PYTHON FULL STACK COURSE

Language: Python
Duration: 60 hours (approx.)

Unit	Content
I. An Introduction to Python	- A Brief History of Python, Python Versions, Installing Python, Environment Variables - IDLE, Editing Python Files - Python Basic Syntax, Comments - The format Method - Numeric Data Types - Conversion Functions - Simple Output/Input, The % Method - The print Function - Conditional Statements and Logical Operator - The for Loop - The while Loop - break and continue
II. Python Collections	- Lists - Tuples - Sets - Dictionaries - Sorting Lists and Dictionaries - Copying Collections
III. Functions, Modules, Comprehensions	- Defining Your Own Functions - Parameters - Function Documentation - Keyword and Optional Parameters - Passing Collections to a Function - Variable Number of Arguments - Scope

		• Passing Functions to a Function • Lambda, Map, Filter, Reduce • Modules, Standard Modules - sys, math, time, The dir Function • List Comprehensions, • Nested List Comprehensions • Dictionary Comprehensions • Specialized Sorts
IV.	**Exception Handling, Regular Expressions, Class objects**	• The Exception Handling • Exception Hierarchy, • Handling Multiple Exceptions, raise & assert • Access Modes, Writing Data to a File, Reading Data From a File, Additional File Methods • Classes in Python • Creating Classes • Class Variables, Inheritance, Polymorphism • Simple Character Matches • Special Characters • Quantifiers • The Dot Character • Greedy Matches • Grouping, Matching at Beginning or End • Match Objects
V.	**An overview of Libraries in Python**	• Numpy • Pandas • Matplotlib • PySpark • Fast API • Beautiful Soup
VI.	**Framework**	• Django

Language: MS-SQL
Duration: 20 hours (approx.)

Unit	Content
I. Introduction to SQL	- What is SQL and MSSQL - DBMS vs. RDBMS - Installation of SQL Sever - SQL Data types - Comments - Constraints
II. DDL and DML Commands and Operations	- Create Database - Drop Database - Create Table - Drop Table - Truncate - Alter Table - Select - Insert - Update - Delete
III. Diving into SQL	- Aggregate Functions - SQL Clauses- - Where - Having - Group by - Order by - Union - Union all - SQL joins - Database Designing - Stored Procedures - Indexing

Language: HTML/CSS
Duration: 10 hours (approx.)

Unit	Content
I. Introduction to HTML, Basic html tags	• Installing code editor • HTML vs. HTML5 • Boilerplate (head and body tags) • HTML Tags and Attributes • Tags vs Element • Title, Link • Heading, Paragraph, Lists • hr and br tags • comments
II. Diving into HTML	• Images • Hyperlink • div and span tags • Table • Input tags • Select, Textarea • Button • Forms • Header, Footer, Main
III. Introduction to CSS	• What is CSS? • Difference between inline, internal and external CSS • Style Tag, Link Tag • Types of Selectors • Comments
IV. Diving into CSS	• CSS color • CSS background • CSS height / width • CSS box model • CSS border • CSS fonts • CSS display • CSS position

Language: JavaScript
Duration: 20 hours (approx.)

Unit	Content
I. Introduction to JS	- JavaScript introduction - Internal JS vs. External JS - Difference between let, var and const - JS Operators, Datatypes - Prompt and Alert - Array - Objects
II. Core Concepts of JS	- Conditional Statements - Loops - Functions - Array Methods - Map, Filter, Reduce
III. JavaScript DOM	- DOM Manipulation - JS Events
IV. Advanced JS	- Promises - Fetch API - Async/Await - ES6