Module – 5 (DB and Python Framework)

1. Why Django should be used for web-development? Explain how you can create a project in Django?

* Simplifies Development to a Huge Extent
* Provides Inbuilt and Up-to-Date Security Features
* Suitable For Any Type of Project
* Implements DRY (Don’t Repeat Yourself) and KISS (Keep It Simple and Short)
* Contains Support For REST APIs
* Massive Community Support

**Set Up a Django Project**

* Prepare Your Environment.
* Install Django and Pin Your Dependencies.
* Set Up a Django Project.
* Start a Django App.
* Command Reference.
* Conclusion.

1. How to check installed version of django?

The very first method to check the version of Django is simply to write python -m django –version in your terminal. This code will return the version of your Django in the format 3.2. 9. If python doesn't work replace it with python3.

1. Explain what does django-admin.py make messages command is used for?

The admin.py file is used to display your models in the Django admin panel. You can also customize your admin panel.

**Custom Django Management Commands**

* python manage.py startapp.
* python manage.py makemigrations.
* python manage.py migrate.
* python manage.py runserver.

1. What is Django URLs?make program to create django urls

Django project contains all the URL paths in the urls.py file. Multiple urls.py files are possible, in a single Django project. The one urls.py file is auto-generated with the project creation, i.e., the main project urls.py file. It also has a pre-defined path for the admin app.

Example ;

from django.urls import path

from . import views

urlpatterns = [

path('books/<int:pk>/', views.book\_detail),

path('books/<str:genre>/', views.books\_by\_genre),

path('books/', views.book\_index),]

1. What is a QuerySet?Write program to create a new Post object in database:

A QuerySet is a collection of data from a database. A QuerySet is built up as a list of objects. QuerySets makes it easier to get the data you actually need, by allowing you to filter and order the data at an early stage.

## [Step 1 — Create Django Application](https://www.digitalocean.com/community/tutorials/how-to-create-django-models" \l "step-1-create-django-application)

[Step 2 — Add the Posts Model](https://www.digitalocean.com/community/tutorials/how-to-create-django-models" \l "step-2-add-the-posts-model)

[Step 3 — Update Settings](https://www.digitalocean.com/community/tutorials/how-to-create-django-models" \l "step-3-update-settings)

[Step 4 — Make Migrations](https://www.digitalocean.com/community/tutorials/how-to-create-django-models" \l "step-4-make-migrations)

[Step 5 — Verify Database Schema](https://www.digitalocean.com/community/tutorials/how-to-create-django-models" \l "step-5-verify-database-schema)

1. Mention what command line can be used to load data into Django?

To load data into Django you have to use the command line Django-admin.py loaddata. The command line will searches the data and loads the contents of the named fixtures into the database.