

Course Overview





PLEASE DON'T SKIP THIS LECTURE







- Course Overview Lecture
 - Useful tips for going through the course
 - How to get help during the course
 - Advice on how to approach the course
 - Where to find the course notebooks
 - How to use the student chat channel





- Use the gear setting to speed up or slow down videos.
- Use the Udemy App to download videos of course lectures.
- Make sure to make use of QA Forums, lots of previous discussion available there!





- Double check against course notebooks
- Quick Google or StackOverflow Search
- Search the QA Forums in the course
- Check out FAQ lecture
- Submit new question in QA forums
 - Details on what you've tried
 - Screenshot of error or code





- Platform level issues please email:
 - support@udemy.com
 - Video playback issues
 - Certification issues
 - Payment issues





- Best way to approach the course is review the notebooks along with the video
 - Beginners: Read extra notes in the notebook along with the video guide.
 - Experienced: Read the notebooks to see if you only need to review certain parts of the video lecture.





- Check your Automated Welcome message for the link to the notebooks.
- Later on we will review how to download and open them Running Python Code lecture.
- Link is also in the FAQ lecture.





- Use the link in the automated welcome message to join our discord server.
- The automated welcome message also includes a link to a YouTube video describing how to use and log in to the chat server.



- Remember, purpose of chat channel is to connect students with other students.
- Technical questions related to course material are best suited for the QA forums.



THANK YOU!





Python 2 vs Python 3





- Choosing between Python 2 vs 3 used to be a very difficult decision for newcomers to the Python programming language.
- Many companies still had legacy Python 2 code to be maintained.



- This course was initially released teaching both versions of Python (2 and 3).
- The versions were similar enough that it was easy to learn both simultaneously.
- Now every major external python package has been updated to support Python 3!



- This course now focuses solely on Python 3.
- All the code, notebooks, and videos have been updated to Python 3.
- If need be, going back to Python 2 syntax is a very easy jump once you know Python 3.



- Python 3 is the future of Python.
- We use Python 3 for this course.
- Old notebooks are available in case you need Python 2 information.
- Let's get started by installing Python 3!



Command Line Crash Course





- Before we install anything, its important to have a very quick overview of how to work at the command line.
- This allows you to programmatically move through your computer's directories.



- We will cover:
 - Find your current directory
 - Listing all files in a directory
 - How to change directory
 - How to clear the command line screen





MacOS and Linux UsersJump to:

Windows UsersJump to:





Python Overview





- In this lecture we will do a brief overview of what Python is, why choose Python for programming, and what you can do with Python.
- This lecture in particular is geared towards people new to programming.



Complete Python Bootcamp

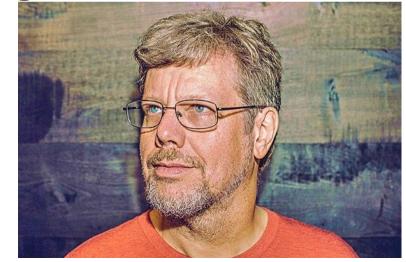
- Brief History of Python
 - Created in 1990 by
 Guido van Rossum
 - Python 3 released in 2008







- Brief History of Python
 - Specifically designed as an easy to use language
 - High focus on readability of code







- Why Choose Python?
 - Designed for clear, logical code that is easy to read and learn.
 - Lots of existing libraries and frameworks written in Python allowing users to apply Python to a wide variety of tasks.



- Why Choose Python?
 - Focuses on optimizing developer time, rather than a computer's processing time.
 - Great documentation online:
 - docs.python.org/3





- What can you do with Python?
 - This course first focuses on "base"
 Python, which consists of the core components of the language and writing scripts and small programs.
 - Later we begin to learn about outside libraries and frameworks that greatly expand Python's capabilities.





- What can you do with Python?
 - Automate simple tasks
 - Searching for files and editing them
 - Scraping information from a website
 - Reading and editing excel files
 - Work with PDFs
 - Automate emails and text messages
 - Fill out forms





- What can you do with Python?
 - Data Science and Machine Learning
 - Analyze large data files
 - Create visualizations
 - Perform machine learning tasks
 - Create and run predictive algorithms





- What can you do with Python?
 - Create websites
 - Use web frameworks such as Django and Flask to handle the backend of a website and user data
 - Create interactive dashboards for users





- Once you understand base Python and begin working with a few libraries, you'll quickly begin to see the vast potential Python has for your own projects!
- Let's get started with setting you up for the course!



Windows Command Line





MacOS and Linux Command Line





Installing Python





- There are many ways to run Python!
- Later on we'll explore the difference between running a Python .py script or running Python code in a notebook environment.
 - Either way, we will still want to install Python!





- Installation Lecture:
 - Install Anaconda Distribution for Python.
 - Anaconda installs Python and an easy to use development environment and navigator launch tool.
 - o Briefly run Jupyter Notebook.
 - Explore "no install" online options.





- Quick Note:
 - There are now many online "no install"
 Python environments that can run in the browser (as long as you have an internet connection).
 - While not officially part of the course, we will give you a brief tour of these online "no install" options at the end.





- To install Python we will use the free Individual Anaconda distribution.
- This distribution includes Python as well as many other useful libraries, including Jupyter Notebook environment.
- Anaconda can also easily be installed on to any major OS, Windows, MacOS, or Linux.





www.anaconda.com/downlo ads





- Free "No Install" Options:
 - jupyter.org/try
 - Google Collab Online Notebooks
 - Repl.it
 - Google Search:
 - "Python Interpreter Online"





- Free "No Install" Options:
 - Hard to upload your own code,data, or notebooks!
 - May not save your code in the free version!
 - Not officially part of this course or supported by this course!





Running Python Code





- There are several ways to run Python code.
- First let's discuss the various options for development environments
- There are 3 main types of environments:
 - Text Editors
 - Full IDEs
 - Notebook Environments





- Text Editors
 - General editors for any text file
 - Work with a variety of file types
 - Can be customized with plugins and add-ons
 - Keep in mind, most are not designed with only Python in mind.

Most popular: Sublime Text and Atom





- Full IDEs
 - Development Environments designed specifically for Python.
 - Larger programs.
 - Only community editions are free.
 - Designed specifically for Python, lots of extra functionality.

Most popular: PyCharm and Spyder





- Notebook Environments
 - Great for learning.
 - See input and output next to each other.
 - Support in-line markdown notes, visualizations, videos, and more.
 - Special file formats that are not .py

Most popular is Jupyter Notebook.





- Most important note:
 - Development Environments are a personal choice highly dependent on personal preference.

Choose whichever development environment you prefer!





- Let's now explore how to run Python code:
 - First with an editor to create a .py script and run the file at your command line.
 - Then with a Jupyter Notebook.

First let's download sublime text editor: www.sublimetext.com





Course Notebooks





Let's show you how to get the course notebooks!

Go to the resource link:

https://github.com/Pierian-Data/Complete-Python-3-Bootcamp

