QEdge®
TECHNOLOGIES

Our Experience
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CLASSROOM TRAINING

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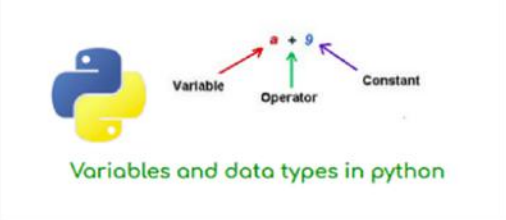
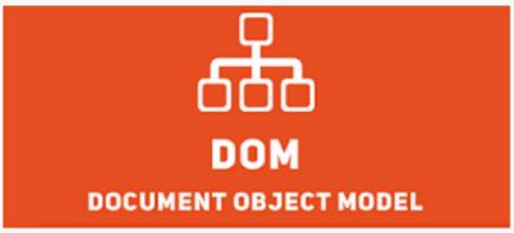
python

Full Stack

Skills Covered





Python Full Stack Development and Data Analysis and Visualization

Module 1: Introduction / Demo

1) How is Python? (History)
2) What is Python?
3) Why is Python?
4) Where is Python?

Module 2: Development Setup

1) Install Python
2) Install Git
3) Install PyCharm
4) Create GitHub repository
5) Virtual Environment Setup

Module 3: Variables and Datatype

1) Variable
2) Data types: String, Integer, Boolean, Float
3) None Type
4) Data Structure: List, Dictionary, Tuple, Array, Set

Module 4: Statement

1) Conditional Statement
2) Looping Statement
3) Nested Loop
4) Control Looping
5) Break and Continue

Module 5: User Defined Function

1) Types of Functions (Function with/without Parameter and/or return value)
2) Unnamed and Named Parameters
3) Create User Defined Function
4) Anonymous Lambda Function

Module 6: Generator and Decorator

1) Iterator
2) Generator
3) Closer Function
4) Nested Function
5) Decorator

Module 7: OOPs with Python

1) What is OOPs
2) OOPs implemented in Python
3) Inheritance and Polymorphism
4) Operator and Method overriding
5) Create Class and Core Python Object
6) Class Attributes

Module 8: Exception Handling and Built in Functions

1) Basic Exception Handling
2) Try...Except...Else...Finally
3) Debugging Errors
4) Debugging with PyCharm
5) Built in functions: String Related Functions, Integer Related Functions, Data Structure Related Functions, Common Functions
6) Built in Modules: OS related Module, Mathematical Modules, Asynchronous Modules, Security Modules, Datetime Modules, Common Modules

Module 9: File Systems and File Handling

1) Write to a File
2) Read from a File
3) Check File and Copy File
4) Pickle Module
5) Working with Directories

Module 10: Threading and Multithreading

1) What is threading
2) What is Multithreading?
3) Different ways of Creating Threads
4) Thread Synchronization
5) Locks and Semaphores
6) Thread Communication

Module 11: Networking

1) Downloading Webpage Content
2) Downloading Image from Web
3) Socket Programming – Client and Server
4) Sending Emails

Module 12: Data Operations using Python

1) Create a database
2) Create a table
3) CRUD operations – Create, Read, Update, Delete

Module 13: Regular Expressions

1) Regular Expression Module
2) Regular Expression Methods
3) Quantifiers
4) Special Characters

Module 14: Python Web Frameworks

1) What is Framework?
2) Micro Framework
3) Full stack Framework
4) Django Overview
5) MVT Architecture of Django

Module 15: Django Start Project and App Models

1) Create Django Project
2) Create Project Application
3) Create Database Schema
4) Generate database and table from Django
5) One2One, One2Many, Many2Many relationships

Module 16: Django Admin and Views

1) Overview of default Django Admin site
2) Add models on Admin Page
3) User Permissions and Groups
4) Overview of Django Views
5) Create Django API endpoint

Module 17: Django Project Deployment

1) How to deploy Django Project using Docker
2) How to deploy project on AWS and overview of relative AWS services.

Module 18: HTML Crash Course

1) Introduction to HTML
2) HTML Tags
3) HTML Lists
4) Divs and Span
5) Attributes
6) HTML Tables
7) HTML Forms
8) Exercises

Module 19: CSS Crash Course

1) Introduction to CSS
2) CSS Colors
3) CSS Backgrounds and Borders
4) CSS Selectors
5) CSS Specificity
6) CSS Fonts
7) CSS Box Model
8) Exercises

Module 20: Javascript Crash Course

1) Introduction to JS
2) Connecting JS
3) Control Flow in JS
4) While loop and for loop in JS
5) Functions in JS
6) Arrays in JS
7) Objects in JS
8) Exercises

Module 21: Document Object Model

1) Introduction to DOM
2) DOM Interaction
3) DOM events

Module 22: Bootstrap Crash Course

1) Introduction to Bootstrap
2) Buttons
3) Forms
4) Navbars
5) Grids

Module 23: jQuery Crash Course

1) Introduction to jQuery
2) jQuery Basics
3) jQuery Events

Module 24: Python Environment - Jupyter Notebook

1) Jupyter Notebooks Overview
2) Optional: Virtual Environments

Module 25: Data Analysis - Numpy

1) Introduction to Numpy
2) Numpy Arrays

3) Numpy Array Indexing
4) Numpy Operations
5) Numpy Exercises

Module 26: Data Analysis – Pandas

1) Introduction to Pandas
2) Series
3) DataFrames
4) Missing data and Groupby
5) Merginig Joining and Concatenation
6) Operations
7) Data Input and Output
8) Pandas Exercises

Module 27: Data Visualization - Matplotlib

1) Introduction to Data Visualization
2) Introduction to Matplotlib
3) Matplotlib plots Methods - Functional and Object Oriented
4) Subplots
5) Matplotlib Excercises

Module 28: Data Visualization - Seaborn

1) Introduction to Seaborn
2) Distribution Plots
3) Categorical Plots
4) Matrix Plots
5) Grids
6) Regression Plots
7) Style and Color
8) Seaborn Exercises

Module 29: Data Visualization – Pandas Buit-in data Visualizaion

1) Introduction to Pandas Built-in Data Visualization
2) Pandas Data visualization Exercise

Module 30: Data Visualization Plotly and Cufflinks

1) Introduction to Plotly and Cufflinks
2) Plotly and Cufflinks

Module 31: Data Visualization - Geagraphical Plotting

1) Introduction to Geographical Plotting
2) Choropeth Maps
3) Choropleth Exercises

Module 32: Projects

1) Website Project using Python django
2) Data Capstone Project using Data analysis and Visualization

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QEdge has its own placement cell serve 365 days placement assistance with 150+ partner clients.

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The experts teach by lecturing and demonstrating.

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Selenium

Data Science

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Deep Learning & NLP

DevOps

aws

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