Pete-Kit Quick Start Guide

Introduction

This guide will walk you through how to start working with your Pete-Kit.

Powering on your device

Powering on the Raspberry Pi is essential to getting started with your Pete-Kit! To do this, you will need:

- The Raspberry Pi

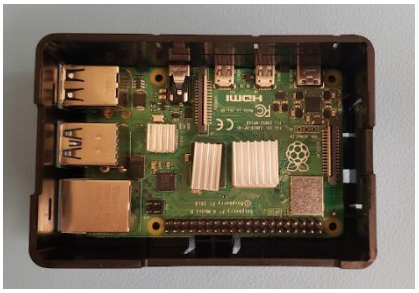

Figure 1: Raspberry Pi in its case.

Figure 2: Raspberry Pi in its case with the top covered.

- USB C Power Supply

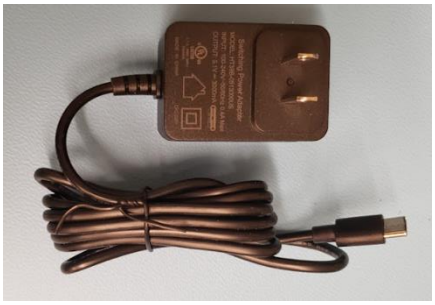

Figure 3: USB-C Power supply

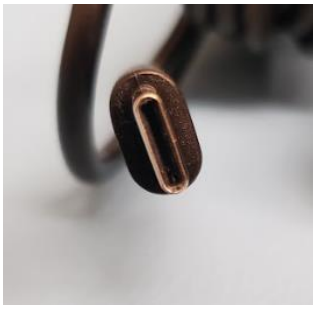

Figure 4: USB-C Connector on the power supply.

- Micro-HDMI to HDMI Cable

Figure 5: HDMI to micro-HDMI display cable

Figure 6: HDMI end

Figure 7: micro-HDMI end

- A USB mouse, monitor with HDMI port, and USB keyboard (not included)

Follow these steps to plug everything in properly.

1. Plug the micro-HDMI end of the micro-HDMI to HDMI cable into the left micro-HDMI port on the Raspberry Pi.

Figure 8: Side view of Pi with left micro-HDMI port circled

2. Plug the other end of that cable into the HDMI port on your monitor.

Figure 9: HDMI Port on back of monitor

3. Plug your mouse and keyboard into the USB ports. Any one will work.

Figure 10: Side view of Raspberry Pi with USB ports circled

4. Plug the USB-C end of the power supply into the USB-C power port on the Raspberry Pi.

Figure 11: Side view of Raspberry Pi with USB-C Power port circled

5. Insert the plug on the power supply into an electrical outlet.

You have now successfully powered on the Raspberry Pi! You should see some activity on your monitor that indicates the Raspberry Pi is booting up (starting). If you don't, check your previous steps and make sure your monitor is plugged and powered on too.

The Raspberry Pi is nothing more than a very compact computer, so it starts up just like any other computer you have used.

You are ready to begin creating with your Pete-Kit! Start by opening a web browser. The default browser on your system is Mozilla Firefox. You will see the icon for it on the left side of your screen. Double-click on the icon to open your browser.

Figure 12: Firefox browser icon

For tutorials, go to https://www.github.com/glcaptain00/Pete-Kit/. If you are not familiar with GitHub, continue reading for a brief walkthrough.

Accessing the tutorials on GitHub

GitHub is an online place to store (a repository) and share software code and related documents. The GitHub Repository contains all the up-to-date tutorials and sample code for you to look through. Understanding how to access the information on GitHub is very useful.

When you first open the link above, you will see the page shown in Figure 13.

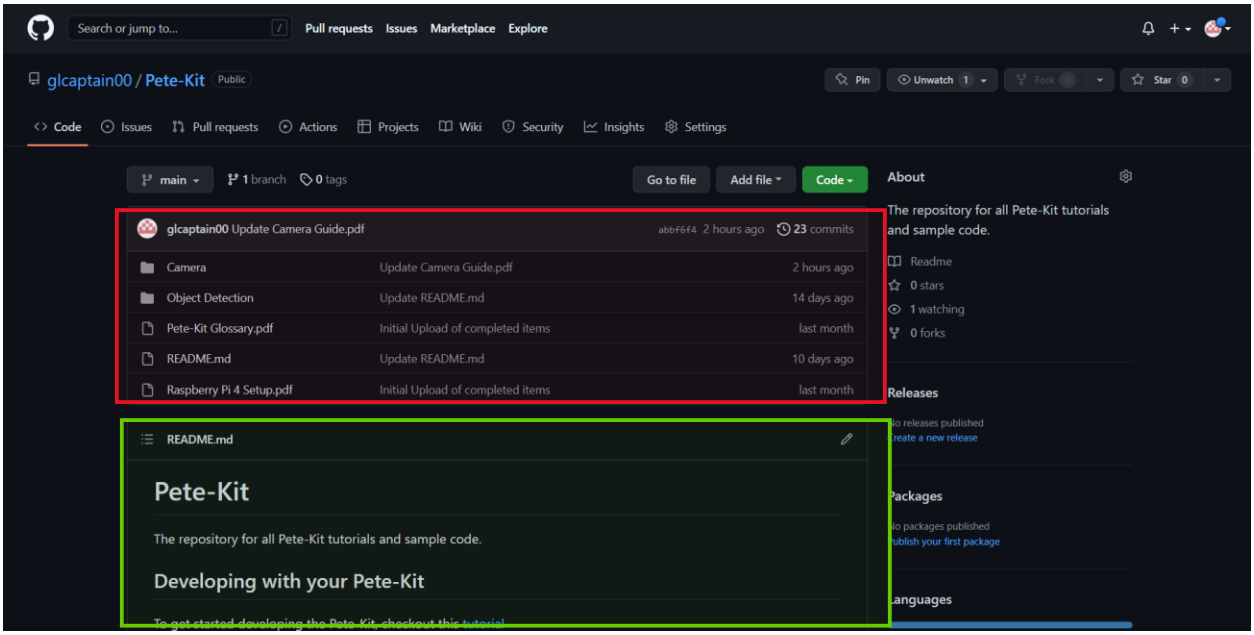

Figure 23: Git-Hub front page for PETE-kits

From here, there are a few things to note. The upper region (highlighted in red) contains the list of files you can download. Click on a file to open it. There are two icons to note. A folder icon

indicates that the link you are clicking on has more files inside. You can see a folder icon next to "Camera" and "Object Detection" inside the file list. A page icon indicates a file with contents that can be opened and read. You can see the page icon next to "README.md" or "Pete-Kit Glossary.pdf."

The "README.md" file is a special type of file. It is written in a special format that allows it to be previewed in various ways. Such a preview is displayed in the lower region (highlighted in green) of Figure 13. This readme document will contain useful information about the repository. For example, the readme for the Pete-Kit repository contains information on how to get started with the tutorials.

To navigate into a file or folder, just click it in the file list. If you click on a file, it will load that file with and display it to you, if possible. Software code is specially formatted to make it easier to read. PDFs and other document formats are just shown normally. Below, you can see the 'Pete-Kit Glossary.pdf' file has been opened. This is not code, so it's not formatted specially. We can also see a download button. See Figure 14. If you click this, you will be able to store the file on your computer (the Raspberry Pi).

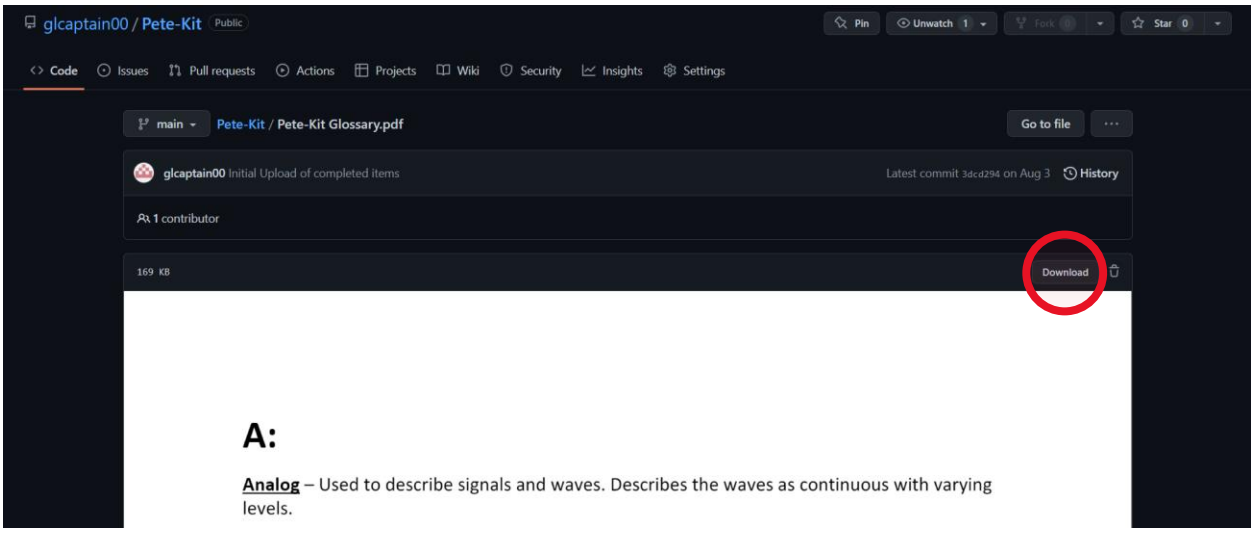

Figure 14: Git-Hub screen displayed when opening a text file (in this case a file called Pete-Kit Glossary.pdf).

If you open a file with code (see Figure 15), we will see two different buttons, "Raw" and "Blame." Don't worry about "Blame" for now.

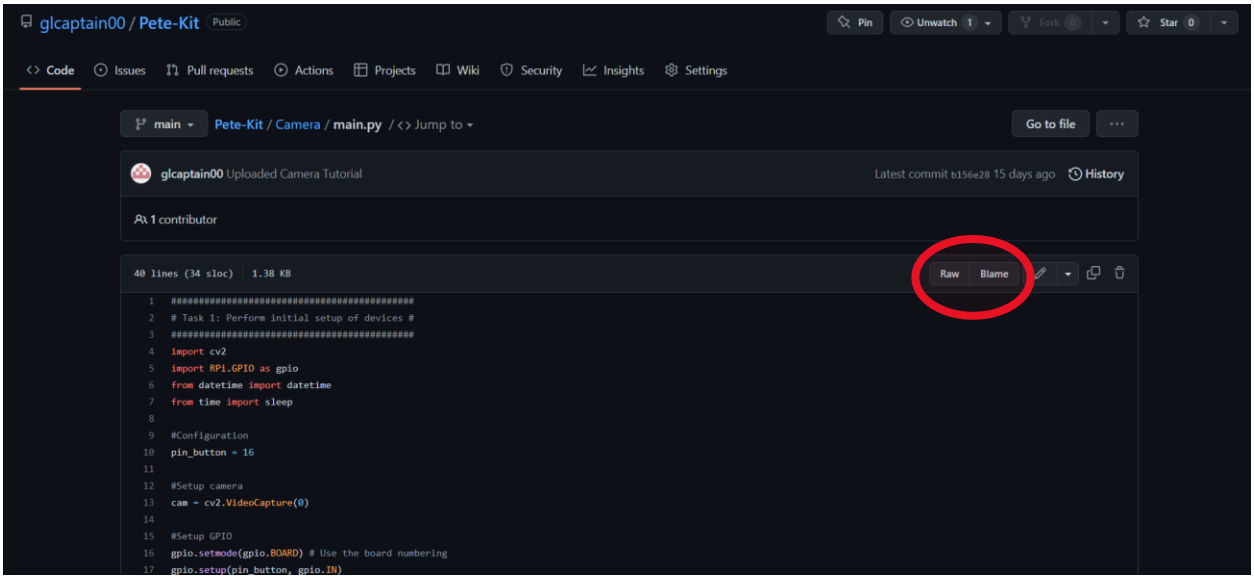

Figure 15: Git-Hub screen displayed when opening code (in this case a file called main.py).

Clicking “Raw” will open the code file in your browser without all the fancy formatting so that you can save it (See Figure 16). You can do this by hovering your mouse over the text and right clicking. After you right click, select “Save as…”. Alternatively, press the “CTRL” and “s” keys at the same time to do the same thing.

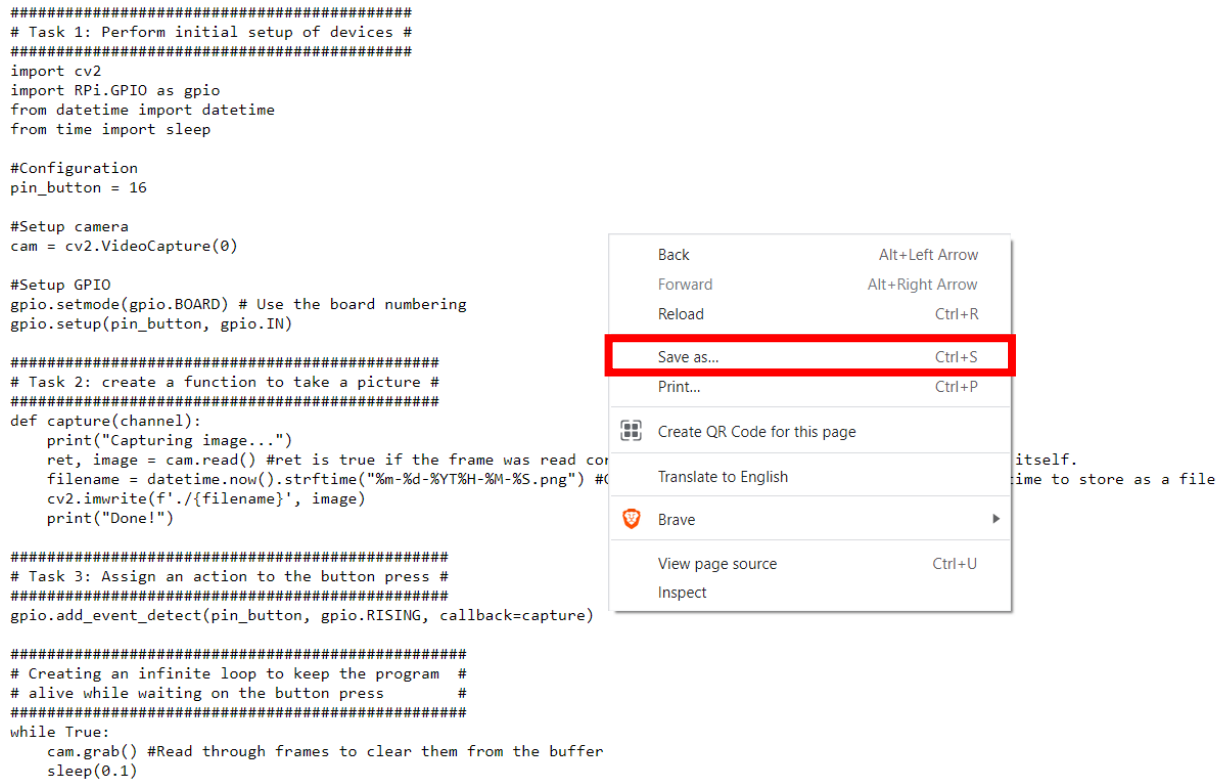

Figure 16: Git-Hub screen displaying code after clicking "Raw" link.

Click “Back” on your browser to go back to the original list. If you click on a folder, it will take you to a similar looking screen as the first screen. If this folder contains another “README.md” file, it will show up on the lower portion as well. See Figure 17.

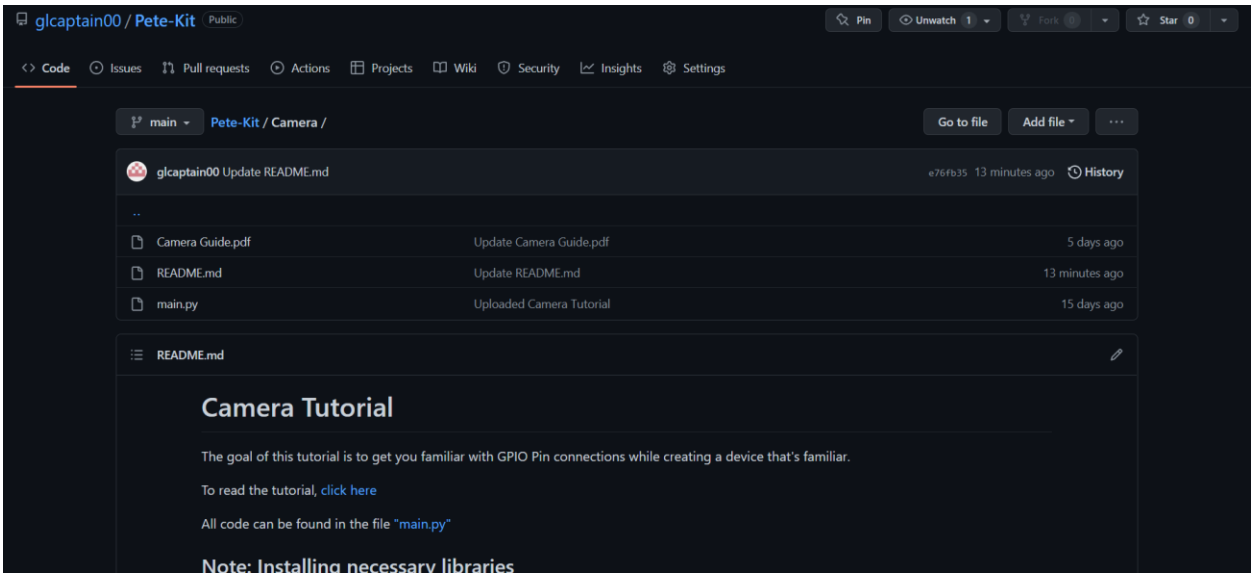

Figure 17: Git-Hub screen displaying contents of the folder called “Camera.”

Navigate around our Pete-Kit repository and look at everything that is available. Don’t worry about hurting anything. Our files are locked and they cannot be corrupted. Feel free to download everything!