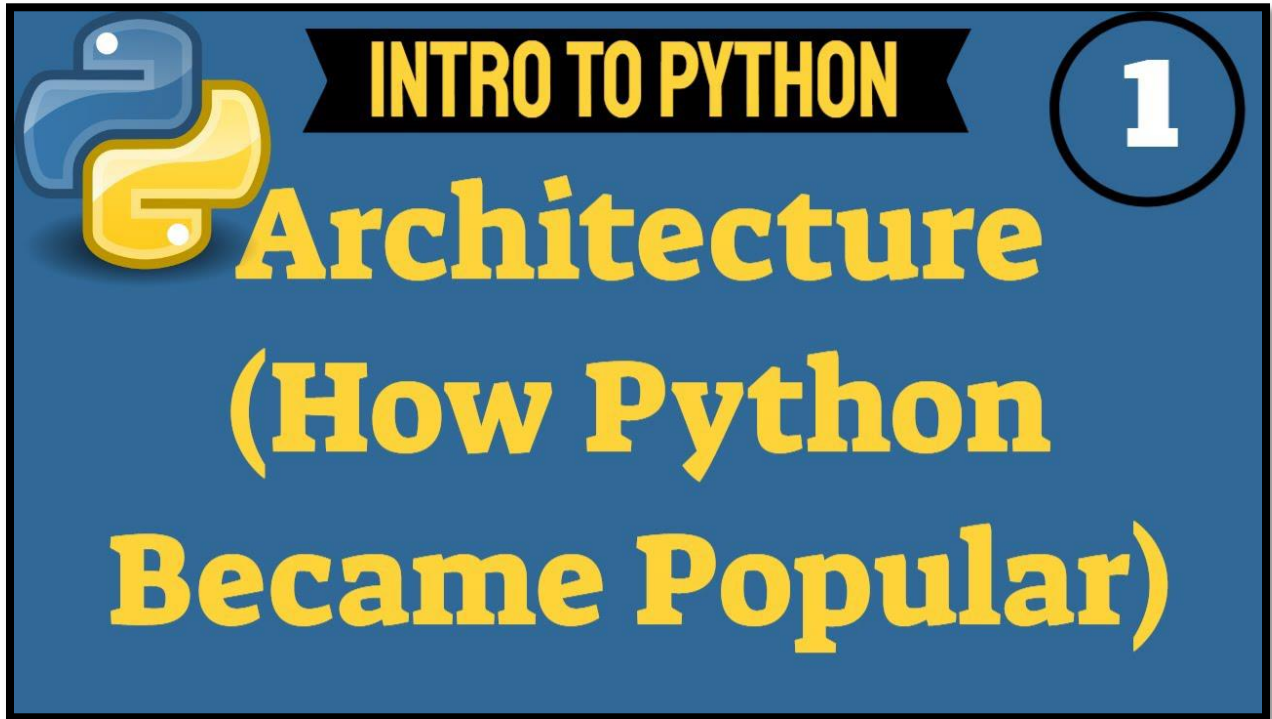


Intro To Python Architecture & Why Python Became Popular



Python Video https://www.youtube.com/watch?v=ZZ49uTiBxYk&list=PLfp-cJ6BH8u8iMtCoea_mWkGesJGQG-vZ&index=1

Python Architecture

In this session, I will talk about 2 things: the Architecture for Python and How Did Python Become Popular.

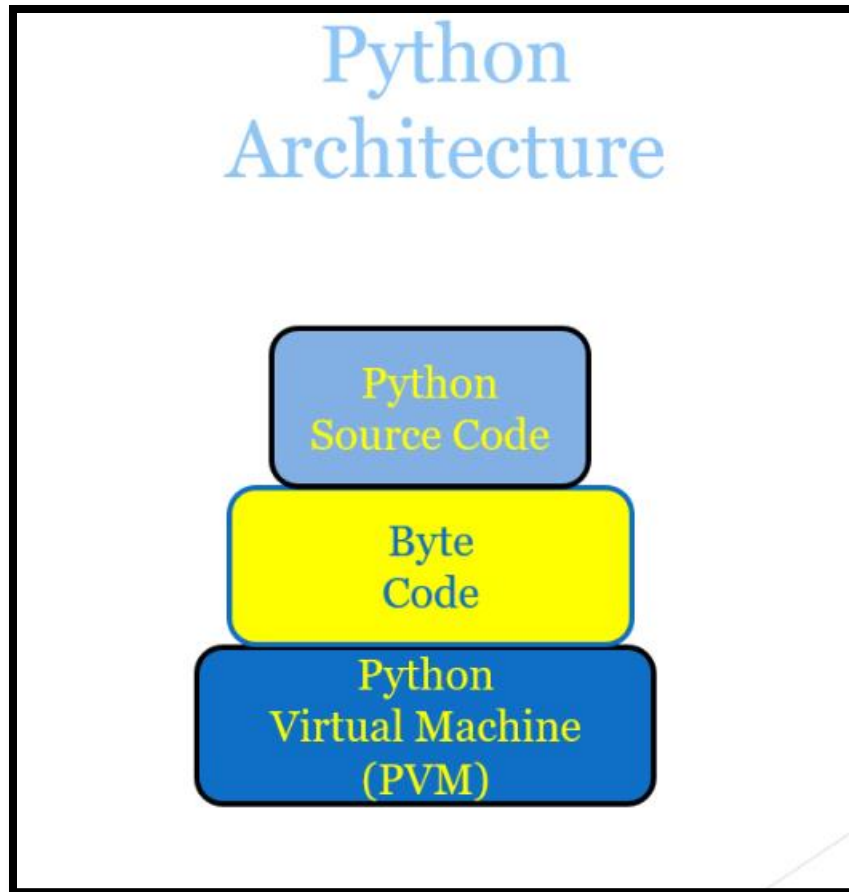
Python

- ▶ Python Architecture
- ▶ How Did Python Become Popular

The Architecture for Python include 3 main parts: the Source Code, Byte Code, and Python Virtual Machine also known as PVM. Source Code is the code we write in an IDE. IDE stands for Integrated Development Environment and it helps us to develop our program. The Source Code is a list of commands or collection of code that has syntax for Python. It has a .py extension When we are finished writing our source code then the next step is to execute the source code. Each line is checked to make sure there are no errors.

If there are no errors, then the source code is converted into byte code. The byte code is platform independent, efficient, and represents our source code as instructions in a particular format. However, there is a difference between source code and byte code. The source code is a high-level language and byte code is a low-level language. High-level languages are used to create software and Test Scripts like Java and C#. A low-level language contains basic instructions.

For Python, the byte code contains instructions executed by the PVM. As soon as the source code is converted to byte code then the byte code is sent directly to the Python Virtual Machine (PVM). The PVM is an emulator and operates as the runtime engine of Python. Just like the CPU executes machine code that's how the PVM executes byte code.



How Did Python Become Popular

Now, how did Python Become Popular? One of the reasons Python is popular because of the rise of AI, Machine Learning, and Data Science. Most of us know AI is Artificial Intelligence. It is intelligence carried out by machines. Machine Learning is the study of computer algorithms. Data Science is the study of getting insights and information from data. Do you see the connection? With all of this intelligence, algorithms, and information; it has to be processed. Python is a good language because it has built in modules to process that request.

Another reason Python is popular because the syntax is concise and easy to pick up. Some schools are starting to use Python as the first language to introduce programming. For Selenium Automation in Python, more and more testers are interested because they can write their Test Scripts with easy to pick up languages and syntax. If you are interested in Python, subscribe to my YouTube channel, click the bell icon. Also, follow me on Twitter, connect with me on LinkedIn and Facebook. I will see you in the next session where I introduce Python by installing Python and installing PyCharm which is the IDE.

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