Getting Started

The preferred method of executing the notebooks is locally with Anaconda or in the cloud using Azure Notebooks.

Using Anaconda

Download notebook zip file and extract its contents.

Download Anaconda and follow the installation instructions to install the software.

After installation is complete, the run the *Jupyter Notebook* program from the Start Menu, browse to the location to which the notebooks were extracted, and open the desired notebook.

Near the beginning of most notebooks, one cell contains code necessary to install third-party libraries using pip. Because some of these libraries require non-Python code to be compiled, this step can fail in Windows. An alternative method of installing the libraries using the Anaconda Prompt and conda is provided.

To install all the required libraries for all the notebooks at once, open the Anaconda prompt and execute the following command.

conda install -c conda-forge --yes pandas lxml requests xlrd geopandas
seaborn statsmodels beautifulsoup4 textblob tinydb folium python-docx plotly
boto3

After executing the conda install command, execute the following in Anaconda prompt.

pip install requests_oauthlib squarify dash dash-renderer dash-htmlcomponents dash-core-components

These installation commands have been verified on Windows 10 64-bit and may not work with other versions of Windows.

Using Azure Notebooks

Note that while most of the content of the notebooks can be run in Azure Notebooks, the Python dashboard code in Unit 7 will not run correctly.

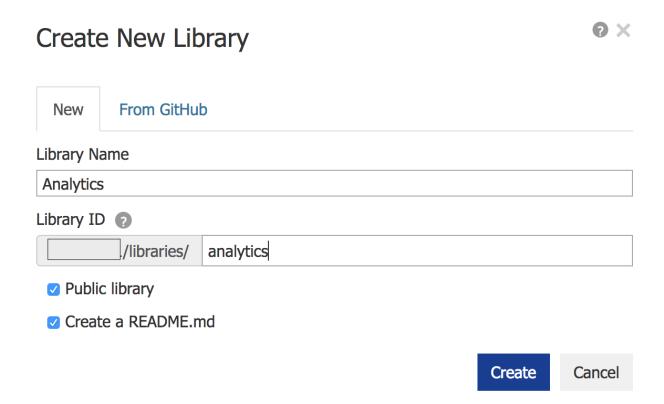
To begin, download notebook zip file.

Sign into Azure Notebooks with a Microsoft account - a CSCC email address will work. Once logged in, select *Libraries* from the menus.

Libraries What's New Status Help

Select Libraries from the Menu

On the *Libraries* screen, click the +*New Library* button. Enter a library name an a library ID. Click the *Create* button.



New Library Details

To upload the notebook zip file, click the + button. In the pop-up window, select the *From Computer* tab. Click the *Choose Files* button, select the previously downloaded notebook zip file, and click the *Upload* button. Depending on the speed of your Internet connection, the upload could take some time.

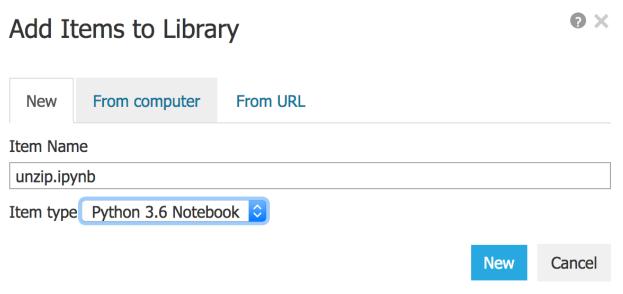
Add Items to Library



New	From computer	From URL	
	les from your local c file at a time.	omputer to upload to your library. You can choose i	more
noteboo	oks.zip		
Choose	files		
		Upload Car	icel

With the zip file uploaded, we now have to extract its contents. To do this, we'll use a new notebook. Click the + button again, enter an item name like "unzip" and select "Python 3.6" as the type. Click *New*.

Add Items



Create New Notebook

Click the newly created notebook file to open it. In the first cell, enter the following and execute it by pressing SHIFT and ENTER.

!unzip *.zip

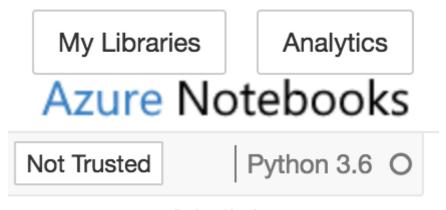
This will take a few minutes. Execution is complete when In [*] is replaced with In [1]. Once complete, close the notebook by closing the browser tab. Return to the library page and refresh it. You should now see a new folder created from the zip file; click the folder name to open it.

To open a notebook, double-click on the notebook file.

Property	- Preview	Edit File
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Search Show hidden items		
FILE NAME ❤	FILE TYPE	MODIFIED
01-Requirements-Data-Identification.ipynb	Notebook	Apr 22, 2018
2 02-Clean-Merge.ipynb	Notebook	Apr 22, 2018
3-Exploration.ipynb	Notebook	Apr 22, 2018
04-Trends-Models.ipynb	Notebook	Apr 22, 2018
05-Text-Analysis.ipynb	Notebook	Apr 22, 2018
06-Visualization.ipynb	Notebook	Apr 22, 2018
07-Reporting-Dashboards.ipynb	Notebook	Apr 22, 2018
08-Automation.ipynb	Notebook	Apr 22, 2018
	Folder	
	Folder	
Showing 1 to 10 of 12 search results (1 hidden)	<	1 2 >

List of Notebook Files

After opening a notebook, make sure it is running with Python 3.6 or later by checking the upper, right corner of the notebook page.



Python Version

To change the Python version, select *Kernel*, *Change kernel*, and *Python 3.6* (or a new version).

ear the beginning of most notebooks, one cell contains code necessary to install third-party libraries using pip.					
These cells should complete successfully in Azure Notebooks.					