DJANGO FRAMEWORK DOCUMENTATION

Django Introduction:

Django is a python framework that makes it easier to create web sites using python. Django helps in reusability of components and comes with ready to use features like login system , database connection. It is designed to help developers build secure, scalable , feature rich web applications quickly and efficiently

Features:

- Excellent documentation and high scalability
- Django web frame work is easy to learn, rapid development and batteries fully included
- It has a huge libraries
- Admin Interface: Automatically generates an admin dashboard for managing data models
- Authentication system: Built in user authentication and permission management
- Security features: Includes protection against common threats like SQL injection

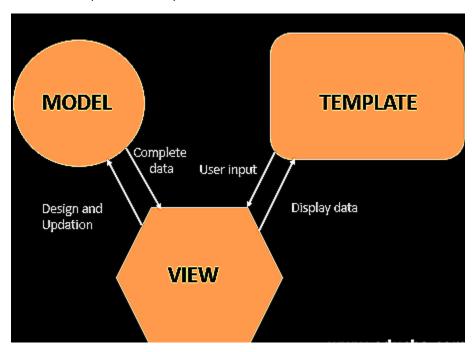
MVT Structure:

Django is based on MVT (Model-View-Template) architecture. MVT is a software design pattern for developing a web application

Model: The model is going to act as the interface of our data . It is responsible for maintaining data. It is logical data structure behind the entire application and is represented by data base

View: The view is the user interface what we see on browser when we render a website . It is represented by HTML/CSS/Javascript. A view function is a python function that takes a web request and returns web response.

Template: A template consists of static parts of the desired HTML output as well as special syntax describing how dynamic content will be inserted. For each app of our project, we can create a different template directory.



Different websites built by using Django framework

- Instagram
- Bitbucket
- Spotify
- Disqus
- Saleor
- Washington Post
- Jobberman
- EDX

REST Framework

Django REST Framework has extensive documentation that covers from installation to advanced features . Django REST Framework is a powerful and flexible tool kit for building web API's

- Installation: Guidance on how to install DRF and set it up with Django project
- Quickstart: A step by step guide to creating first API with DRF,including serializers,views and routing
- Serialization: Details on how to convert complex datatypes
- Views: Information on function based and class based views
- Authentication and Permissions: Documentation on various authentication methods and permission classes to secure API
- Routing: Explanation of how to configure URL routing
- Testing: How to write tests to ensure behavior as expected
- Customization: Guidelines on customizing to fit our specific needs, including serializers and views

It's a great resource for both beginners and advanced users