

DRF Task 1

- 1) What is Django REST Framework?
- 2) what is restful api ?
- 3) Create a model role and link with the user model
- 4) Create a api to register user

1. Django REST Framework (DRF):

- Django REST Framework (DRF) is a powerful and flexible toolkit for building web APIs in Django. It provides a set of tools and utilities to help developers create web APIs quickly and efficiently.
- One of the main benefits of DRF is its ability to simplify the process of serializing and deserializing complex data types, such as Django model instances, into representations like JSON or XML.
- DRF is built on top of Django's class-based views, making it familiar to developers who are already experienced with Django.
- Additionally, DRF includes features such as authentication, permissions, and pagination, which are essential for building secure and scalable APIs.
- Command for installing drf : `pip install djangorestframework`

2. RESTful API:

- A RESTful API (Representational State Transfer) is an architectural style for designing networked applications. It uses HTTP requests to perform CRUD (Create, Read, Update, Delete) operations on resources.
- RESTful APIs are characterized by their adherence to a set of principles and constraints, including statelessness, uniform interface, client-server architecture, and layered system.
- They use HTTP methods such as GET, POST, PUT, PATCH, and DELETE to perform actions on resources. For example:
 1. GET: Retrieve a resource.
 2. POST: Create a new resource.
 3. PUT or PATCH: Update an existing resource.
 4. DELETE: Remove a resource.
- RESTful APIs typically return responses in formats like JSON or XML, making them easy to consume by various clients, including web browsers and mobile apps.

- 3) Create a model role and link with the user model
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GitHub link : <https://github.com/Parvathykrishna1/DRF>