

Django Syllabus



django



Django Prerequisite:

- HTML, CSS, Bootstrap, Python,SQL

Introduction to Django

- Installation of Django
- Creating a virtual environment for better dependency management
- Setup Django environment
- Create your first sample Django project
- Understanding the project structure of a newly created django project
- Django Admin, Commands and Shell
- Difference between a App and a Project
- Role of Flask and Django

Django Architecture

- Django Project MVT Architecture and MVC
- Difference Between MVT and MVC



Routing

- Understanding urls.py and the purpose of it
- Creating urls with names and namespaces
- Building dynamic urls
- Mapping of the urls with the view functions
- Linking the urls of an app in a project with the the root app of the project using 'include

Django Views

- Django views
- Function Based Views
- Django CRUDE operation using function
- What is Render and relative
- Import URL names as Links

The Django Template System

- Basic Using Template System
- Need for templates
- How to Configure Template
- Template Loading
- Using conditionals and looping in django templates
- Django convention of storing the static assets like images, css and javascript and referencing them from the template



- Handling different kind of media files
- Template Inheritance

Interacting with databases

- What is ORM?
- Benefits of ORM
- Connecting a django project to a database
- Django migrations
- Visualize business data as django models
- Django model Field and field types
- Relationship between django models - One to One, Many to One, Many to Many
- Saving, updating, deleting, and querying django models
- admin files and registration models fields

The Django Admin Dashboard

- Activating the admin interface
- Customize admin dashboard
- Creating superuser for accessing the backend admin dashboard
- Customizing django admin templates look and feel (perform CRUD Operations)



Built In Django Apps And Web Development Concerns

- Authentication system
- Messages framework
- Emailing system

Session Management

- HTTP as a stateless protocol
- Django session management built in app
- Concept of session management and how it internally uses cookies and session id
- Storing attributes in a session and retrieving from the same session
- Destroying a session using 'flush'

Django Class Based Generic Views

- Introduction Generic Class Based Views
- How to create generic class based views
- Class based CRUDE operation
- Create views
- Retrieve views
- Update views
- Delete views



Rest Web Services

- Web Services and REST
- Django REST framework
- What is serializers?
- Creating Views
- Creating urls
- Update and delete records using serializer/django rest framework
- POSTMAN details and how to check API's in POSTMAN

