Abstract: Django CRUD App

Introduction :

The Django CRUD App showcases CRUD operations using Django, emphasizing simplicity and efficiency with SQLite3 for the database and HTML/Bootstrap for the frontend.

Problem Statement and Overview :

The project addresses the need for straightforward CRUD functionality in web applications, providing a simple Django-based solution for developers learning web development basics.

Tools and Applications Used :

Django: A high-level Python web framework that encourages rapid development and clean, pragmatic design.
SQLite3: A lightweight, disk-based database that doesn't require a separate server process, making it ideal for small-scale applications and development purposes.
HTML: The standard markup language for creating web pages and web applications.
Bootstrap: A front-end framework for developing responsive and mobile-first websites, providing pre-designed components and a grid system.

Architecture :

The application follows Django's Model-View-Template architecture, separating concerns into:
- Models for data and business logic,
- Views for handling requests and user interactions,
- Templates for managing the presentation layer and rendering HTML to clients.

Design or Flow of the Project :

1. **Home Page**: Lists all records with options to create, read, update, or delete entries.
2. **Create Page**: Provides a form to add new records to the database.
3. **Read/View** *Page:* Displays details of a selected record.
4. **Update Page**: Allows editing of an existing record.
5. **Delete Functionality:** Enables the removal of records from the database..

Conclusion and Expected Output :

This project aims to create a fully functional Django application proficient in CRUD operations, serving as a practical learning tool and foundational example for developers. It demonstrates Django's ease of setup and management, encouraging adoption for web development by showcasing successful CRUD implementation and highlighting its benefits in integrating databases with frontend interactions.