

# Full Stack Web Development

## **Module 1: Introduction to Dynamic Web**

- Web Applications and the Request/Response Cycle
- Exploring the HyperText Transfer Protocol
- Understanding Browser Developer Mode

## **Module 2: HyperText Markup Language (HTML)**

- What is HTML?
- HTML Basics
- HTML Elements
- HTML Headings Paragraphs
- HTML Forms

## **Module 3: Cascading Style Sheets (CSS)**

- CSS Introduction
- CSS Syntax
- Margin, Padding, Border
- CSS Box Model
- CSS Responsive

## **Module 4: JavaScript**

- JavaScript - Overview and History
- JavaScript - In the Browser
- JavaScript - The Language
- JavaScript - Functions and Arrays
- JavaScript - Loops and Conditional

## **Module 5: Basics of Python Programming**

- Python Intro Syntax
- Python Variable, Data Types
- Python List, Tuple, Sets
- Python If Else
- Python Functions, Classes/Objects
- Object-Oriented Programming in Python

## **Module 6: Basics of SQL**

- How Databases Work
- Introduction to Structured Query Language (SQL)
- Demonstration: Basic SQL

## **Module 7: Django Data Models**

- Installing Django Locally
- Django Data Models
- Data Model Migration in Django
- Demonstration: Django Single Table Models

## **Module 8: Understanding Model View Controller (MVC)**

- Model View Controller in Django

## **Module 9: Django Views and Templates**

- URL Routing in Django
- Django Views
- Inside Django Views and HTML Escaping in Django
- Using Templates in Django
- Using the Django Template Language (DTL)
- Django Template Inheritance
- Reversing Django URLs

**Module 10: Django Generic Views**

- Forms, GET, POST, and HTTP
- Building HTML Forms
- Forms and Cross-Site Request Forgery (CSRF)
- CSRF Support in Django
- The POST Refresh Pattern
- Implementing POST Redirect in Django

**Module 11: Cookies and Sessions**

- Cookies in Browsers and Django
- Using Sessions in Django

**Module 12: Django Users and Authentication**

- Creating and Managing Users in Django
- Login and Logout URLs in Django
- Login and Views in Django

**Module 13: Form Objects in Django**

- Using Django Forms Capabilities
- Data Validation with Django Forms

**Project 1: Poll App in Django**

**Project 2: Autos CRUD Application**