UI prompt does not appear when viewing a note.
- Miscellaneous
  - Updated and edited sounds, textures and materials
  - Added new manager examples to the prefabs and demo scene
  - Update all prefabs and set them to 0, 0, 0 for future use

### Version 1.1.2 – June 2020

- General Additions
  - Trigger interaction added for 3<sup>rd</sup> person controllers and such
  - Input controller added for the raycast, allows you to pick from a keycode list
  - Inputs added for note controller, which allows you to choose a keycode on a per note basis
  - Enum added on a per note basis, creating a drop down to choose note type
- UI Fixes / Changes
  - Added and updated all prompt UI's.

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- Added a custom help UI with its own canvas (Can be removed)
- Added new blur / background for note UI's (Allowing them to be easily read)
- Fixed all UI Anchors
- General Fixes
  - General code refactoring and reformatting

Version 1.1.1 – May 2020

- General Fixes
  - Added namespaces to scripts to stop any clashes with other projects
  - Added a new LayerMask called "LayerToExclude" which will allow you to add a layer to a wall or door (For example) and stop the raycast going through.
  - Updated demo scene FPSPrefab and general prefabs to be more consistent

Version 1.1 – March 2020

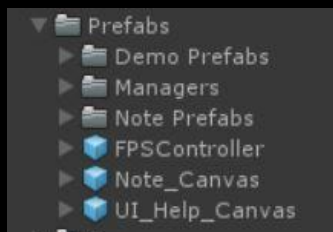
- UI Changes:
  - Updated package to Unity 2017.4 (As per Unity Rules)
  - Added FPSController to package (As per Unity rule change)

Version 1.0 – February 2020

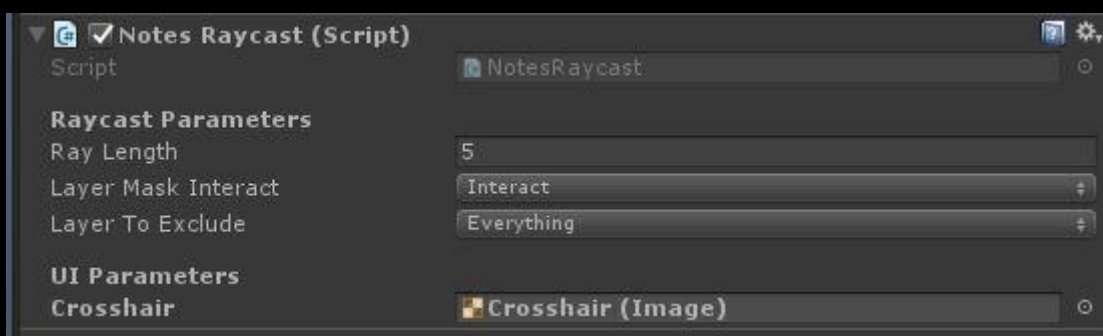
- Initial Release

## Manual Setup – Initial #1

1. CHECK OUT THE ONLINE DOCUMENTATION HERE:  
<https://app.gitbook.com/@speedtutoruk/s/letter-and-note-system-doc/>
2. I would recommend using the “**NoteScene**” demo scene from the package as a start to your main project but if not we’ll go through the basic setup, please refer to that scene if you’re ever stuck for the way it is setup! :)
3. **If not:** Start a new scene and add the FPSController – These will already be added to the package for your ease of use! Add the “**FPSController**” from the “**Prefabs**” folder to the Hierarchy or scene.

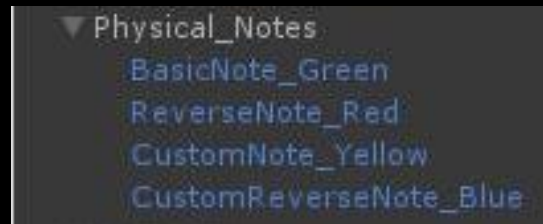
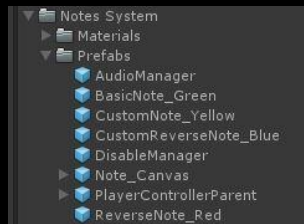


4. Now add the “**Disable Manager**”, “**Audio Manager**” and “**InputManager**” from the “**Prefabs > Managers**” folder to your Hierarchy or scene.
5. On the **Disable Manager**: Make sure the “**FPSController**” object from the is added to the player slot, also add the Crosshair to this slot from the “**Note\_Canvas**”
6. On the **Audio Manager**: Make sure you add your audio clip to the “**Interact sound**” slot, I have provided the “**SFX\_Paper Flip**” sound effect from the “**Sounds**” folder.
7. On your main camera, make sure you have the “**RaycastNotes**” script added.
8. You will also want to make sure you add the Crosshair UI object from the “**Note\_Canvas**” explained a little later on.

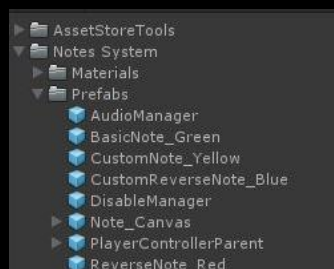


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9. Add one of the note prefabs to your scenes from the “**Prefabs**” folder to your hierarchy or scene. Add this asset wherever you want in your scene. See the example below:

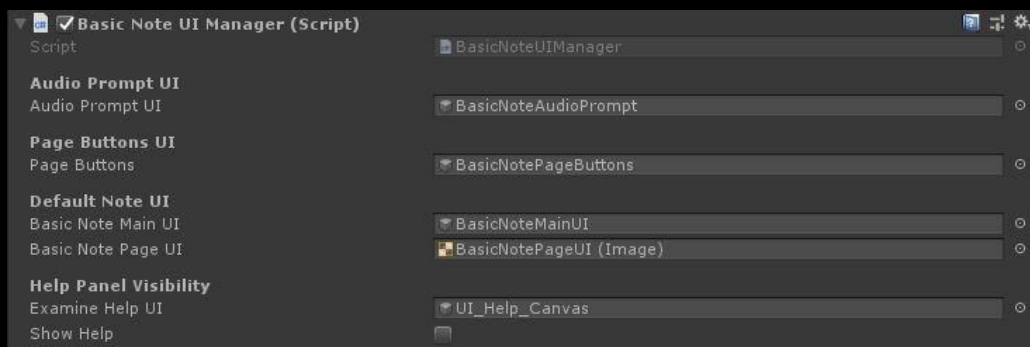


10. Add the “**Note\_Canvas**” from the “**Prefabs**” folder to your hierarchy (You may want to also add an “**EventSystem**” to your scene by right clicking the Hierarchy > “UI” > “EventSystem”).  
NOTE: Or add the prefab from the prefab folder!



11. You will also need to add the particular UI manager which is in reference to the type of note you’ll be using. So this example below, uses the “**BasicNoteUIManager**” which you can find in the prefabs folder.

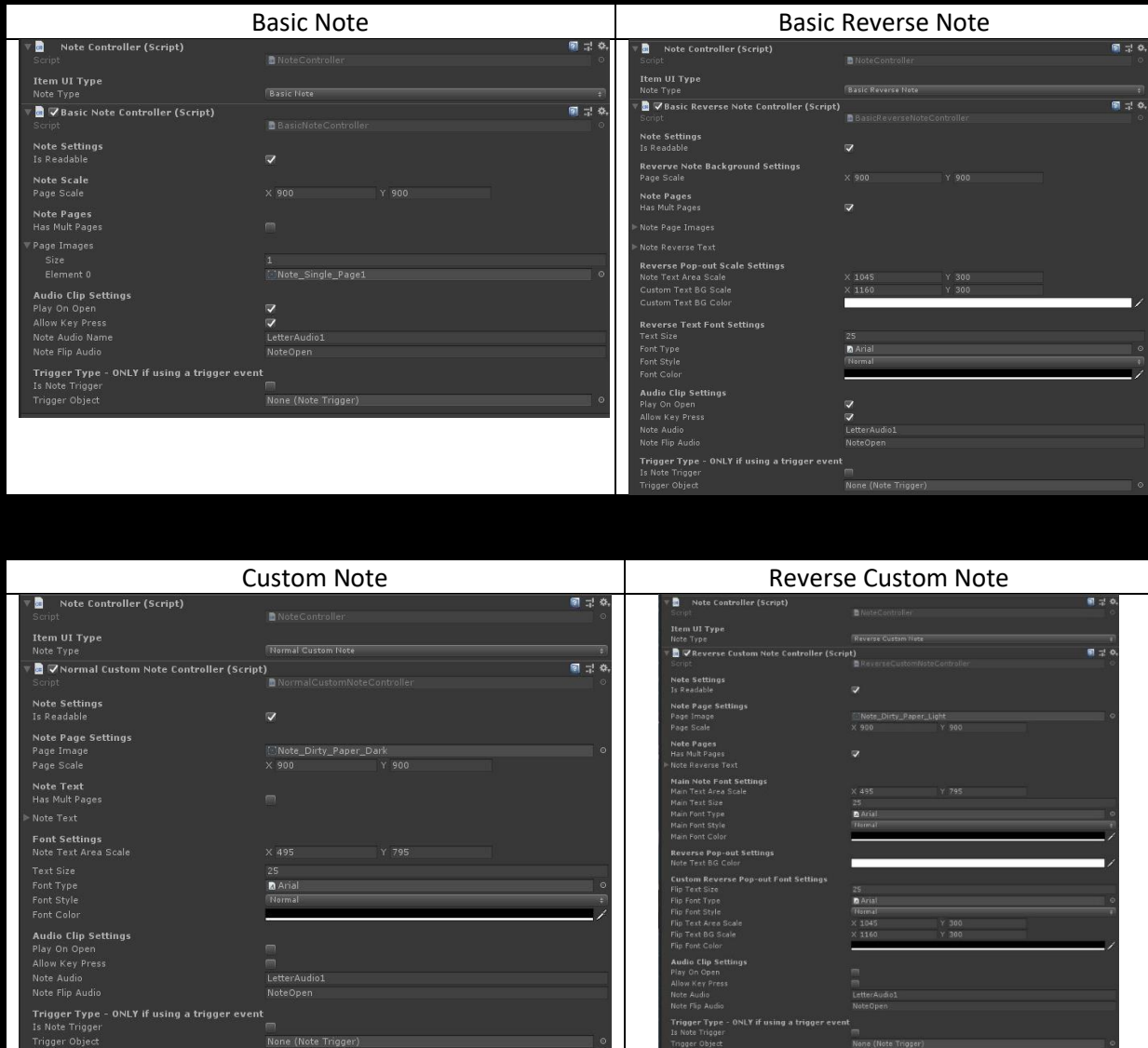
NOTE: You will need to add the variables (if not already) from the specific related canvas, as seen below.





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12. Depending on the note you added from the “Prefabs” folder to your scene you may need to connect different elements of the UI canvas to the inspector slots of the provided script. See examples below. The notes will require a “**NoteController**” script and the appropriate note controller for each type. (Make sure each 3D object has a box collider and are tagged as “**Note**” and have the layer of “**Interact**”.



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13. Some of the settings I'll explain here:

BASIC NOTE DETAILS	
IsReadable	This is whether you'll be able to read the note at the beginning
Page Scale:	Scale of the overall size of the note that appears, by default this is set to 900x900.
HasMultiPages	Tick whether your note has multiple pages (Leave unticked if you only have one page) – This button shows “Next” and “Previous” UI buttons
Page Images	This is the array for adding your pages, add to the array if you have multiple pages
AudioClip Settings	Playing audio when the note opens

BASIC REVERSE NOTE DETAILS	
Page Scale	The scale of your note, default 900x900
HasMultiPages	Tick whether your note has multiple pages (Leave unticked if you only have one page) – This button shows “Next” and “Previous” UI buttons
Note Page Images / Note Reverse Text	The arrays to add new images and text
Note Text Area Scale:	This is the size of the area that the custom text will fill the space within your note. You may need to test the sizes in gameplay.
Custom Text BG Scale:	The scale of the overall background of the text
Note Text Image Color:	The popout text background image color, slightly transparent for effect but can be changed to suit your style.
Font Settings: Size, Type, Style	Different settings for the popout font
Font Color:	Font colour of the text

CUSTOM NOTE DETAILS	
Page Images	The default image used as the background of your note
HasMultiPages	Tick whether your note has multiple pages (Leave unticked if you only have one page) – This button shows “Next” and “Previous” UI buttons
Note Text	Edit this text to change what will display on the note
Font Settings: Size, Type, Style:	Different settings for the popout font
Note Text Area Scale:	This is the size of the area that the custom text will fill the space within your note. You may need to test the sizes in gameplay.
Font Color:	Font colour of the text

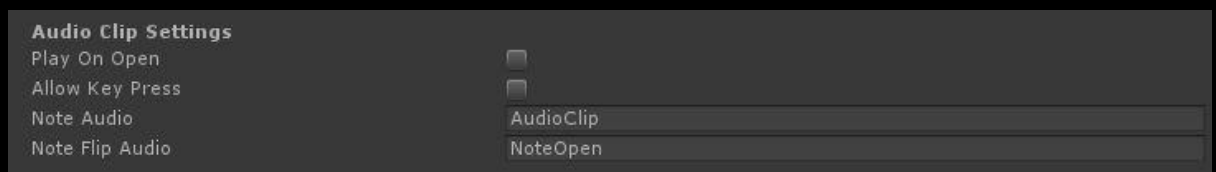
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CUSTOM REVERSE NOTE DETAILS	
Page Image:	The default image of your note style
Page Scale:	The scale of your page on screen, default 900x900
HasMultiPages:	Tick whether your note has multiple pages (Leave unticked if you only have one page) – This button shows “Next” and “Previous” UI buttons
Note Reverse Text	This is the text which will display on the main note and on each reverse page, change the array accordingly
Main Text Area Scale:	This is the size of the area that the custom text will fill the space within your note. You may need to test the sizes in gameplay.
Note Font Color:	Font colour of the text
Note Text BG Color:	The colour of the background for the reverse text popout
ReverseNote Font Settings	Different settings for the popout font
Flip Note Text Area Scale:	This is the size of the area that the custom text will fill the space within your note. You may need to test the sizes in gameplay.
Flip Text BG Scale:	The scale of the overall background of the text
Reverse Note Color:	Font colour of the text

14. As of V1.3 the asset now includes an audio clip section which allows you to choose to:

- 1). **“Play on Open”** – Means the audioclip will play when you first open the note
- 2). **“Allow on key press”** – Means, if you press the specified key, it will play the audioclip
- 3). **“Note Audio”** – The string name of the Audio to play, from the “AudioManager”
- 4). **“NoteFlip Audio”** - Add the name of the audioclip from the AudioManager to play the sound

NOTE: The audio is programmed to STOP when you close the note, could be changed within code if you wish for another option. The two checkboxes, can be used together or independently!



## Final Notes

Your asset is setup and ready to use in your scene, please remember a few things.

- 1). Remember each of your 3D objects that are classed as notes within your scene should be tagged "Note" and have the layer of "Interact".
- 2). You can edit all the note backgrounds and sizes within each of the settings for the notes!
- 3). If you want any extensions for notes, either contact me and I'll help you out or add the sections to the code!
- 4). You can remove the "UI\_Help\_Canvas" if you wish, it was added to make interaction examples easier to understand when you first use the asset in the demo scene!

## Trigger Setup / 3<sup>rd</sup> Person Controller Example

### ADDING A TRIGGER EVENT – Using NoteTrigger script for 3<sup>rd</sup> person Controllers

- 1). Create a box or other 3D Object, make sure this object has a collider set to "IsTrigger".
- 2). Add the "NoteTrigger" script to that 3D object and add the keypad object to the inspector slot named "MyNote". (The keypad object will have the script "NoteController")
- 3). Add your own or the "InteractPrompt" gameobject from the Crosshair canvas to the slot, which will have a UI prompt to help you and/or players know when you can interact!
- 4). On the specific note controller scripts make sure to tick the "Trigger object" box and add the trigger to the empty slot in the inspector!

### REFERENCING THE AUDIO MANAGER:

- 1). If you click on the audio manager you can add addition elements to the array by incrementing the value by as many sound clips as you want to add, make sure to give them a name you will remember as you will reference this in your code!

If you find the package helpful, please leave a positive review and star rating as it would really help me out! 😊 If you have any problems, feel free to send an email to me!

## Contact

Thanks very much for downloading! Please be sure to leave a **star rating** and **review** if you liked the package!

Support me on Patreon: <https://www.patreon.com/SpeedTutor>

Make a small donation: <http://www.paypal.me/speedtutor>

If you have any problems with the pack, or have some ideas for new models you'd be interested in, please feel free to contact me.

Email: [speedtutoruk@gmail.com](mailto:speedtutoruk@gmail.com)

Website: <http://www.speed-tutor.com>

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