DAT405/DIT40 Introduction to Data Science and AI, LP2 2022

Assignment 4: Spam classification using Naïve Bayes

Practical details

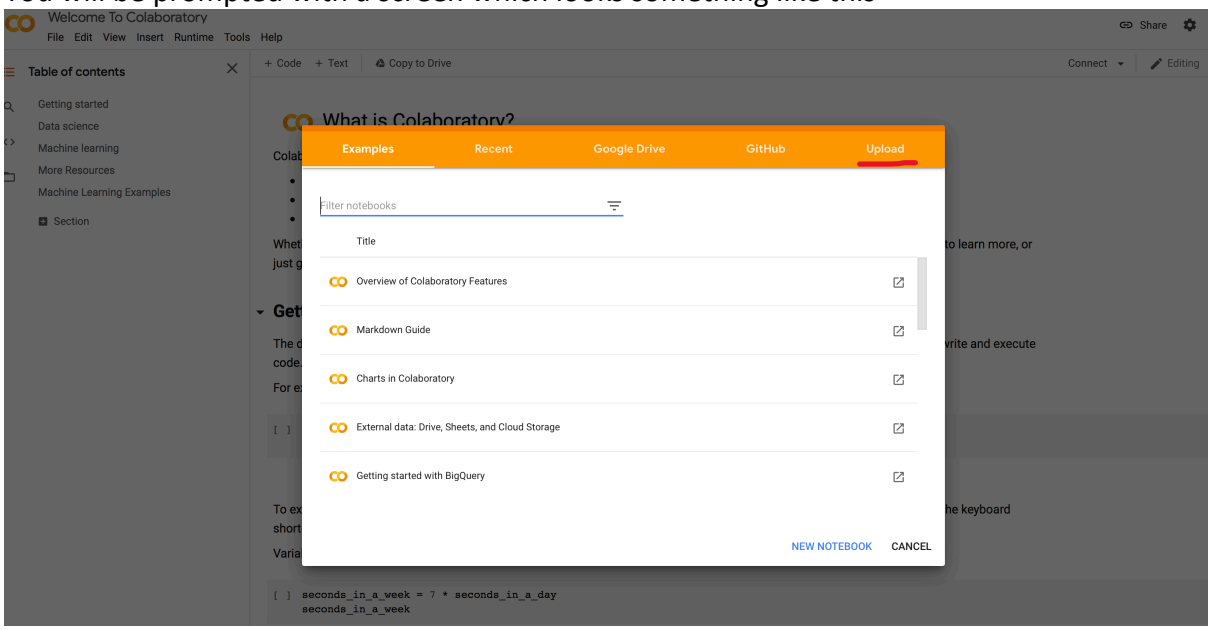
In this assignment, you will work with the Naïve Bayes algorithm using the scikit-learn library. The assignment takes place in a notebook environment – all questions and general information about the assignment is in the notebook itself. You are free to continue working in Jupyter on your own computer and submitting **pre-executed notebooks to canvas**. However, we strongly recommend using **Google Colab** for this the coming assignments as it allows you to more easily collaborate in groups with social distancing.

To use **Google Colab,** you will need to have a Google account – as for Gmail, Google Docs, etc.

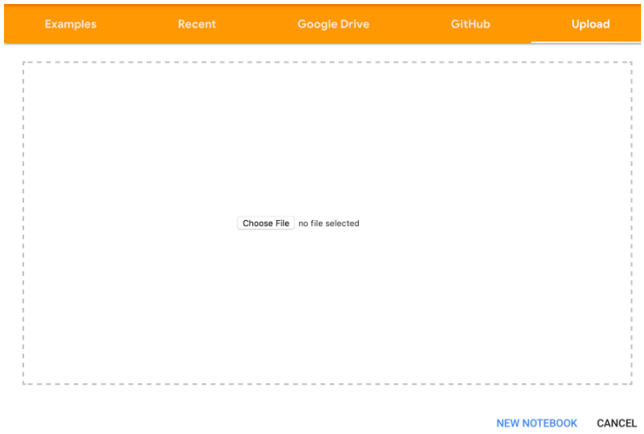
Make sure you have downloaded the Assignment4.ipynb file from Canvas.

Then go to http://colab.research.google.com/ in your browser

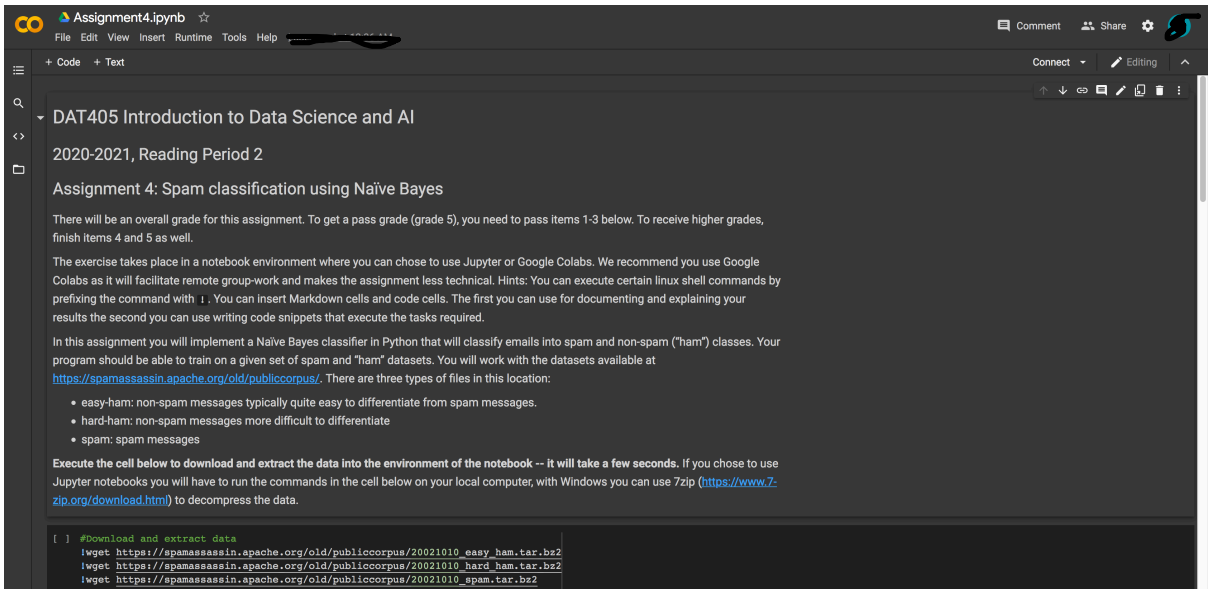
You will be prompted with a screen which looks something like this



Press Upload (underlined in the screenshot above) and the following screen should appear, where you can select Assignment4.ipynb on your local computer and upload it.



Now the assignment should be open in your Google Colab environment, and look something like this:



You use this exactly as a Jupyter notebook, and all the libraries you need for the assignment are already pre-installed. Cool, Huh?

Now you can share the notebook with you team-partner via the share button in the upper right corner of the notebook.

Sharing a link to your completed notebook through Canvas is also an option to submit your assignment for grading.

Submitting the assignment for grading

In general, when submitting your reports, please make sure all results and discussions are clearly visible and readable. **That means, notebooks should be executed and all code output should be visible and readable.** In Google Colab, first go to the Runtime menu and select Factory Reset-Runtime and then go to the Runtime again and select Run all.

You have the following options to submit the assignment:

- Submit a link to a completed and fully executed Google Colab notebook (please make sure it is executable and editable for anybody with the link).
- Submit a completed and fully executed jupyter notebook (.ipynb-file) from Colab or in Jupyter.

Deadline: Tuesday 29 November 2022 at 23:59