Create a pet dog inside Visual Studio Code using Python

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Introduction:

Over the course of the past several years, coding has been an integral part of who I am as a person. It is something that is both fascinating and challenging at the same time. My one problem was that I did not have the easiest introduction to coding, which is why I created this tutorial on how to teach you to write your own code! I hope that it helps!

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Definitions:

Class: Think of a class like a blueprint for a house. You can use the blueprint to make a house as many times as you want. In coding, you can use a class to make as many objects as you want.

Object: They are the instances of classes. In the house example, think of an object as a fully assembled house with certain traits about it (color, price, square footage, etc).

Method: It is a part of a class that defines the behavior of things that are created in the likeness of said class (objects). Like a house class might have a method called garage() that opens up the garage door.

Python: A modern coding language that is very easy to learn basic coding principles on. Also very useful for advanced programming.

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Step 1: Getting to Visual Studio code

First order of business is quite simple. All that you have to do for this step here is navigate to your search engine of choice on your computer (chrome, bing, etc,) and open it up (Fig A). Following that, you will enter this url into your browser: https://code.visualstudio.com/ (Fig B).Once you complete that, move on to step 2.

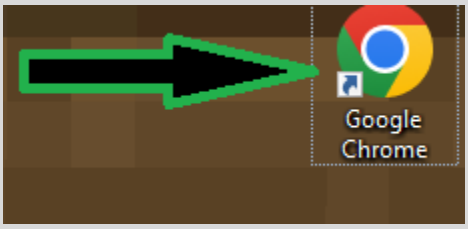

Fig A

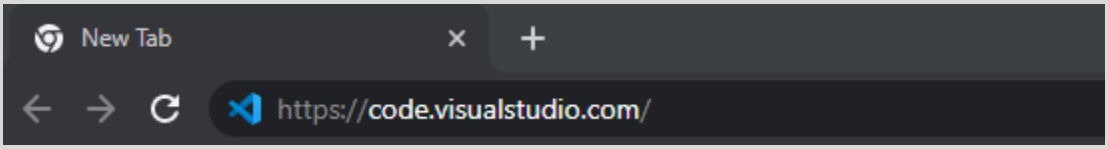

Fig B

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Step 2: Download Visual Studio Code

After you put in the link found in step 1, you will be sent to Visual Studio's website and there should be something similar to the image below on said page (Fig A). All that you need to do is hit the download button depending on your operating system. Once you have done that, please proceed to step 3.

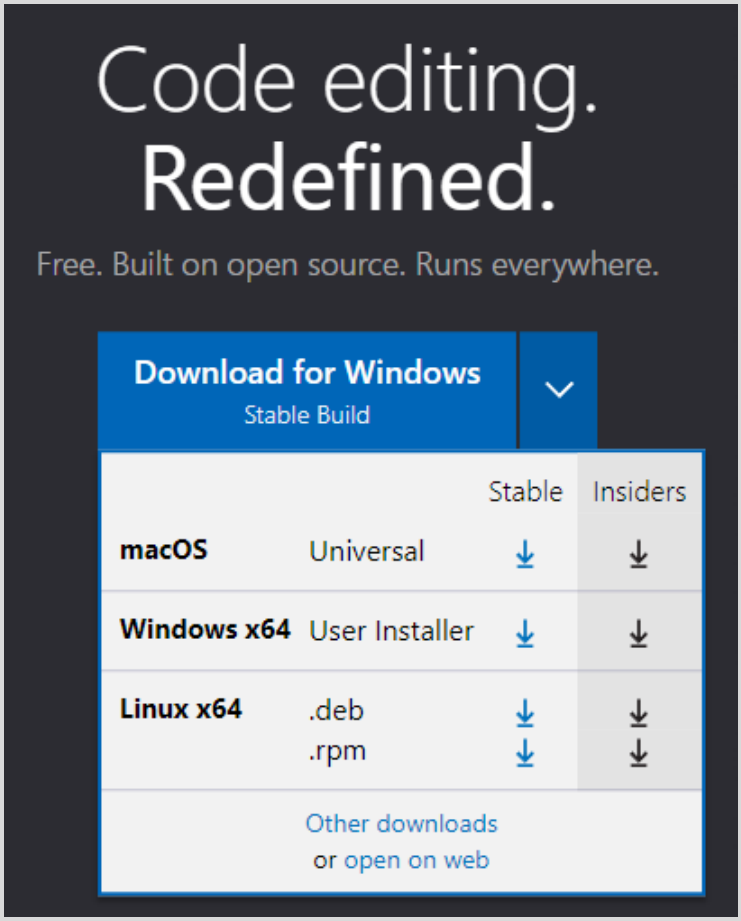

Fig A

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Step:3 Complete the installation lauch Visual Studio Code

After you have begun the download, you should get a little popup in the bottom left corner of your screen (if you are on windows) similar to (Fig A). If you don't see this popup, please refer back to step 2. Once it is done downloading, click on that popup and you should be prompted with a white and gray setup screen. Most of it you can click through, but make sure that you check off on these settings once you get to that portion of the setup (Fig B). Following this, please proceed to step 4.

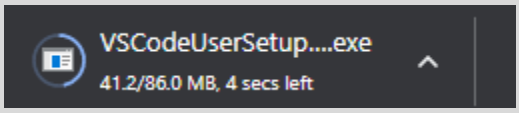

Fig A

Important settings to click:

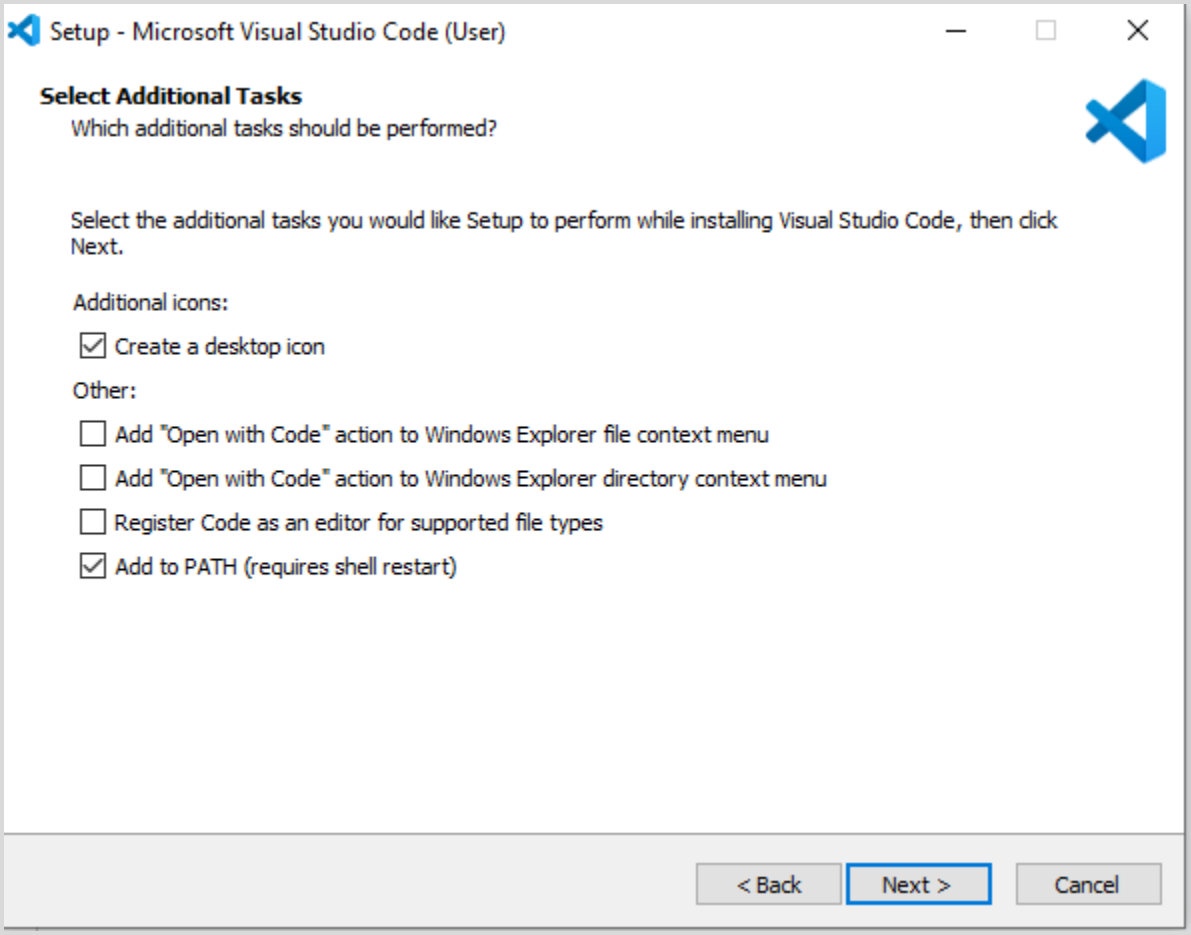

Fig B

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Step:4 Install the Python extension

Following step 3, go back to your main desktop page, and click on the new Visual Studio code icon (Fig A). Once you do this, you should be presented with something that looks quite similar to Fig B. Visual Studio code is now on your computer! Congratulations! Now we need to get python running on it. To do this, go to the extensions section (fourth button down on the main page). After that you should see a little search bar prompt in which you will enter “python” (see Fig C). Make sure that you hit install on the one with the blue check and says “Microsoft” on it. You are now ready to move on to step 5!

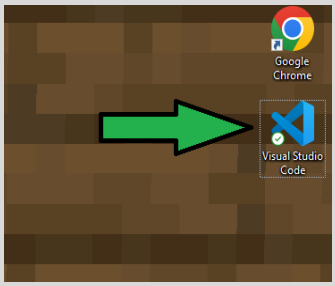

Fig A

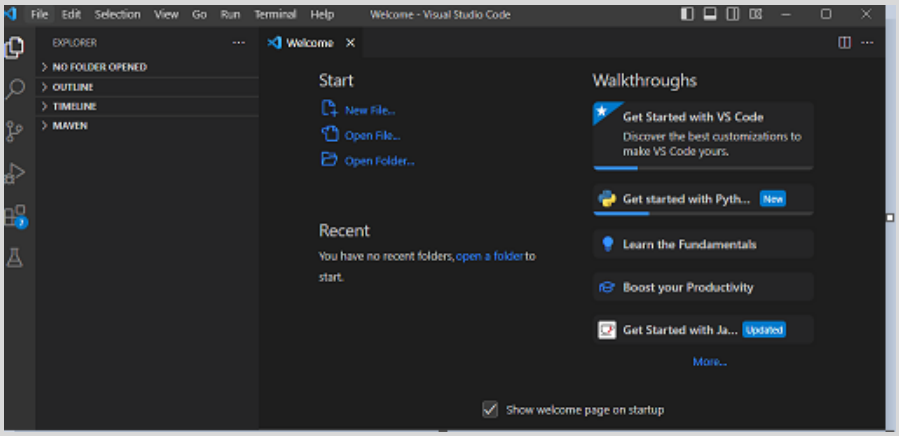

Fig B

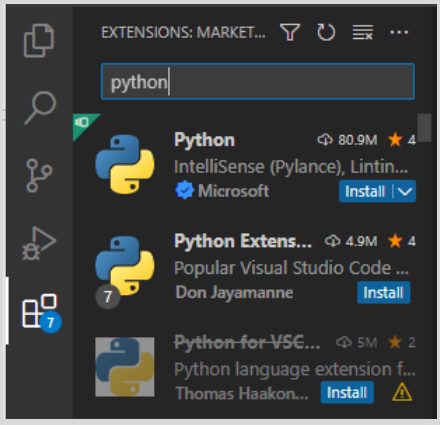

Fig C

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Step 5: Create a new Python file

After installing Python, you are almost ready to write your first code! First, you need to navigate back to the main menu of Visual Studio code (can do this by clicking the file icon in the top left). Once you do this click on the new file (Fig A). After doing this, you will be prompted to name your file. We will call this file pet.py (the py standing for python which indicates the type of file it is) (Fig B). Once you name it a pop-up will ask you to store your file somewhere. Store it anywhere you feel comfortable and then hit create file (Fig C). Following that, you are ready to proceed to step 6!

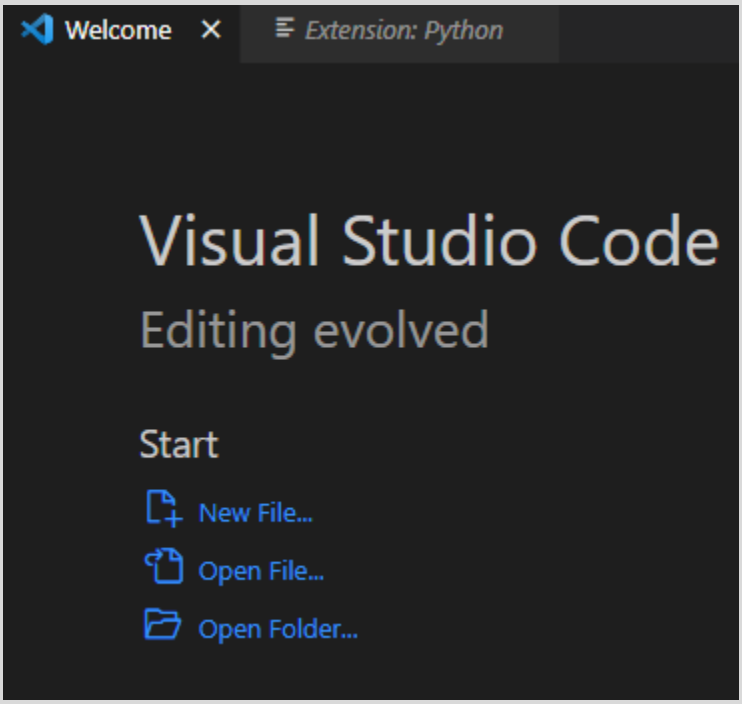

Fig A

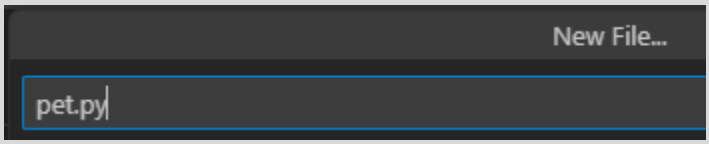

Fig B

Fig C

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Step 6: Copy the following code

Now, it is time to write some of your first Python Code! After you created your pet.py file, a text editor in Visual Studio Code should automatically pop up onto the screen (Fig A minus the code). Once here, you are to copy the code that you see below in Fig A. You will be creating a class dog that is created with a name, age and a breed. You will also add several methods that allow the dog object to perform certain actions. After you copied this code, please move on to step 7!

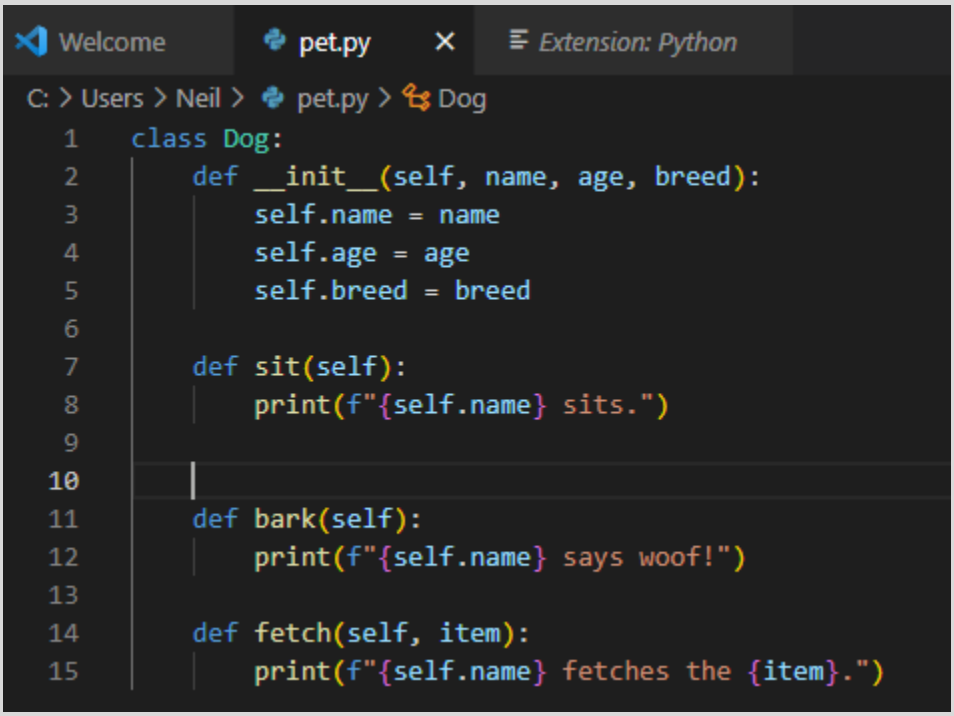

Fig A

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Step 7: Add the following objects so the code will actually run

Now that you have coded the means to actually create the object, all that is left to do in code is to create a dog object and have it do a few tricks! All you need to do is copy the code below and put it below your previous code. When all is said and done, your code should look something like Fig A. Once complete, please proceed to step 8! Note, please make sure to it crtl s to save your code!

```
13
14      def fetch(self, item):
15          print(f"{self.name} fetches the {item}.")
16
17
18  my_dog = Dog("Rufus", 3, "Golden Retriever")
19  my_dog.bark()
20  my_dog.sit()
21  my_dog.fetch("stick")
```

Fig A

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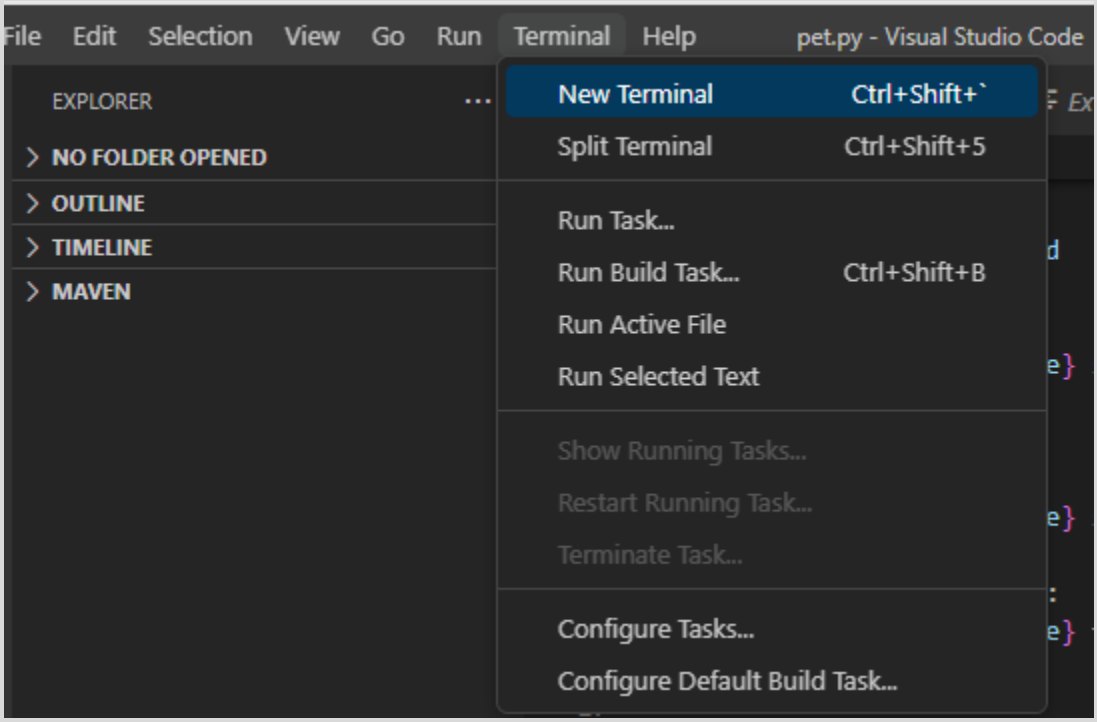
Step 8: Open a new terminal

This step is quite simple. For this step, all you need to do is navigate to the bar on the top of your page, navigate and click on “terminal", and then click “New Terminal” as shown below in Fig A. Once complete please proceed to step 9 where you will be running your code!



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Step 9: Run your code!

After opening up a new terminal in step 8, you should see a black window at the bottom of the new terminal with a line of text in it. Next to said text you just need to type “Python pet.py”. When you do this, hit enter and your window should look something like Fig A. Congratulations! You just wrote your first bit of real code!

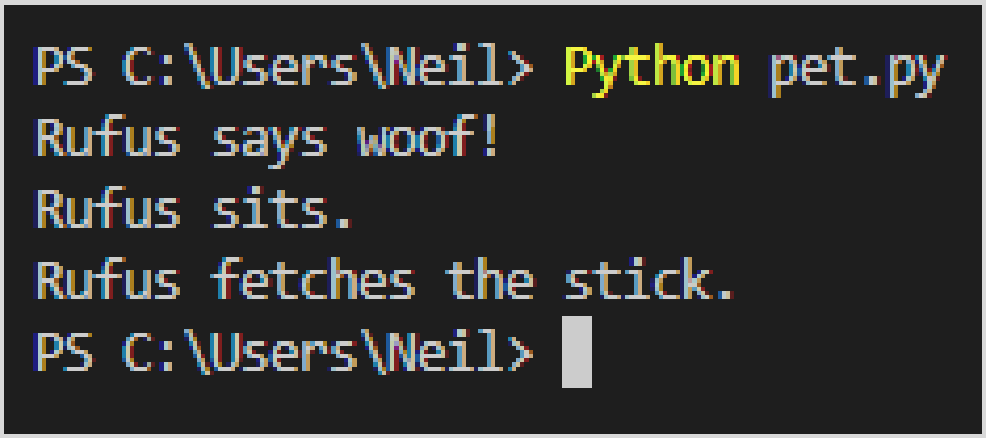

Fig A

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Sources:

Python logo image:
File:python-logo-notext.svg. Wikimedia Commons. (2008).
https://commons.wikimedia.org/wiki/File:Python-logo-notext.svg

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