

Teach Kids Coding

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Chapter 1

Setup

For parents.

1.1 Python

Python is a programming language. It is pre-installed in Mac, you don't have to install it if you are using a Mac.

Install Python 2.7.13

<https://www.python.org/downloads/>

1.2 GitHub

GitHub is used to share the code with other developers.

Register on GitHub

<https://github.com/>

Install GitHub client

<https://desktop.github.com/>

1.3 PyCharm

You can program purely use text editor. But an Integrated Development Environment (IDE) will make life much easier.

We use PyCharm

<https://www.jetbrains.com/pycharm/>

1.4 matplotlib

There are a lot of very useful packages (tool boxes) available for python. matplotlib is one for 2D plotting. We will use it to draw our maze in the final project.

For information, <http://matplotlib.org/>

To install

In PyCharm. File -> Default Settings -> Project Interpreter.

Chose the right python you installed from the Project Interpreter drop down box.

The installed packages will be displayed. Click the + sign, search matplotlib, then install.

Or

Open a Command Prompt in windows or Terminal in Mac then type:

```
python -m pip install -U pip setuptools
```

```
python -m pip install matplotlib
```

1.5 Test

Go to <https://github.com/artcheng/TeachKidsCoding>

Download ZIP

Un-zip the download file to a folder.

Open PyCharm, new project, chose the folder of TeachKidsCoding/ch1

You will see drawline.py under ch1 folder in PyCharm.

Double click drawline.py, put your mouse on drawline.py window, right click, Run drawline.py.

If you can see an image pop up, you are ready for the next step.

You can also try to run drawfib.py , If you got an error of missing numpy package. Try to install numpy as matplotlib.