**Jaweria Naeem**

**Back-End ( Django )**

During my fellowship, I have acquired extensive knowledge in the Django track. This document aims to compile the key concepts, best practices, and insights I have gained during this period. It covers various aspects of Django development, including setting up a project, working with models, views, templates, forms, authentication, and deployment.

***TABLE OF CONTENTS:***

***1. DJANGO OVERVIEW :***

1.1 Introduction to Django

1.2 Django Features and Advantages

1.3 Django Project Structure

***2. SETTING UP A DJANGO PROJECT :***

2.1 Installing Django

2.2 Creating a New Django Project

2.3 Managing Project Dependencies with Pip

2.4 Configuring the Database

2.5 Running the Development Server

***3. DJANGO MODELS :***

3.1 Introduction to Models

3.2 Defining Models

3.3 Database Migrations

3.4 Querying the Database

3.5 Model Relationships (One-to-One, One-to-Many, Many-to-Many)

***4. DJANGO VIEWS :***

4.1 Introduction to Views

4.2 Class-Based Views vs. Function-Based Views

4.3 URL Mapping

4.4 Request and Response Handling

4.5 Template Rendering

4.6 Django Forms

***5. DJANGO TEMPLATES :***

5.1 Introduction to Templates

5.2 Template Language Basics

5.3 Template Inheritance and Extension

5.4 Template Tags and Filters

5.5 Rendering Dynamic Data in Templates

***6. DJANGO FORMS :***

6.1 Introduction to Forms

6.2 Creating HTML Forms

6.3 Form Validation

6.4 Handling Form Submissions

6.5 Working with Model Forms

***7. DJANGO AUTHENTICATION AND AUTHORIZATION :***

7.1 User Authentication

7.2 User Registration

7.3 Password Management

7.4 User Authorization and Permissions

This compilation of knowledge in the Django track provides a comprehensive overview of the key concepts and best practices necessary for Django development. It covers essential topics such as project setup, models, views, templates, forms, authentication, and deployment. By utilizing this document, developers can enhance their understanding and proficiency in Django, enabling them to build robust and scalable web applications**.**

I feel exhilarated by the Django track during my fellowship. The process of building web applications using Django has ignited a sense of excitement and passion within me. It's incredibly satisfying to see my projects come to life and witness the impact they can have.

I want to extend my deepest thanks to the organizers, mentors, and everyone involved in making this fellowship possible. Your guidance, support, and expertise have been invaluable in shaping my understanding of Django and helping me navigate through the challenges and complexities of web development.