Pandas for Business

Introductory Training Session

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Technical Pre-requisites

1. Laptop and Charger
2. Python Installation - version 3.9 or 3.10
3. Pandas Installation
4. Access to Jupyter Notebook
5. Beginner knowledge of how to navigate a Jupyter Notebook

NB: This document contains detailed guidance on performing the above steps before the Training Session - please follow these if you have no prior experience with Python.
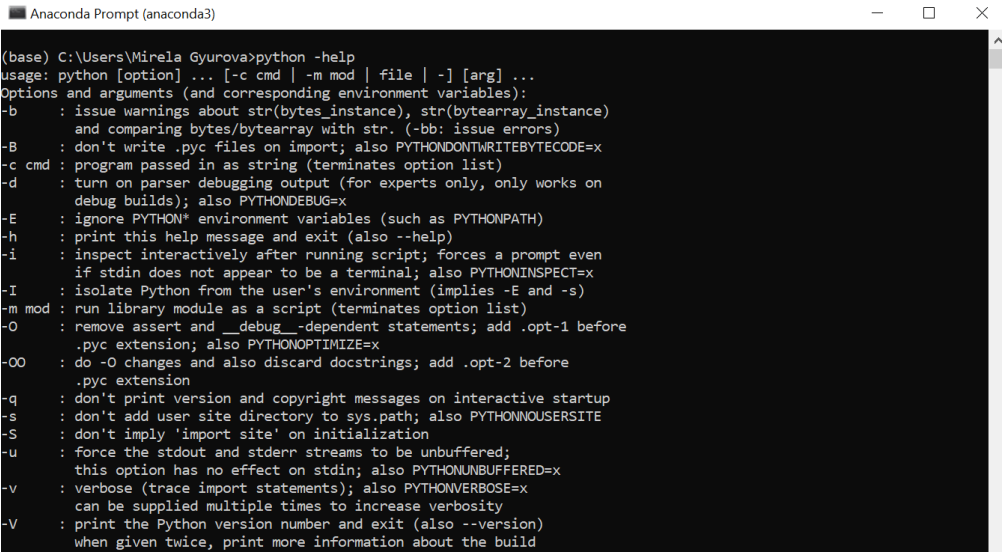
Python Installation - Instructions

1. Python for Windows

- Install Python version 3.9 via **Anaconda Distributor**
- Follow this link - [Anaconda | The World's Most Popular Data Science Platform](#)
- Running the installer should be straightforward
- We recommend installing under your username, rather than as administrator
- When offered the choice of adding Python folder to the **system PATH**, select **Yes**
- At the end of the installation, try launching the **Anaconda Prompt** from the search bar - it will look like this:
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- Your installation should include access to **Anaconda Prompt**, **Jupyter Notebooks** and **Spyder** applications
- To check that your installation was successful, launch an **Anaconda Prompt** (a black window) and type `python -help`, then hit `Enter`
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- If you see the official manual page for Python on the prompt (image above), congratulations, you have successfully installed Python!

2. Python for Mac

- Install Python version 3.9 via **Anaconda Distributor**
- Follow this link - [Anaconda | The World's Most Popular Data Science Platform](#)

- Running the installer should be straightforward - do not get overwhelmed by the pop-up windows
- Select **OK** on each step of the installation process - see images below:
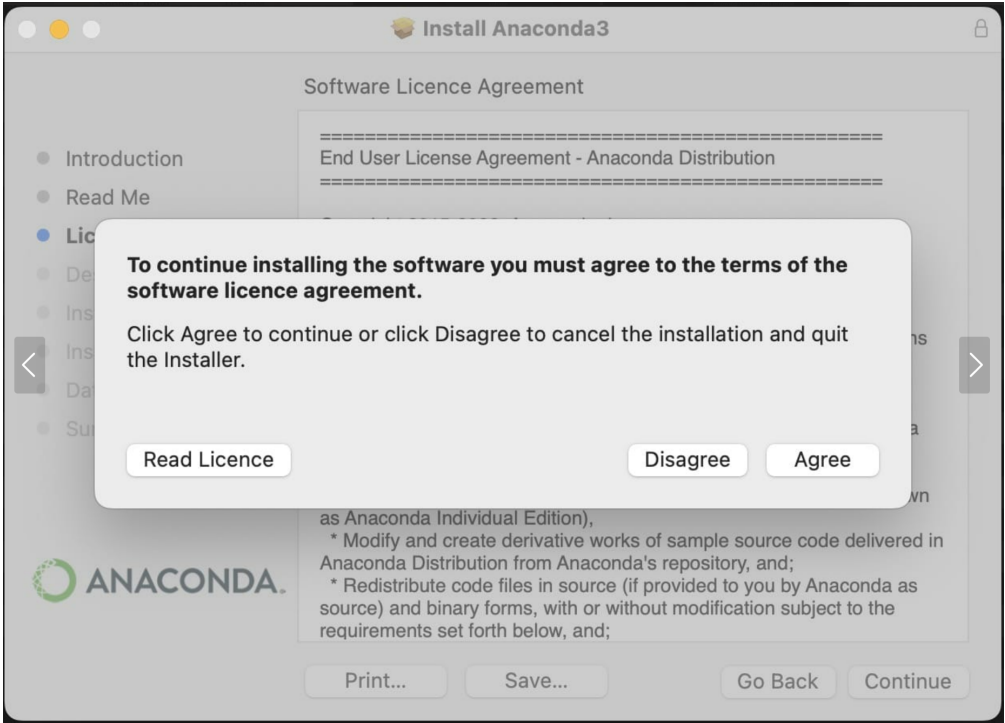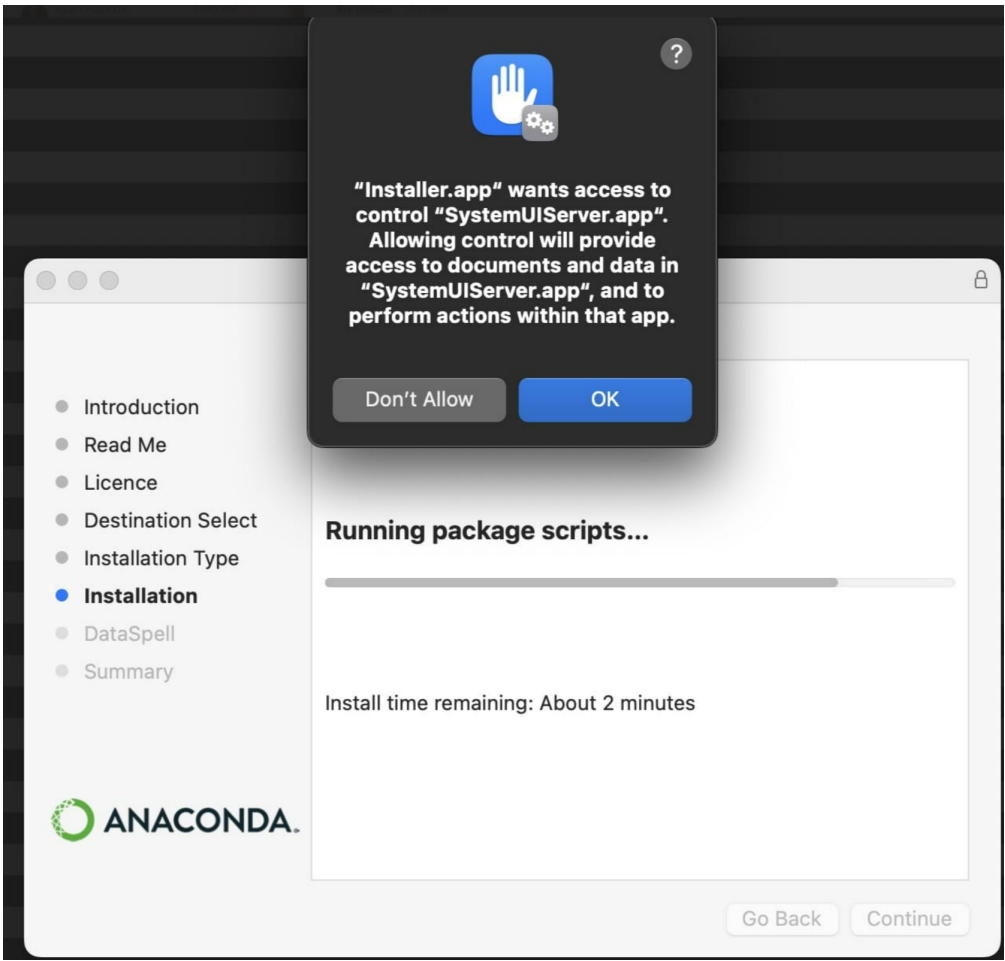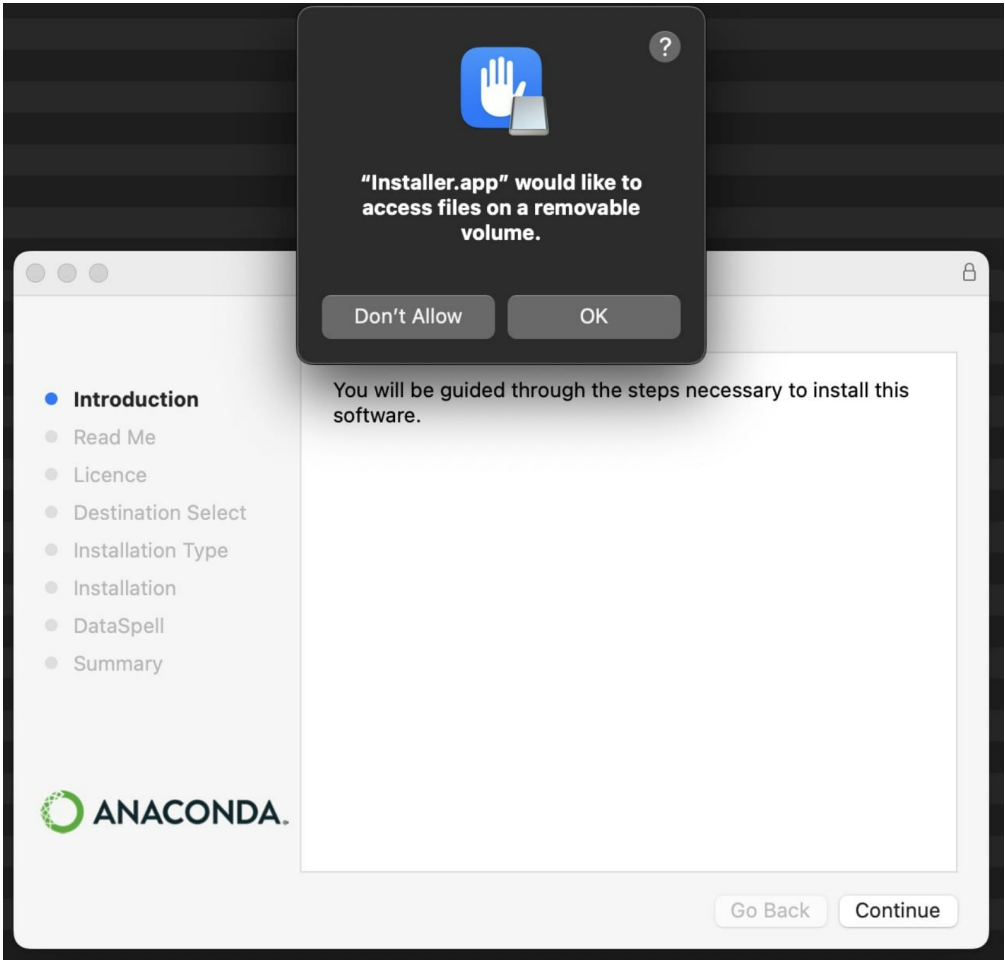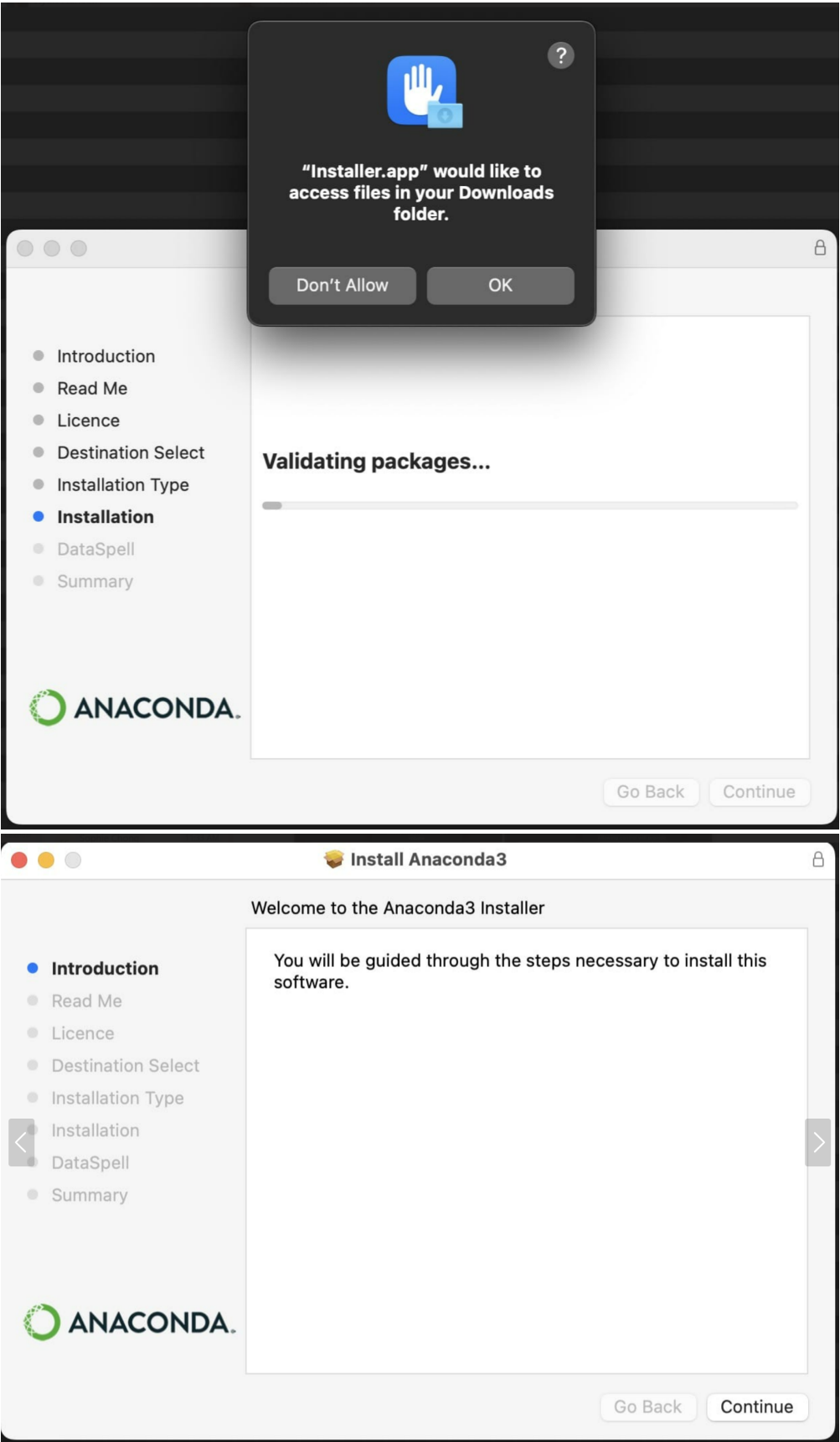
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- At the end of the installation, try launching the **Anaconda Prompt** from the search bar - it will look like this:

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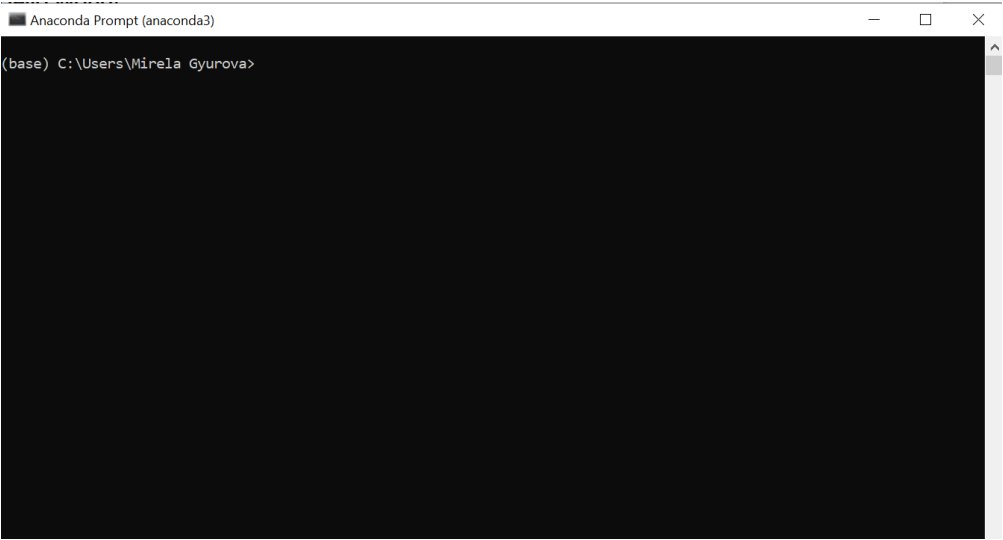
Pandas Installation

- open an **Anaconda Prompt** from your search bar on the desktop
- regardless of whether on Windows or Mac, in the prompt type `pip install pandas` and hit `Enter`
- close the Anaconda Prompt

Access to Jupyter Notebook - Instructions

- Python can be run in many applications (also known as *interpreters*)
- The training session will be held in **Jupyter Notebook**
- Create a folder **pandas_for_business** locally in the C-drive on your computer
- Click on the search bar of your computer and search for **Anaconda Prompt**
- In the black window, write `cd C:\Users\Mirela Gyurova\...\pandas_for_business`, replacing the example folder path with the path of your folder

- if you work on Mac, in the **Anaconda Prompt** run the following code - it will both create and navigate into your `pandas_for_business` folder:

```
cd ~
mkdir pandas_for_business
cd pandas_for_business
```

- the `cd` command stands for *change directory* and allows you to navigate inside of your folder via the Anaconda Prompt
- the `mkdir` command stands for *make directory* and allows you to create a folder via the Anaconda Prompt
- Next, in the Anaconda Prompt, write `jupyter notebook` - this will spin up a Jupyter notebook in your web browser, where you can read and write python code
- **NB: Once you have spun up a Jupyter Notebook on the browser, do NOT close the Anaconda Prompt - this will kill your Jupyter Notebook session and you will lose any unsaved changes**
- Once Jupyter Notebook is open, it will look like so:
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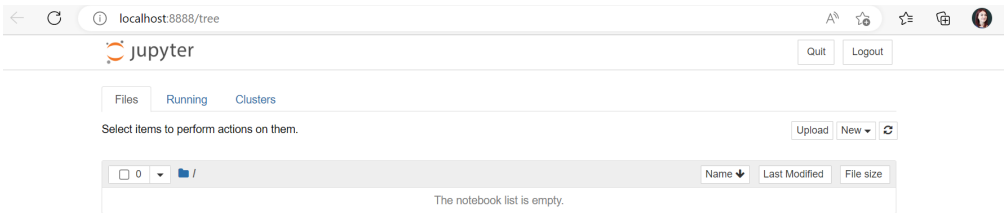
Jupyter Notebooks - First Steps

- from the Jupyter Notebook Home Page (snip above), click on **New** and select *Python3 (ipykernel)* - this will create an empty notebook
- Jupyter Notebooks consist of **cells** of 2 main types - *Markdown* and *Code*
- The file will initially contain a single empty cell:
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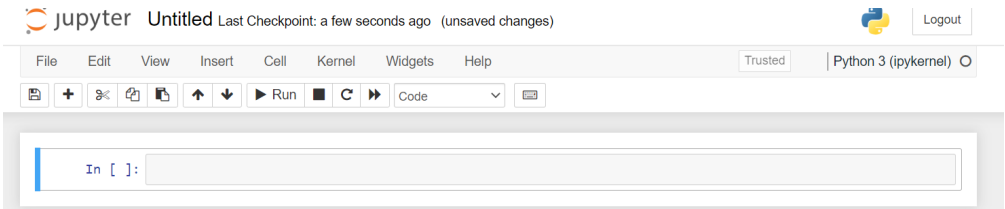
- Cells can be in one of 2 modes - **edit** and **command** - **edit** allows us to write in the cells, **command** allows us to exit the cell and redirect to another one
- cells with a green ribbon are in **edit** mode, and with blue ribbon - in **command** mode
- Below are some useful shortcuts:
  - **double-click** on any cell to switch it to edit mode
  - to execute a cell, click on **Ctrl + Enter** - this will run the cell and change its mode to command (i.e. it will go from green to blue)
  - to switch from edit to command mode without running the cell, press the **Esc** button
  - to insert a cell under your current one, ensure you are in command mode, then press **B**
  - to insert a cell over your current one, ensure you are in command mode, then press **A**
  - to delete a cell, ensure you are in command mode, then press **DD**
  - to change the type of a cell, navigate to control pane at the top and in the drop-down, select **Markdown or Code**
  - New cells will always default to being of type Code