
Django Learning Report

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Features of Django

1. Rapid Development

Django allows developers to build applications quickly. It provides many built-in tools, so developers do not need to write everything from scratch.

2. MVT Architecture

Django follows the **Model–View–Template (MVT)** architecture.

- **Model:** Handles database structure and data.
- **View:** Contains the business logic.
- **Template:** Manages the user interface.

This makes the project well-organized and easy to maintain.

3. Built-in Admin Panel

Django provides an automatic admin interface. Developers can manage users, data, and content without creating a separate admin dashboard.

4. ORM (Object Relational Mapping)

Django ORM allows interaction with databases using Python code instead of SQL queries, making database operations simple and secure.

5. High Security

Django includes built-in protection against common security threats like:

- SQL Injection
- Cross-Site Scripting (XSS)
- Cross-Site Request Forgery (CSRF)

This makes Django suitable for secure web applications.

6. Scalable

Django can handle small to large-scale applications. Many popular websites use Django because it performs well even when traffic increases.

7. Authentication System

Django provides a ready-made authentication system including login, logout, password management, and user permissions.

8. URL Routing System

Django uses a clean and flexible URL routing system that connects URLs with views easily.

9. Template Engine

Django's template engine allows dynamic content generation using simple syntax while keeping HTML and Python code separate.

10. Database Support

Django supports multiple databases such as:

- SQLite
- MySQL
- PostgreSQL
- Oracle

Developers can switch databases with minimal changes.

11. Open Source and Community Support

Django is free and open source. It has a large community, so help, tutorials, and libraries are easily available.

12. Reusable Apps

Django allows creating reusable apps that can be used in multiple projects, saving time and effort.
