Installation and Set up

for Python Programming course at ECPR winter school 2020

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1 Introduction

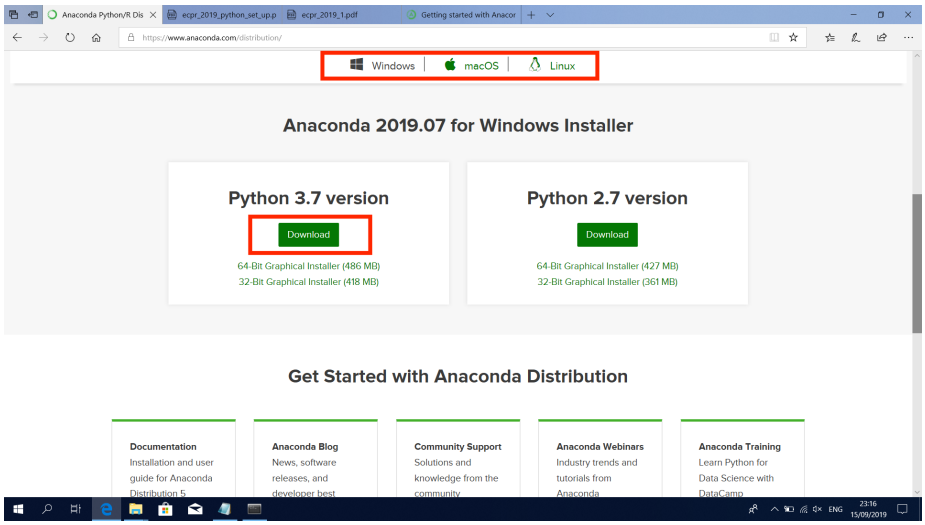
Here, I explain how to (1) install Python via Anaconda, (2) install PyCharm and configure conda environment, and (3) install two Python libraries which will be used in the course.

In case you are an experienced Python programmer, so you already installed Python and an editor, skip the following sections and go directly to Section 5.

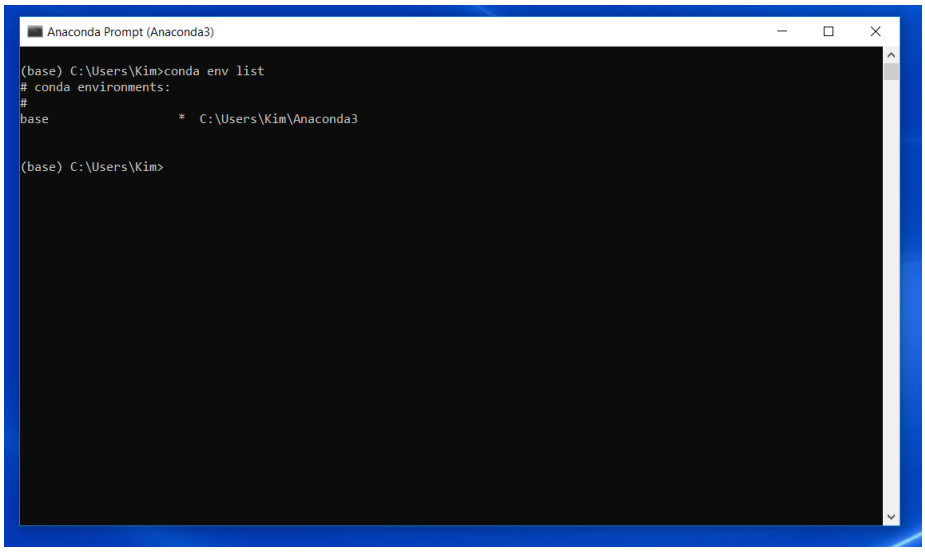
2 Anaconda

Among several possibilities, we use Anaconda to install Python.

1. Visit the Anaconda site: `https://www.anaconda.com/download/`
2. Download and install Python ver. 3.7, which corresponds to your operating system (e.g., Windows, Mac, or Linux). Follow the installation instructions.



Let's check if Anaconda installed successfully. If you are a Mac user, open `Terminal`, if you are a Windows user, open `Anaconda Prompt`. Please type `conda env list`.[1] It should display your conda environments. At this moment, only `base` environment is displayed since you did not create any new environment. The address, `C:\Users\Kim\Anaconda3` is where the corresponding environment is stored in this example. The address may be different depending where your machine stored the environment. This information will be used to configure a conda environment at Pycharm. We will get back this point later in the next section.



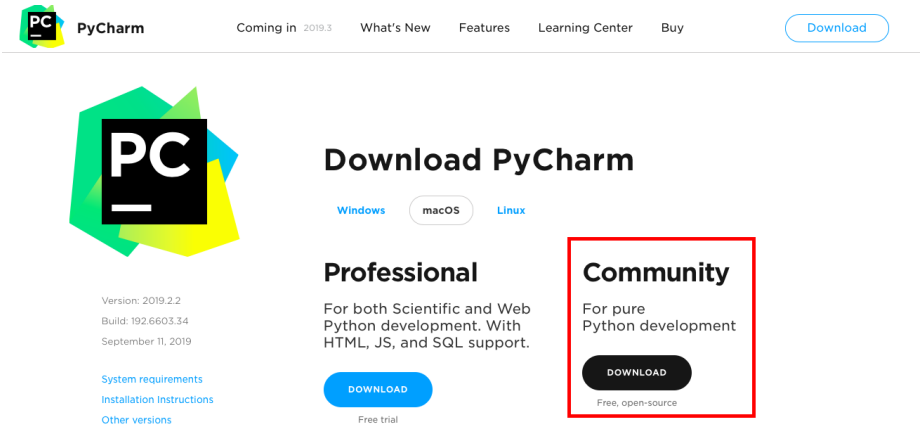
Anaconda Prompt (Windows example)

3 Pycharm

Installation

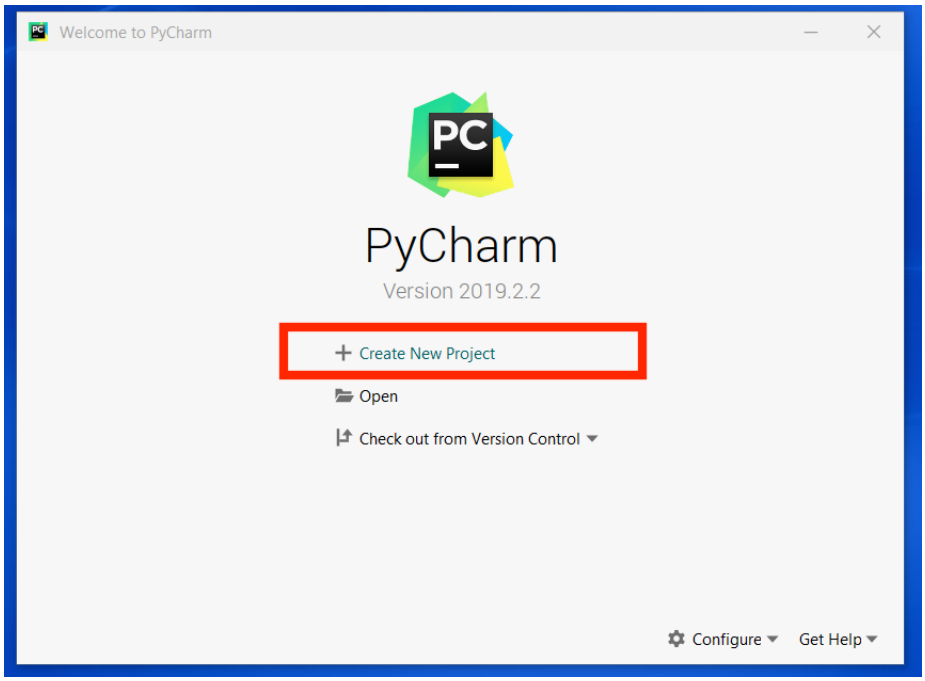
In this section, we install PyCharm, one of the most popular editors of Python. Please download and install **Community** version (it is free): `https://www.jetbrains.com/pycharm/download/`. Do not forget to choose the version corresponding to your operating system. Follow the installation instruction.

[1] You can find all the information about conda here: Conda docs



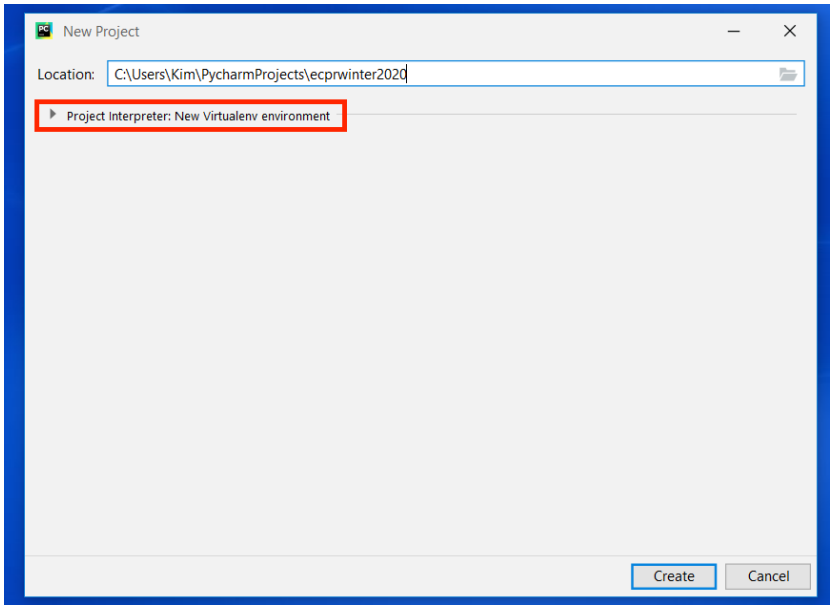
Configure a conda environment

Now we create a conda environment at PyCharm.[2] After you finish installation, open PyCharm and select **Create New Project**.

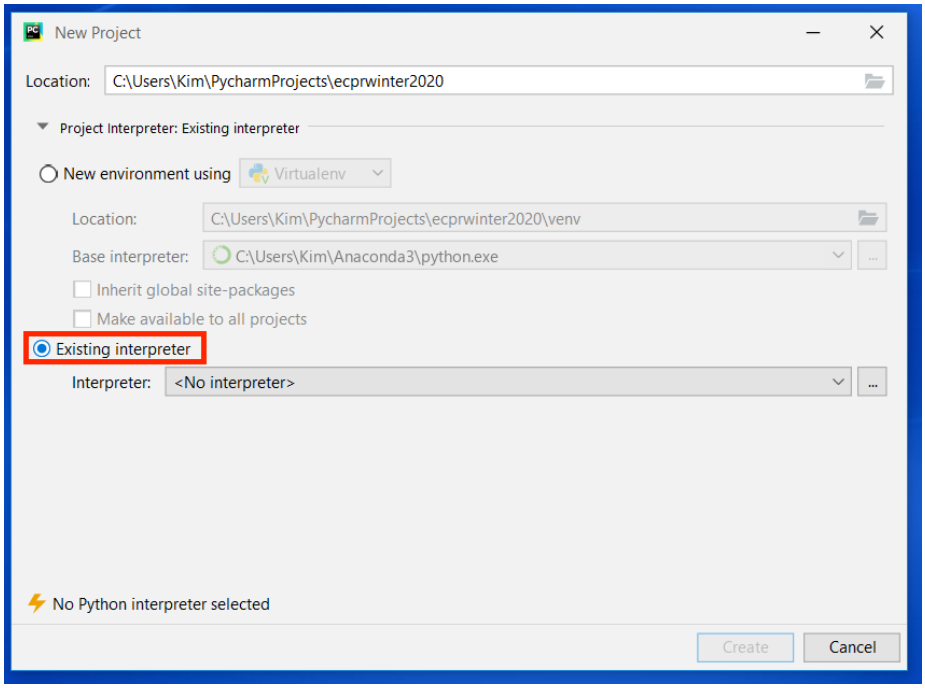


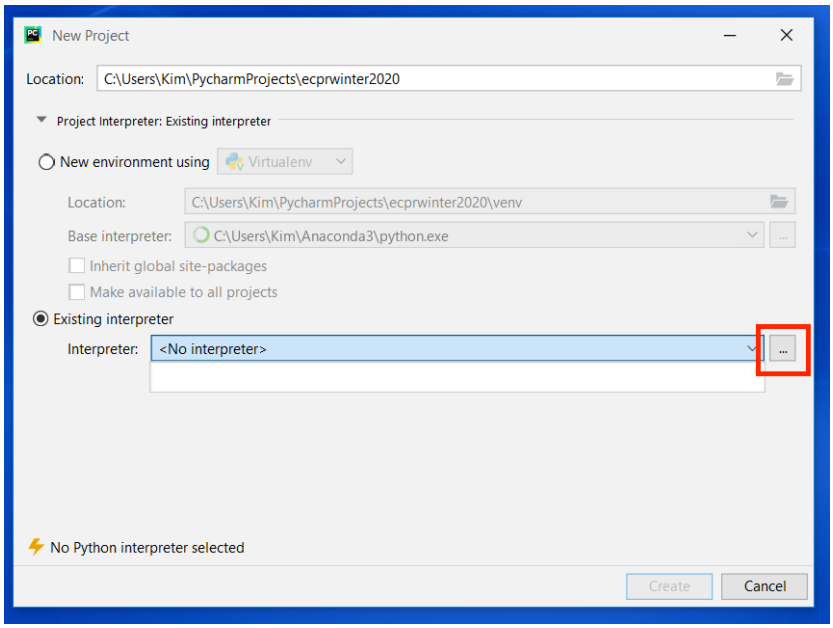
[2]PyCharm webpage explaining how to configure a conda environment: Here

Add a project name, in this example **ecprwinter2020**, and click **Project Interpreter: New Virtualenv environment**.

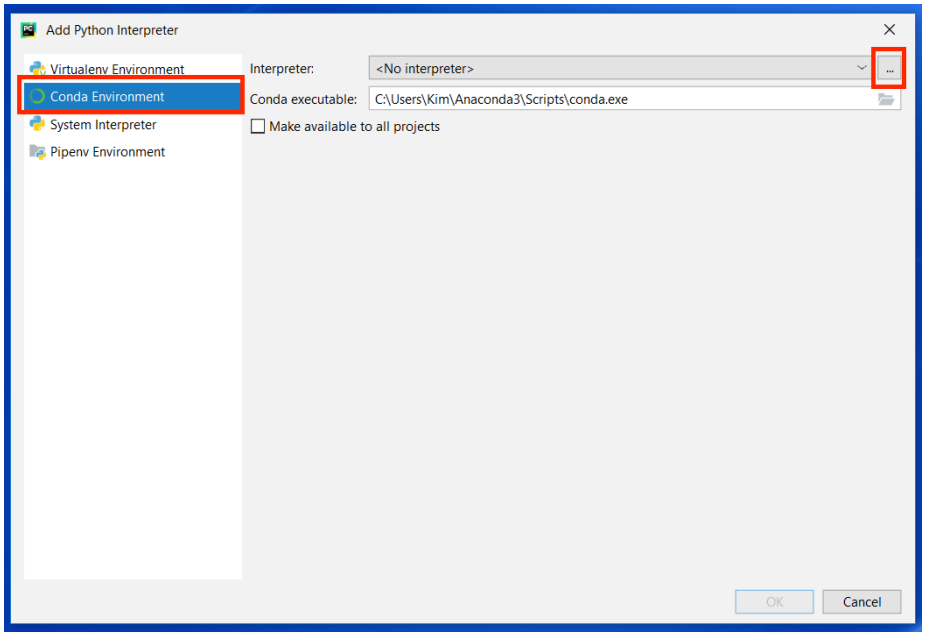


Select **Existing interpreter**, and click the button at right side of the interpreter section.





Select **Conda Environment** and click the button on the right-hand side next to Interpreter section.

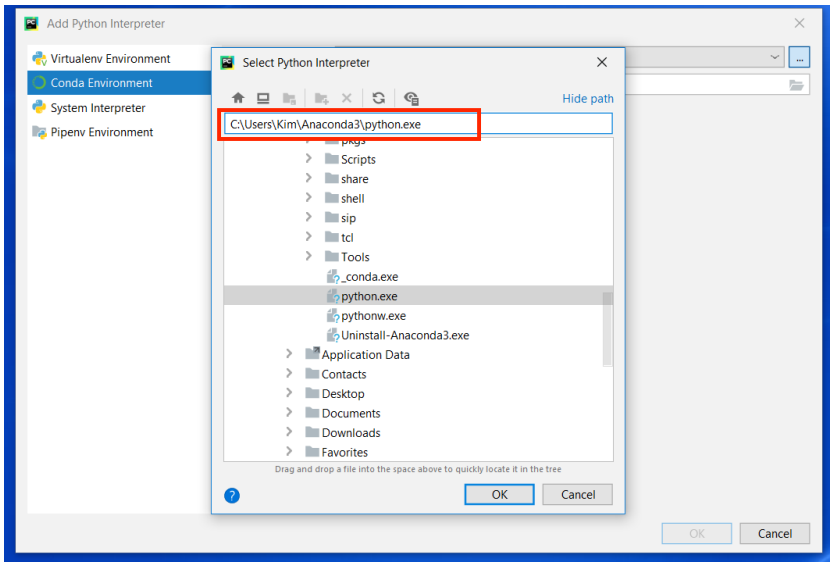


Now you have to let PyCharm know where your Python interpreter is. We want to use the one, which is stored at an Anaconda environment. In

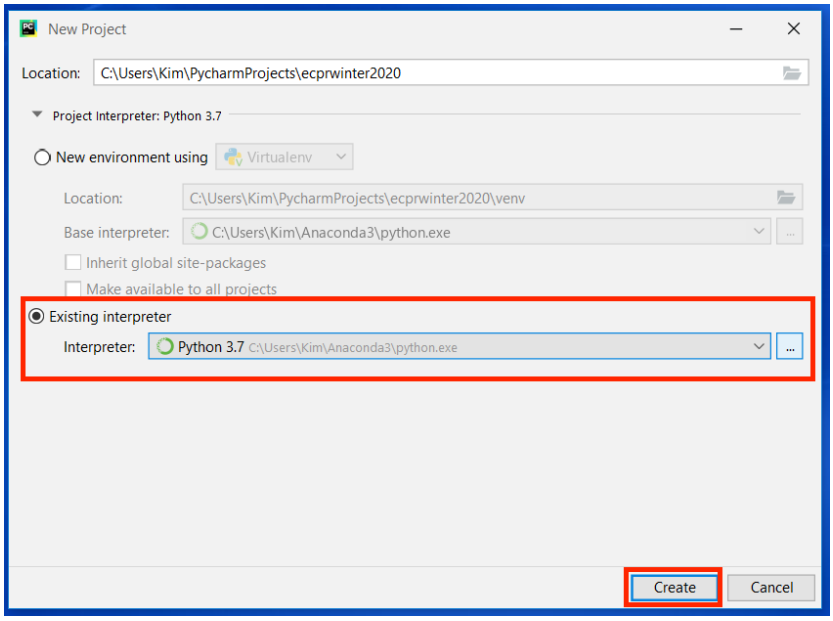
this example, we use an interpreter of `Base` environment. The address is `C:\Users\Kim\Anaconda3` as we have checked before. Select

```
C:\Users\Kim\Anaconda3\python.exe
```

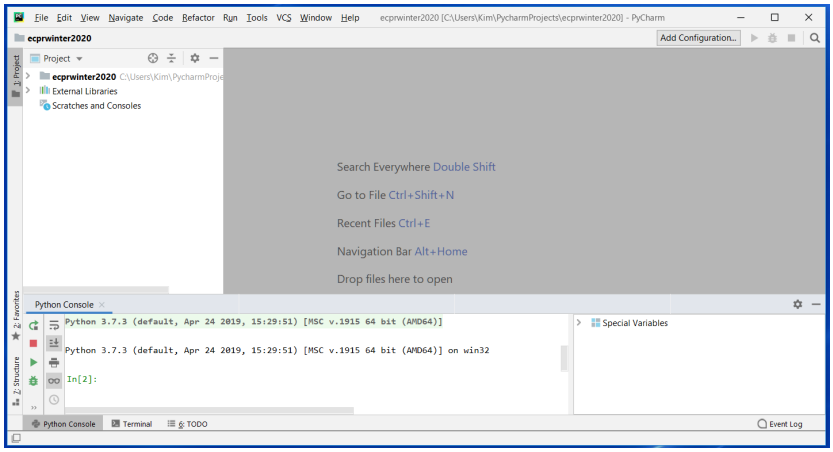
to indicate the interpreter of this environment. Select **Make available to all projects** and click **OK**.



Now you will see the interpreter, which you have just selected. Click **Create**.



If you see the following window, you have successfully finished configuration.



4 Install Python Libraries

Now let's install two Python libraries, `requests-oauthlib` and `progress`,into the **Base** environment.[3] First, open `Terminal` or `Anaconda Prompt` and type the following command. Note that it is a **hyphen** between two words `requests` and `oauthlib`.

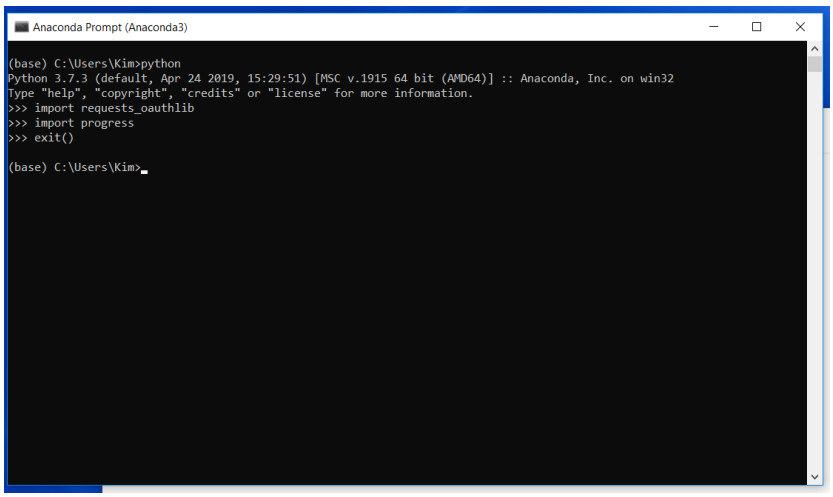
```
conda install requests-oauthlib progress
```

Now let's check if two libraries have been successfully installed by using Python console. The following command execute Python.

```
python
```

Next, type the following command. Note that it is a **underscore** between two words `requests` and `oauthlib` (not hyphen!).

```
import requests_oauthlib
import progress
```



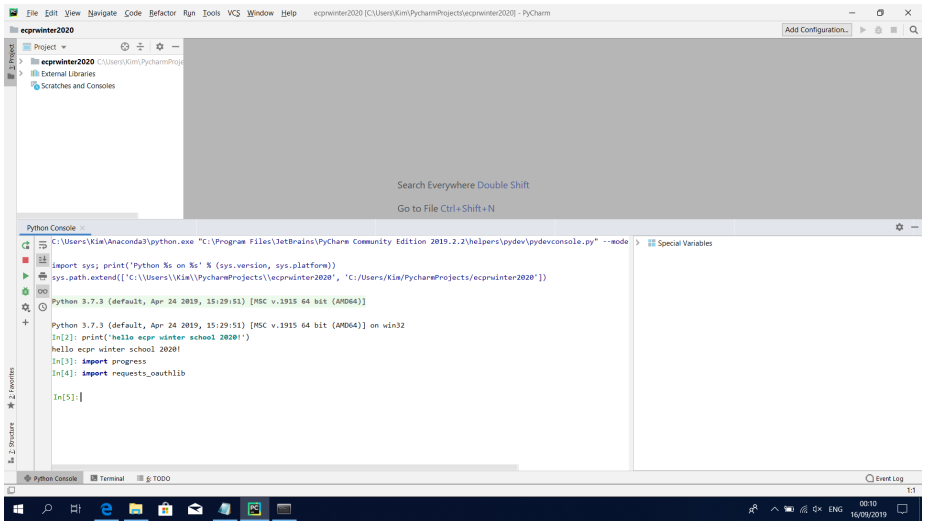
If there is no error message, two libraries are installed correctly. Finally, let's check if this change reflected in PyCharm. Open PyCharm project you have just created in the previous section and type the following command at **Python Console**.

```
import requests_oauthlib
```

[3] Conda documentation how to manage conda environment: here

```
import progress
```

There should appear no error message, if you have configured correctly.



5 If you are an experienced Python programmer...

In this case, I assume that you already have Python and an editor in your environment. Also, you are capable to...

- install libraries,
- create virtual environment with different Python version or libraries.

In this case, you do not need to follow the instructions. Just make sure that you have Python > 3.5 and install libraries introduced in section 4. You can also choose an editor you want to use. But note that the course examples assume use of the PyCharm editor and the course will not take care of other editors' trouble shootings.