

L D College of Engineering, Ahmedabad

Department of Information Technology

Academic Year :- 2021-22



GTU B.E. 7th Semester

3170001- Summer Internship

Subject / Topic : Python(Django)

Day 5:-

What We have learned?

- From Today's session we started our main agenda of this amazing internship program which is **Django**.
- Today we didn't begin programming. This was just theoretical session of python framework Django.
- We begin with little introduction of all web based python frameworks some of them are following
 1. Django
 2. Web2py
 3. Flask
 4. Tornado
 5. CherryPy and many more ...
- Then we dived in to our main topic Django deeply and understand
 1. what it is?
 2. Why it is so popular in market?
 3. Which are the amazing features those Django provide?
- We learn moto of Django framework or we can say we learn principle behind Django which is DRY (Don't Repeat Yourself)
- We also get to know about Django has an inbuilt supportive library for multiple databases,
 1. MySQL
 2. PostgreSQL
 3. SQLite3
 4. Oracle
- Then we are got aware about what we are going to learn about Django in this internship like Internship Highlights
 1. Authentication support
 2. Database schema migrations
 3. Object-relational mapper (ORM)
 4. Support for web servers
 5. Template engine
 6. URL routing
- Then we suddenly jumped into history of Django like who made it and how they named this framework "Django" and we also gathers info about version time line of Django which shows version and its release dates.

➤ Features:

1. It's fast and simple
2. Open Source
3. It's secure
4. It suits any web application project
5. It's well-established

➤ After that we get an information about which companies are using Django in this contemporary world to grow their business and marketing

➤ The we learned MVT structure which are used by Django to develop any Django project in organized way.

Model

- Defines the data structure.
- Takes care for querying the database.

View

- Defines what data should be presented
- Returns HTTP response

Template

- Renders the data in suitable format – HTML/XML/etc...

➤ After that which know what are prerequisites of learning Django which include basic of python and its functionalities.

➤ Then we choose our code editor(VS Code) for programming in Django and installed it.

➤ Then using 'pip' we install Django into our system but before that we set out python path to environment variable.

➤ Then we learn about 'pip' command also called 'Pip Installs Packages'.

➤ Then we learned some basic command like how to download, upgrade, and uninstall any python library using "pip" command.

➤ We also learned how to find version of any installed python libraries using "pip". As well as we learned how to see all installed python libraries in our system.

➤ Then we visited [Django official website](https://www.djangoproject.com/) where all documentation of Django is already there.

➤ Then we learned how to start Django project using Django-admin startproject command.

➤ This command will generate some base file of Django in your working directory. Then we run our first program of Django in this internship using

python manage.py runserver.

- Then we understood all file provided inbuilt by Django one by one .And learned Django project life cycle.
- We run program of Django in VS Code as well as Pycharm.