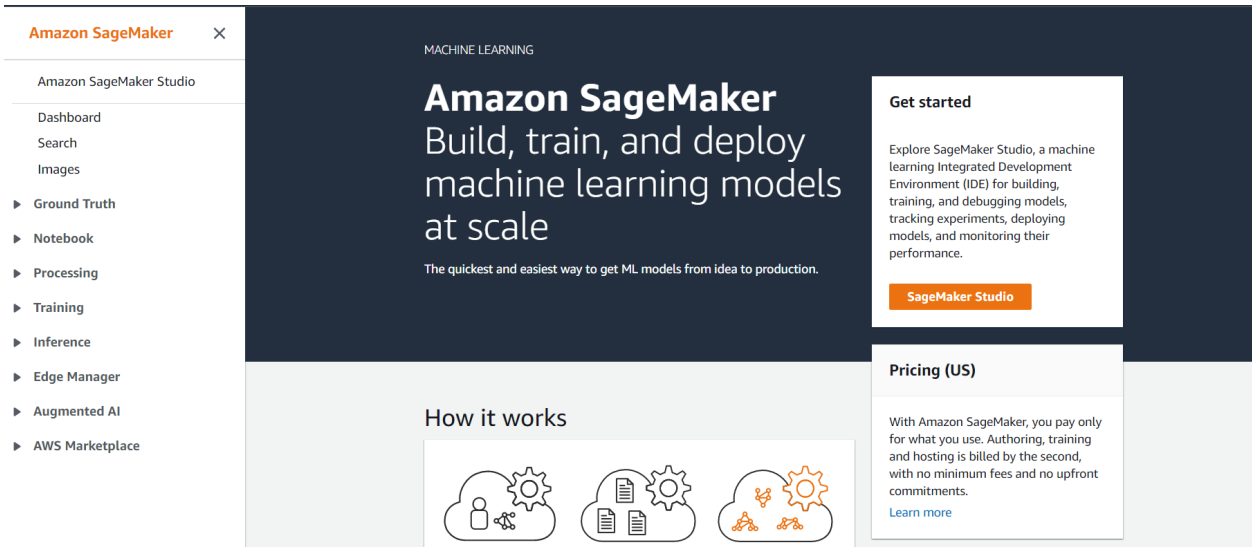
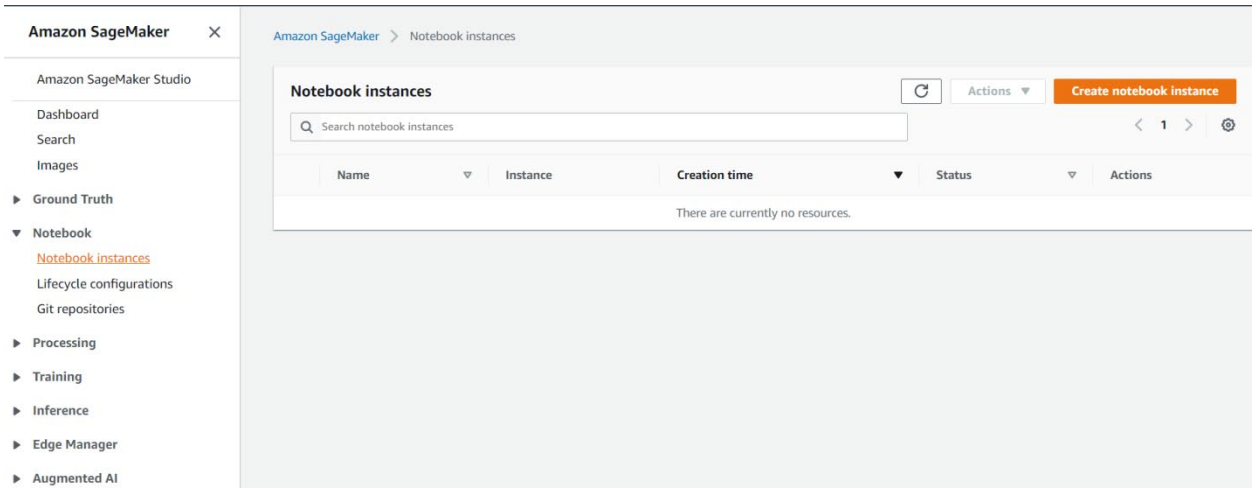
AWS SageMaker

Build, Train, and Deploy Machine Learning models at scale

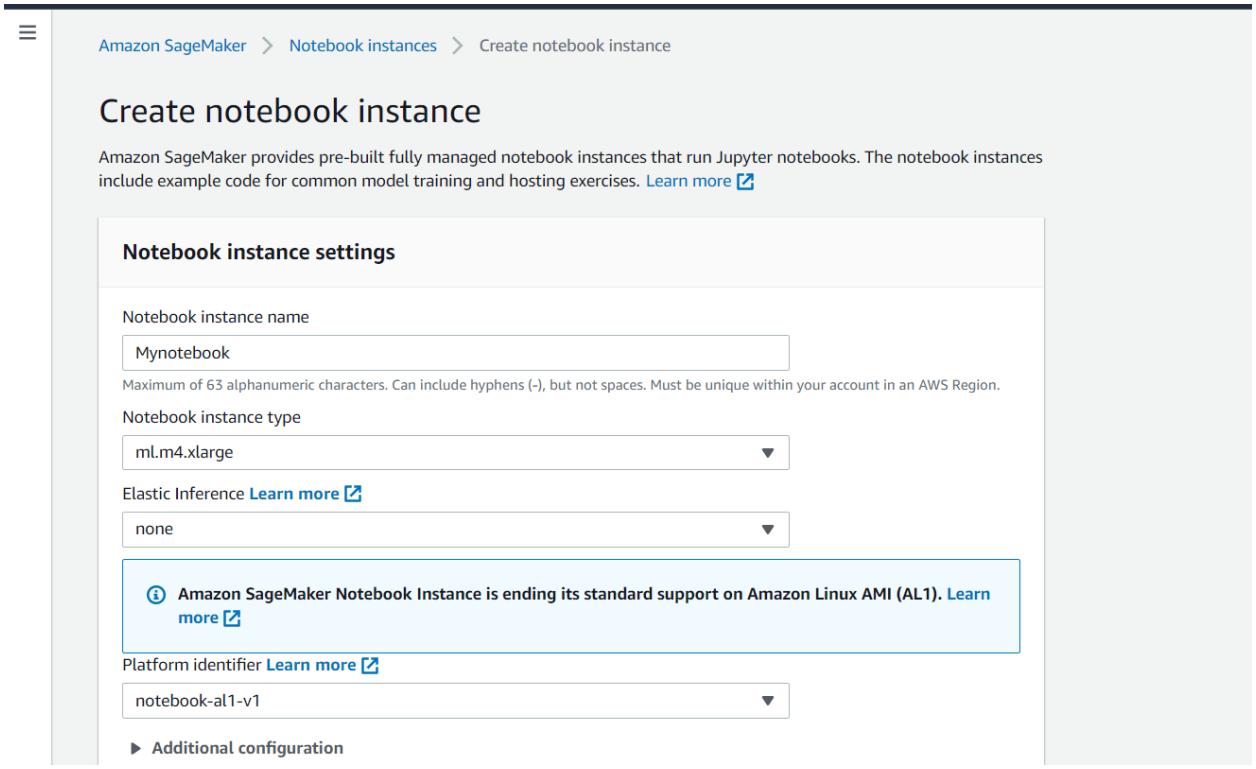
1. Creating and Importing Data



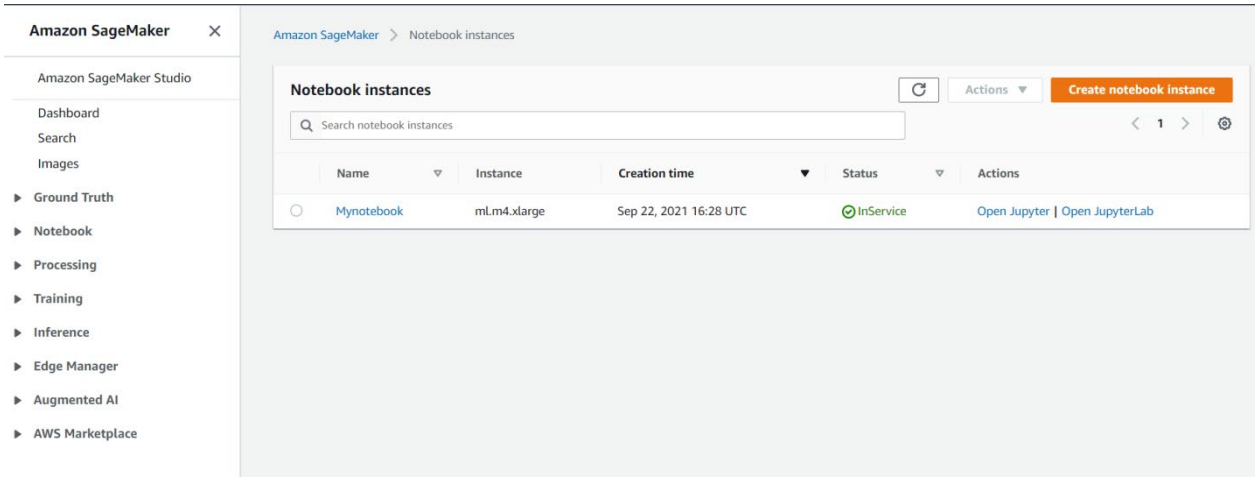
AWS SageMaker Dashboard



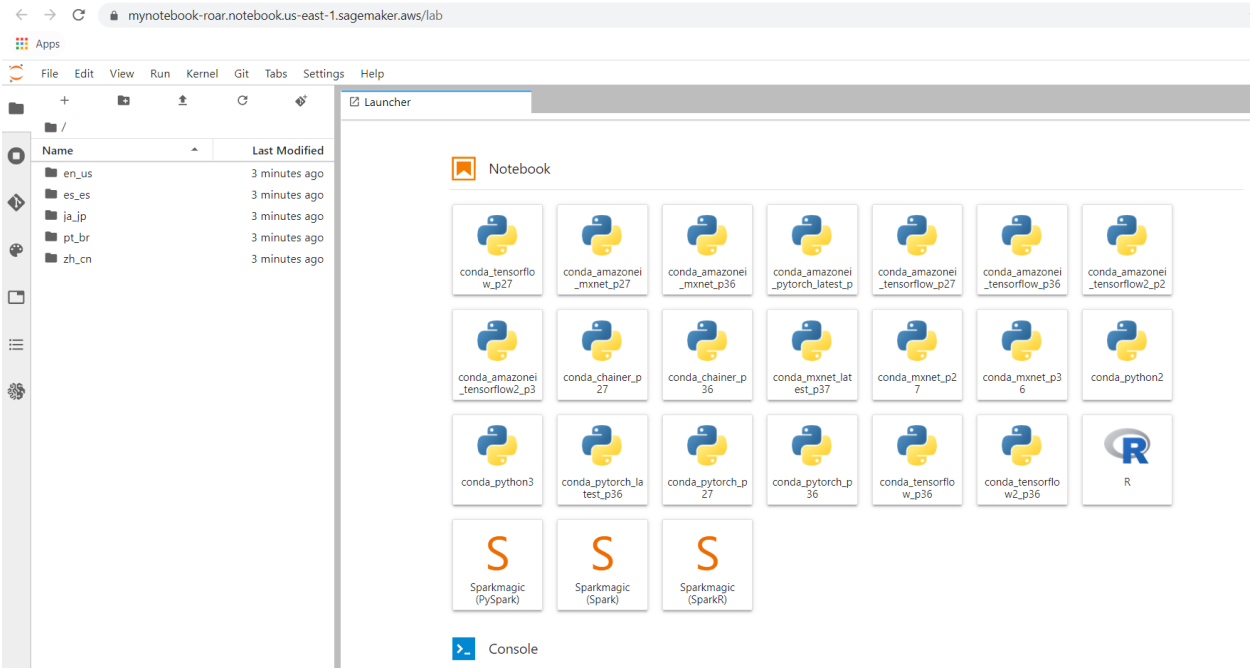
NoteBook Instances Page



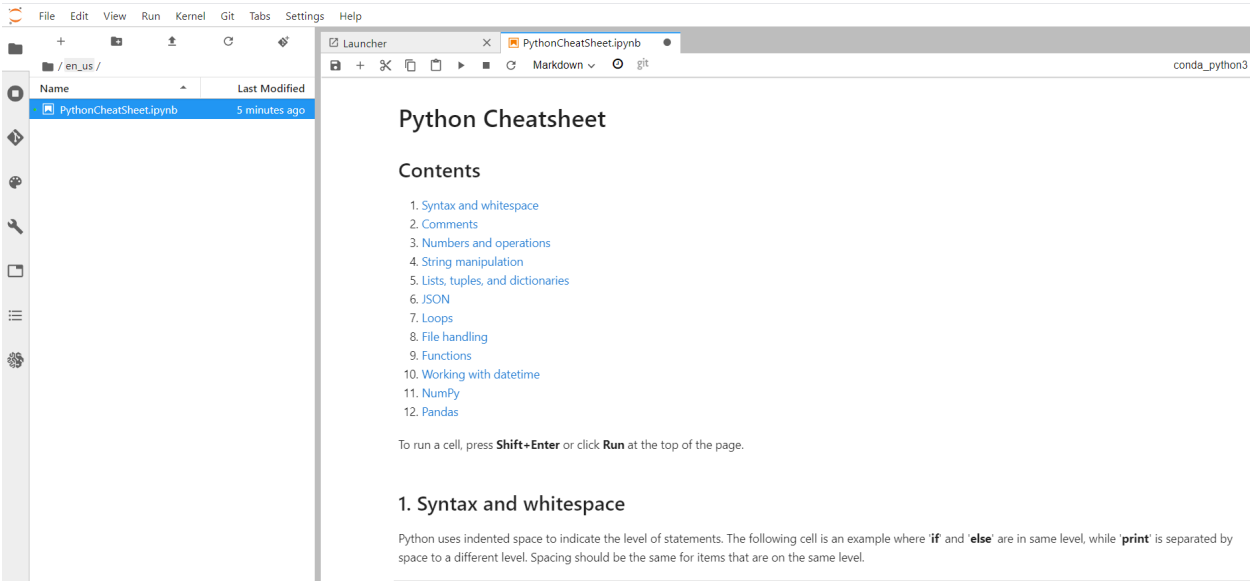
Creating Notebook Instance



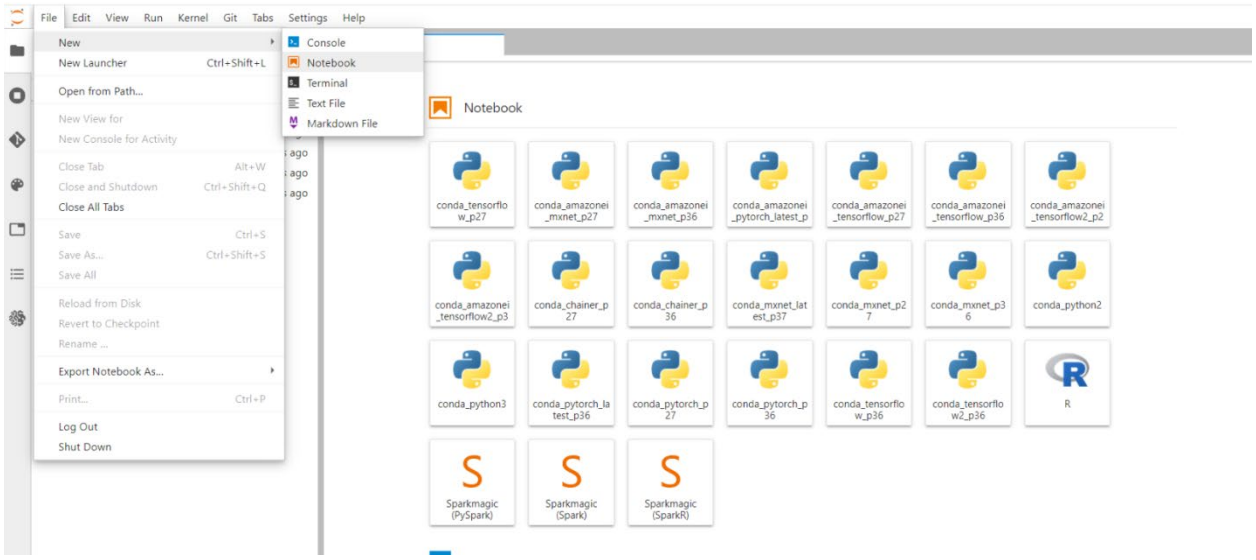
Notebook Successfully Created



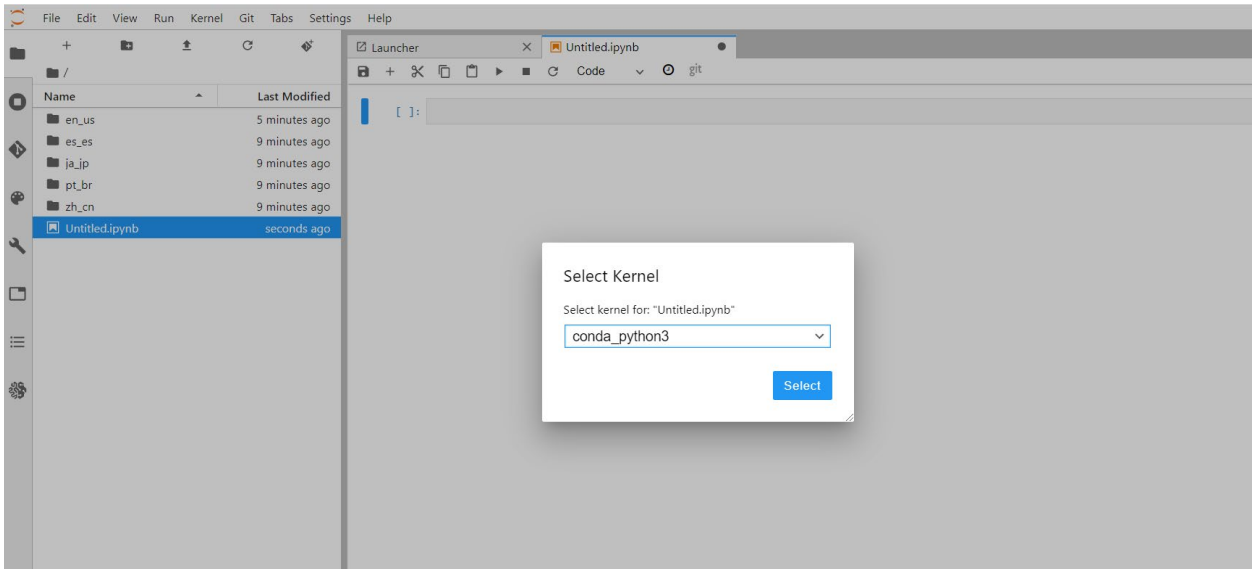
Jupyter Lab for the Notebook



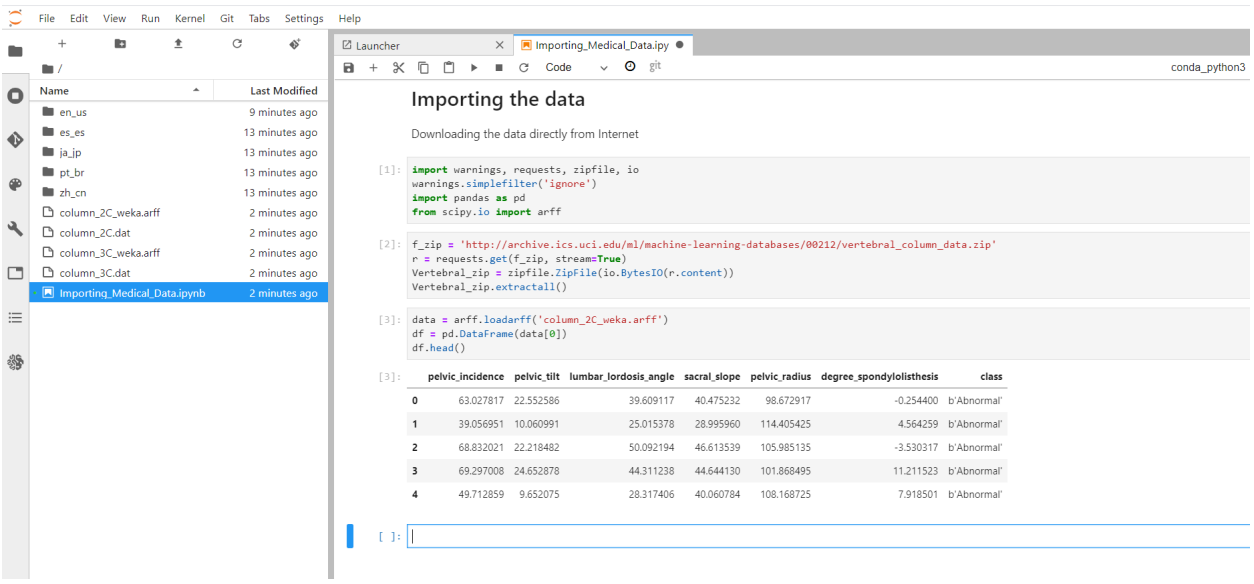
Ipynb files opens in a new window in Jupyter Lab



Creating New Notebook

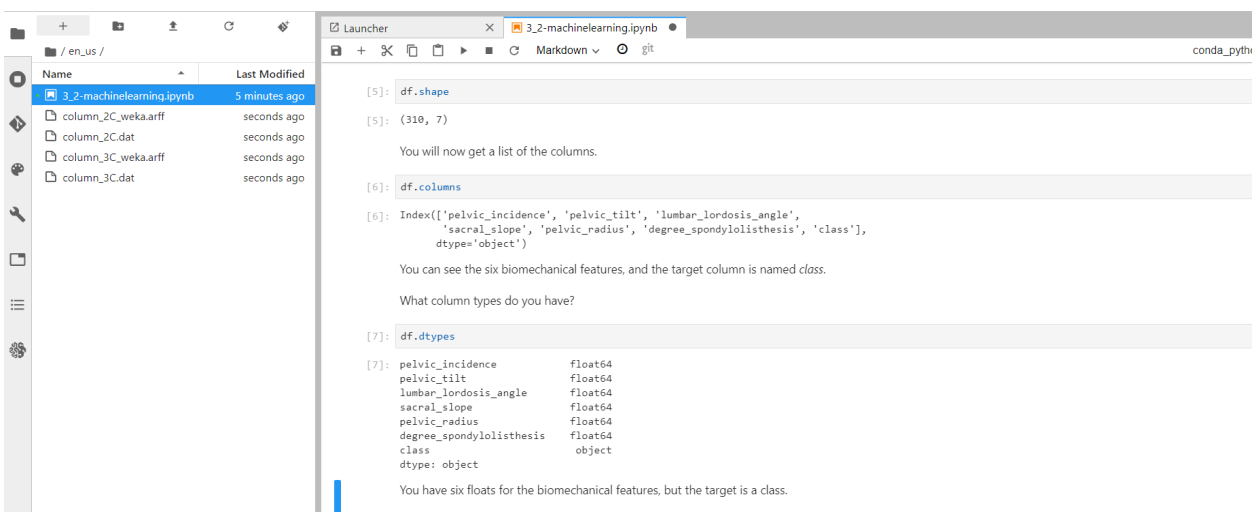


Selecting the Kernel for New Notebook



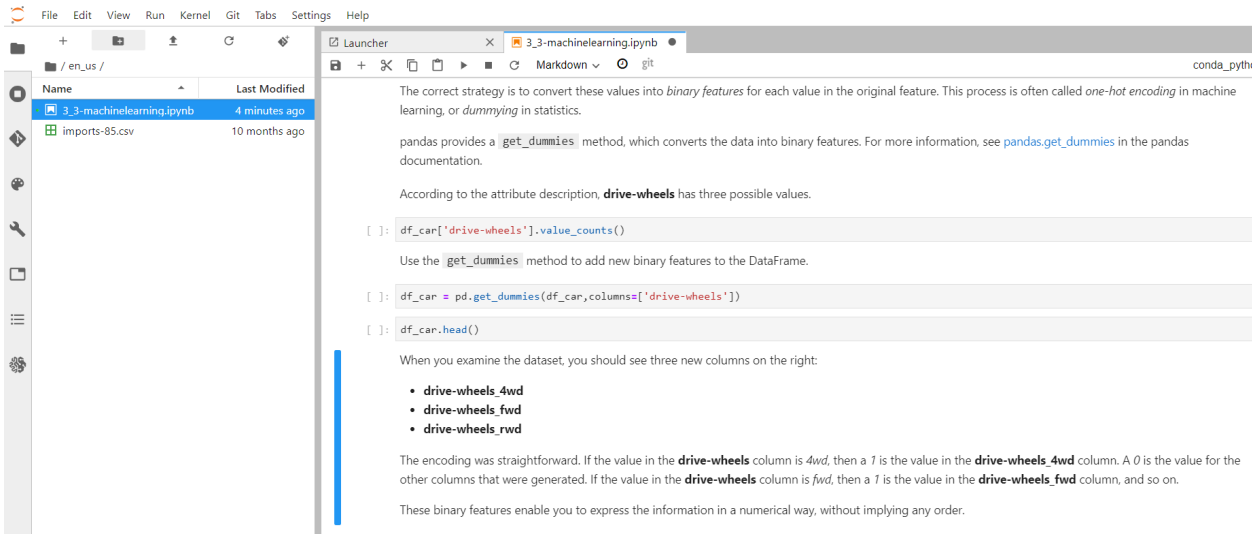
Working on New Notebook (Downloading and Importing Data)

2. Exploring Data using Pandas, Matplotlib



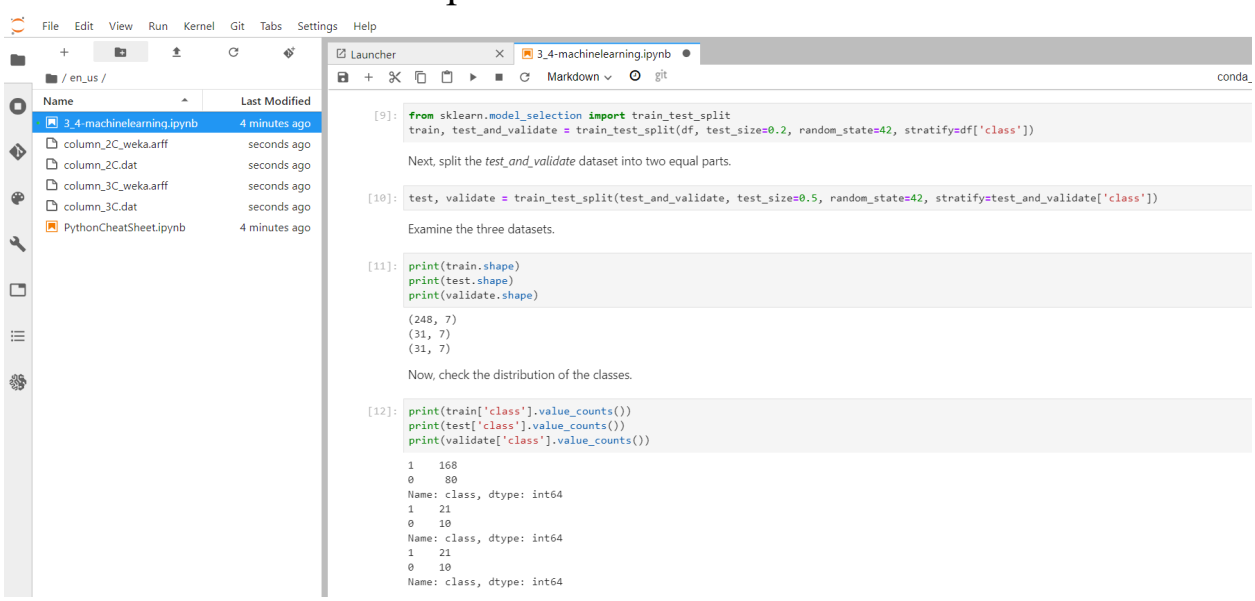
Exploratory Data Analysis

3. Feature Engineering
   - Cleaning Data
   - Dealing with Outliers and Selecting Features
   - Encoding Categorical Data

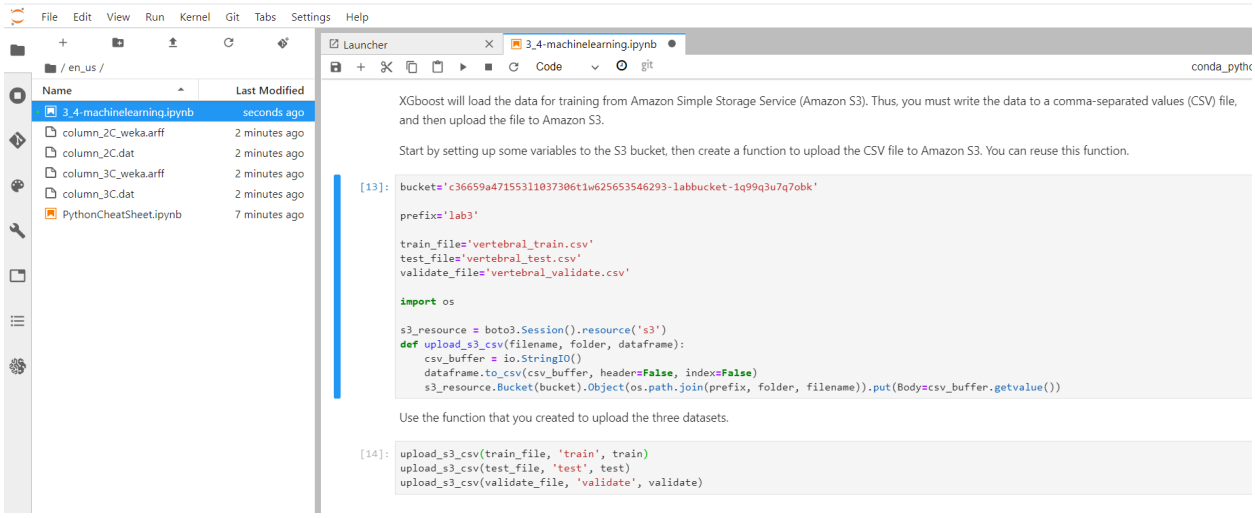


Encoding Categorical Data using Pandas (get_dummies) – AWS SageMaker Notebook

4. Training
   - Train / Test / Validation Split

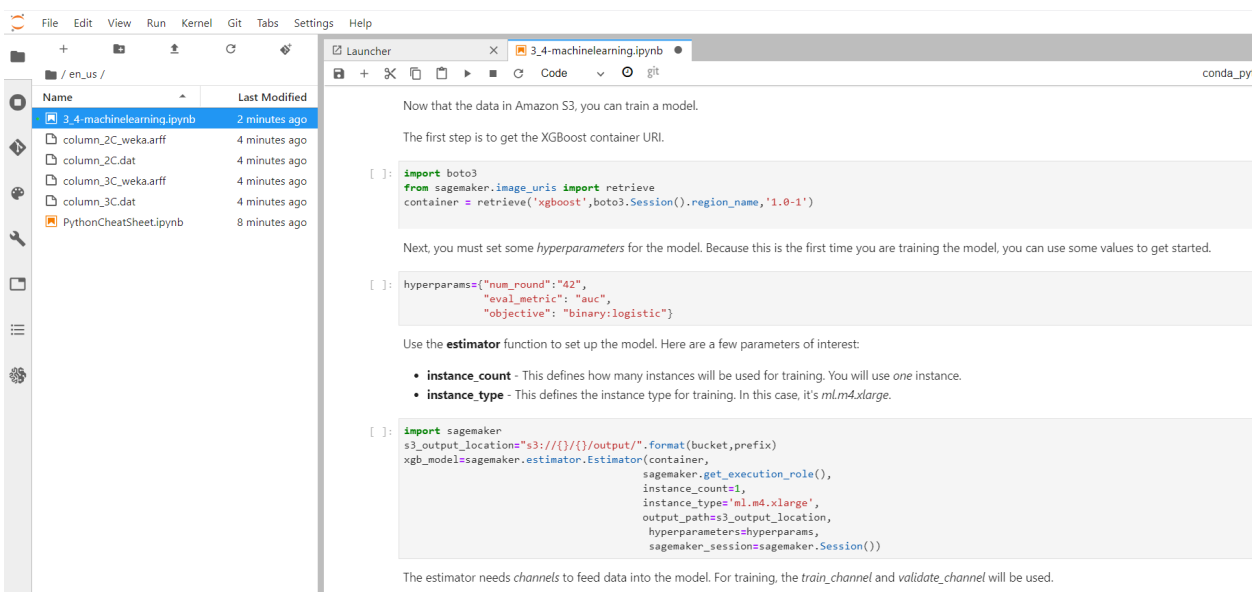


- Uploading Data to S3 Bucket for Model Building



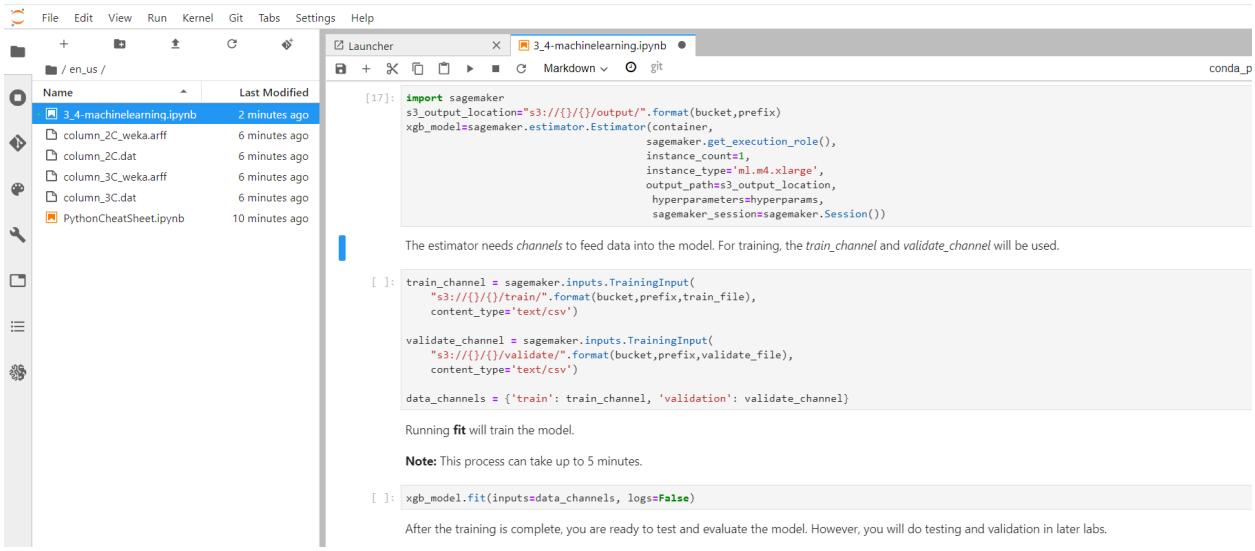
XGBoost Model loads data from S3 bucket (uploading data to S3 bucket)

- Training the Model



XGBoost Model Retrieved from Container and setting up

- Fitting the Model



Creating Channels and Fitting the Model