

# A user guide to work with Jupyter Notebook Libraries (JUPYCEE, JUPYCEEDOC, EJUPYCEE)

**Required IDE :** Any Jupyter Notebook Environment

**A brief Overview:** Compilers tend to produce cryptic and uninformative error messages, leaving programmers confused and requiring them to spend precious time to resolve the underlying error by searching in Google or online question-and-answer forums such as Stack Overflow. To overcome this time-consuming process, we have created three solutions as python libraries, viz. JUPYCEE, JUPYCEEDOC and EJUPYCEE.

JUPYCEE automatically queries *StackOverflow* for the error in the threads that discuss the compiler error message, and it returns whatever it has collected as a whole customized package to the programmer within the IDE.

Similarly JUPYCEEDOC queries the *official Python Documentation* website for the error.

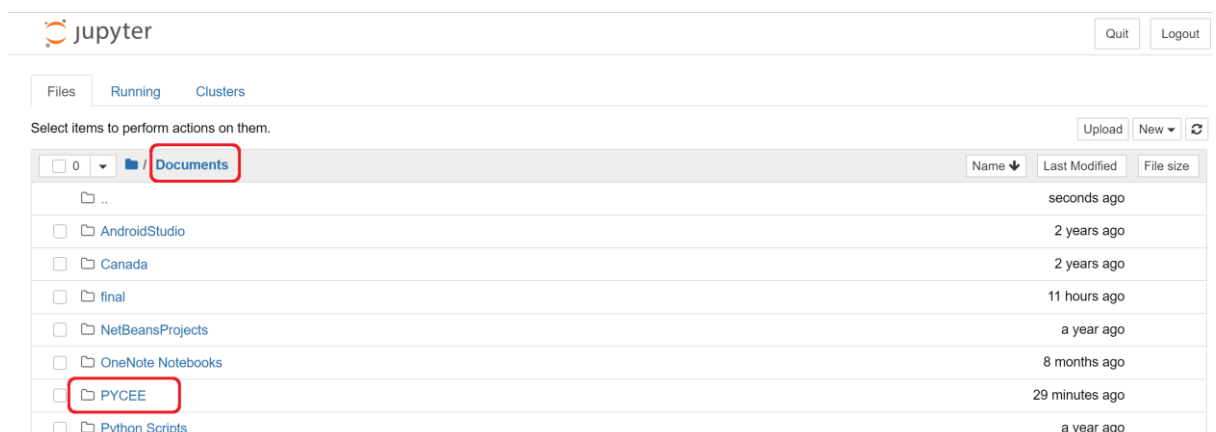
EJUPYCEE combines the results obtained from both *StackOverflow* and *Python Documentation*.

**Objective1:** To write any two programs in Python from the pool of tasks given at the end

**Objective2:** Complete a survey [Link provided below]

Kindly read the following instructions to perform the tasks with the help of the three libraries.

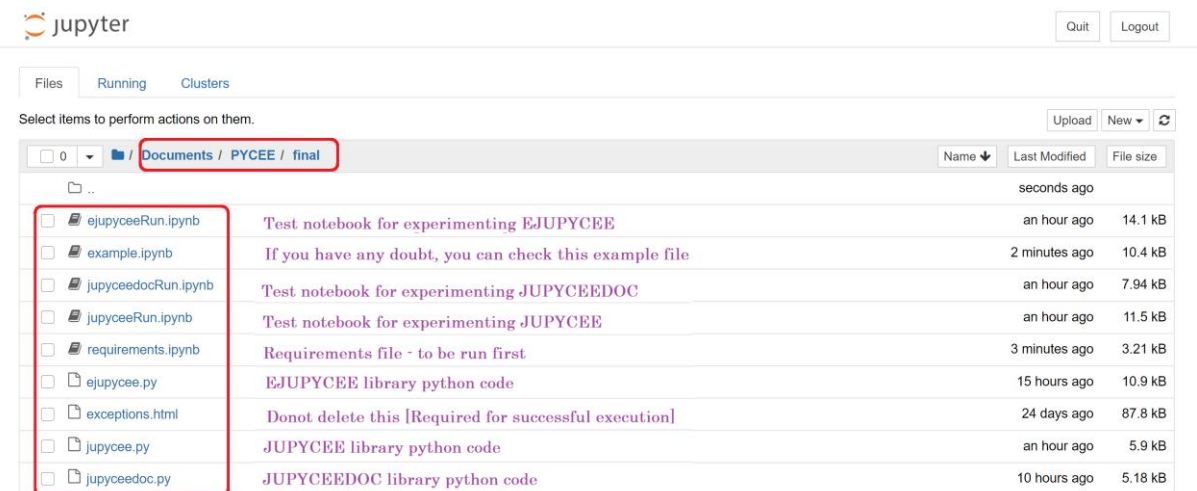
1. Unzip the folder PYCEE and save it in your local system.
2. Open *Jupyter Notebook IDE* and locate this folder [In this example, the folder is stored inside 'Documents' folder]



3. Open the folder **final** inside the folder **PYCEE**



4. Inside the folder **final**, you can see the following files [Have an understanding of each of the files with the description given]



5. Do the following steps in sequence

- Open the file **requirements.ipynb** and run the commands one by one in it

```
In [ ]: !pip install sty
In [ ]: !pip install bs4
In [ ]: import nltk
        nltk.download('stopwords')
```

- Create a new Notebook file **Task1.ipynb** in this same folder for running **Task1**
- Import one of the following '*one at a time*' to see it's functionality when you encounter any error
  - import **jupyceerun.py**
  - import **jupyceedoc.py**
  - import **ejupyceerun.py**

[NOTE: Refer to the notebook **example.ipynb** if you have any confusion on testing.]

Also, please note down whether any of the three variants helped you in completing the task, or you had to directly search for the error in Google.

YOU WILL NEED THIS DATA TO COMPLETE THE SURVEY AT THE END.]

- d. Similarly create a Notebook file **Task2.ipynb** for running **Task2** and repeat the step **5.c**
6. If you did not encounter any error while performing **Task1** and **Task2**, do run the following **test notebook files** to have a basic understanding of the functionality of the three libraries.
- i. **jupyterRun.ipynb**
  - ii. **jupyterdocRun.ipynb**
  - iii. **ejupyterRun.ipynb**

### Task Pool:

1. Write a function that takes a list (with duplicate elements) and returns a new list that contains all the elements of the first list removing duplicates.
2. Write a password generator in Python. Be creative with how you generate passwords - strong passwords have a mix of lowercase letters, uppercase letters, numbers, and symbols. The passwords should be random, generating a new password every time the user asks for a new password. Include your code in a main method.
3. For this exercise, we will keep track of when our friend's birthdays are, and be able to find that information based on their name. Create a dictionary (in your file) of names and birthdays. When you run your program it should ask the user to enter a name, and return the birthday of that person back to them. The interaction should look something like this:

Welcome to the birthday dictionary. We know the birthdays of:

Harry Potter

Jack Sparrow

Jon Snow

Who's birthday do you want to look up?

Jon Snow

Output: Jon Snow's birthday is 01/11/1988.

4. Write a Python program to extract all the URLs from the webpage python.org that are nested within <li> tags

Kindly submit a survey by clicking on the following link

<https://forms.gle/Qf1PiW7VyABQN6hK7>

In case of any queries/concerns, please reach out to us by sending mails to any of the following mail ids

[akoirala@lakeheadu.ca](mailto:akoirala@lakeheadu.ca) [aramesh3@lakeheadu.ca](mailto:aramesh3@lakeheadu.ca) [mchowdh8@lakeheadu.ca](mailto:mchowdh8@lakeheadu.ca)

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Hope you enjoyed working with our libraries.

Your valuable time was highly appreciated and we are very much grateful to you for your co-operation.

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