Python Django (FullStack Development)

Prerequisites :

This course requires an understanding of:
- Stable Internet Connection

Output:
- Good Programmer.
- Able to think out of the box.
- Expertise in different Domain like Python, AWS, Python Django
- Create a fully functional Website with Django for your startup and business.
- Create your own personal portfolio site to showcase your projects to potential employers
- Package of Full Stack Developer with Django starts from 6LPA

What you will learn:
- Understand how using frameworks like Django will save your time in Web Development
- Learn how to use HTML & CSS to create beautifully styled sites
- Learn how to take advantage of Bootstrap to quickly style sites
- Use Javascript to interact with sites on the Front-End
- Understand HTTP requests and Create Fantastic landing pages
- Power of Python to code out your web applications
- Implement a full Models-Views-Templates structure for your site.
- Improve your web development and coding resume
- Create beautifully styled websites, Be able to connect Django to databases like SQLite and Postgres to help store and track data
- Understand Django basics like Function and Class Based Views, URL routing, Models, RestAPIs and much more!
- Deploy your website online with AWS, Heroku or on Any popular web hosting provider.

Course & Projects (Contains Maximum Topics of each Topic)

TOPICS	On Demand Live Lecture Duration
● Basics of Frontend to use in Django ● + ● Python ● + ● Python Django	● 30 - 35 Hours
Total:	**30-35 Hours**

Project	Project Name
● Project 1 ● + ● Working Phase 1	● Calculator ● Make Counter ● Change Background Automatically ● Concepts **UI of Ecommerce**
● Project 2 ● + ● Working Phase 2	● Speed Typing Test ● Start Working on user friendly Admin Panel ● Quiz App ● File Rename Tool ● **Functioning of Ecommerce UI**
● Working - 3	● **Database Connection + API + BackEnd**
● Final Project	● **Final Ecommerce Site**

HTML Basics(1.5 - 2 Hours)
- HTML Level One Introduction
- HTML Part One Basics
- Basic Tagging
- Paragraph, Styles, Formating, Quotation, Lists
- Color, Links, Images Divs and Spans
- Blocks & Inline, Ids, Classes, Attributes
- Tables, IFrames
- Forms Basics, Input types and Attributes
- Form Elements and Labels
- Forms and Selections
- Some Advanced Topics

CSS Basics(1.5 - 2 Hours)
- Introduction
- Color, Background, Padding
- Border, Margin, Box, Model
- Outline, Text, Icons
- Position, Float, Opacity
- Creating Navigation
- Creating Dropdown
- CSS Forms, Counters
- Website Layout
- Some Advanced Topics

Bootstrap 4(1 - 1.5 Hours)
- Bootstrap Introduction
- Colors, Buttons, Table, Jumbotron, Containers
- Alert, Badges, Spinner, Lockdown
- Input Groups, Nav Bar, Dropdown
- Grid System
- Some Advanced Topics

JavaScript(1 - 1.5 Hours) uses mainly in Django Concepts
- Introduction
- Basics, Connecting Javascript
- Data Type, Solutions, Operators, Control Flow
- Conditions, Boolean, Comparison
- While Loops, For Loops

Python(4 Hours)
- Introduction to Python - 10 Min.
- Python Installation and Set-Up - 15 Min.
- Numbers, Strings - 10 Min.
- Lists, Tuple and Sets - 20 Min.
- Dictionaries - 15 Min.
- Conditions, Loops, Operators - 10 Min.
- Some Libraries - 30 Min.
- Functions - 15 Min.

- Iterator, Scope - 15 Min.
- Object Oriented Programming - Part One - 15 Min.
- Object Oriented Programming - Part Two - 15 Min.
- Modules and Packages - 20 Min.
- **Decorators** - 15 Min.
- **Some Libraries - 30 Min - Important for Python**

Python Django(--)

Overview of the Final Project
- Introduction to Django
- Architecture

Section Introduction
- Django Installation and Configuration
- MVC Applied to Django and Git
- Basic Views, Templates and URLs
- Models, Databases, Migrations and the Django Admin

Customizing Django <mark>Admin Panel</mark>
- Introduction to Admin
- Admin Templates
- Ordering Fields
- Adding Search
- Adding Filters
- Adding Fields
- Editable List View

Creating a User Authentication
- Setting Up A Simple User Authentication System
- Login and Session Variables
- Social Registration
- Form Validation

Frontend
- URL Template Inheritance
- Template Filters and Custom Filters
- Template Language and Static Files
- Twitter Bootstrap Integration
- Static File Compression and Template Refactoring

Upload Image
- Add Pillow requirement
- Modify recipe model
- Add tests for uploading image to recipe
- Add feature to upload image

Preparing The Storefront
- Product Display

Adding a Shopping Cart
- **Images**
- **Dynamic Content/Page Creation**

Payment Gateway
- **PayPal Integration**
- **Paytm**
- **Google Pay / PhonePe**

Stripe Integration with Ajax

Django Rest Framework
- Serializers, views and URL
- Creating API and Web ServiceS
- Working on POSTMAN
- GET
- POST
- PUT
- DELETE
- PATCH
- Testing our API

ALSO WE WILL LEARN ABOUT GRAPHQL TO LOAD DATA FROM A SERVER TO A CLIENT.

WILL MAKE CUSTOMISE ADMIN PANEL USING DJANGO JET, Analyse Data and Predict it:
- Learn Numpy, Pandas, DataFrames and MatplotLib.
- Learn to take real time data and Show everything on the basis of Graph.
- Customize User Friendly Panel & Also learn to predict data using Python
- How to move towards Machine Learning and BigData & analyse it for the Ecommerce Business need (OUR PROJECT WORK)

Django Deployment
- GitHub
- AWS
- Heroku

FLOW OF PROJECT:
- Requirement Gathering
- Designing
- ADMIN PANEL + DataBase
- BackEnd + API

- **USER**: DESIGN => HOME PAGE [LISTING] => Selection of ITEM => Cart PAGE => Confirm => Order Confirm => Payment Gateway => Payment done => Tracking of Parcel => Parcel Delivered => I'd Closed
- **Admin:** Do Listing, Accept and flow payment and Customization according to need.
- DeployMent on CLOUD(AWS)