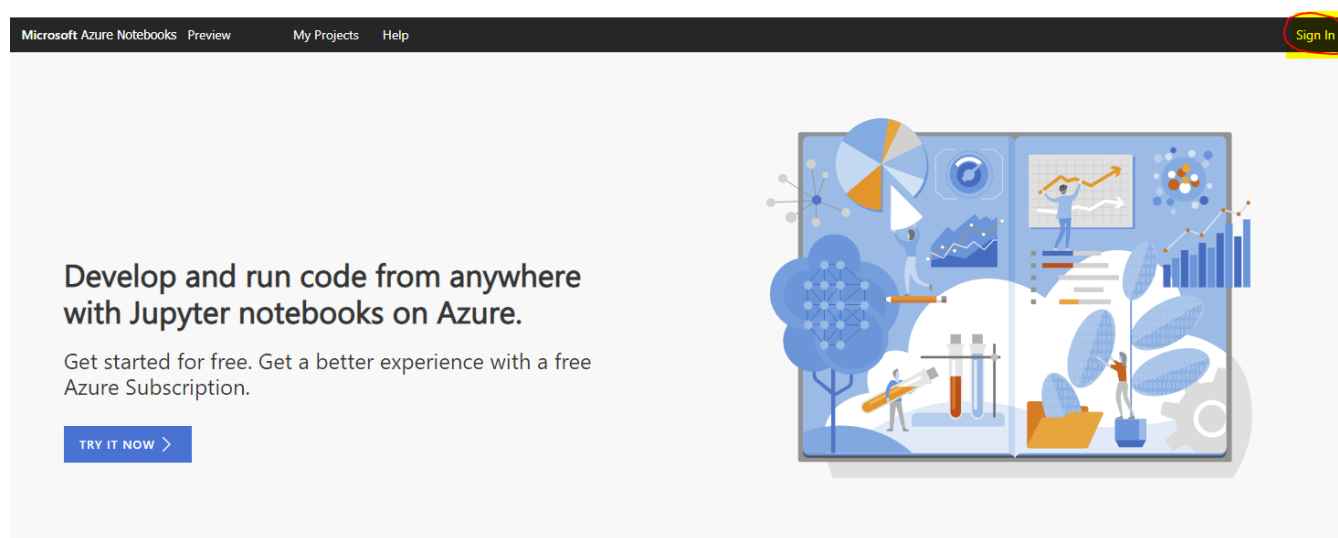# Hands-on Lab on Data Science Fundamentals

In this lab, you are going to use Azure Notebook services (a compute resource on Azure for data scientists) to practice some components of the data science process, including:

1. Load data into a Pandas data frame and explore the data.
2. Practice on stochastic gradient descent (SGD) to learn a linear regression model.
3. Use Scikit-Learn library to train and test a linear regression model.
4. use Scikit-Learn library to train and test a Gradient Boosted Decision Tree model.

Step 1. Set Up the Azure Notebook service.
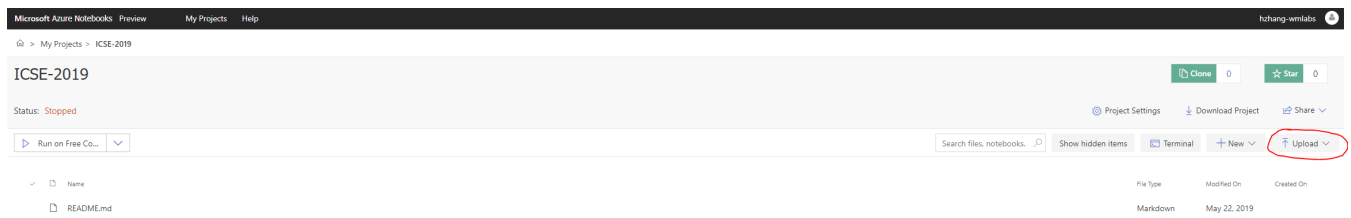
- First, open a web browser and visit https://notebooks.azure.com.

- Sign in using your Microsoft account (@outlook.com, @hotmail.com, or @live.com).

  If you do not have a Microsoft account, you can https://account.microsoft.com/account to create one for free.

- After signing in, click **My Projects** on the top-left corner of the page, and then click **+ New Project** to create a new project *ICSE-2019*.

- Upload the Jupyter Notebook *ICSE_2019_Data_Science_Fundamental_Lab.ipynb* to this project.

Step 2. Run the Jupyter Notebook

Please follow the speaker to run the cells on this Jupyter Notebook step by step.