SocialSite – Django Project Documentation

1. Introduction

SocialSite is a Django-based social networking platform that allows users to create profiles, post content, comment, like posts, and interact with other users. This document provides a complete overview of the project structure, features, setup guide, and workflow.

2. Project Features

- User Registration & Login (Django Authentication)
- User Profiles with editable information
- Create, Edit, Delete Posts
- Like/Unlike posts
- Comment on posts
- News Feed showing latest posts
- Responsive UI using HTML, CSS, Bootstrap
- Admin Panel to manage users, posts, and reports

3. Project Structure

```
SocialSite/
■■■ manage.py
■■■ SocialSite/
■ ■■■ settings.py
■ ■■■ urls.py
■ ■■■ wsgi.py
■ ■■■ asgi.py
■■■ accounts/ (User Authentication App)
■ ■■■ models.py
■ ■■■ views.py
■ ■■■ forms.py
■ ■■■ urls.py
■ ■■■ templates/accounts/*
■■■ posts/ (Social Posts App)
■ ■■■ models.py
■ ■■■ views.py
■ ■■■ urls.py
■ ■■■ templates/posts/*
■■■ static/ (CSS, JS, Images)
■■■ templates/ (base.html and shared components)
■■■ requirements.txt
```

4. Installation & Setup

1. Extract the project folder.
2. Open terminal and navigate to project directory.
3. Create and activate a virtual environment:
   - python -m venv env
   - env\Scripts\activate (Windows)
4. Install dependencies:

- pip install -r requirements.txt
5. Apply migrations:
  - python manage.py makemigrations
  - python manage.py migrate
6. Create superuser:
  - python manage.py createsuperuser
7. Run server:
  - python manage.py runserver

5. Database Models

User Model: Django's built-in User

Profile Model:
- user (OneToOne)
- bio
- profile_photo

Post Model:
- user
- content
- image
- created_at

Comment Model:
- user
- post
- text

Like Model:
- user
- post

6. Workflow

- Users sign up and create profiles.
- Users can create posts with text/images.
- Others can like or comment on posts.
- Feed displays posts sorted by date.
- Admin monitors reported posts and user activity.

7. Testing Overview

The tests.py file should include:
- User registration tests
- Login tests
- Post creation tests
- Commenting tests
- Like/Unlike functionality tests
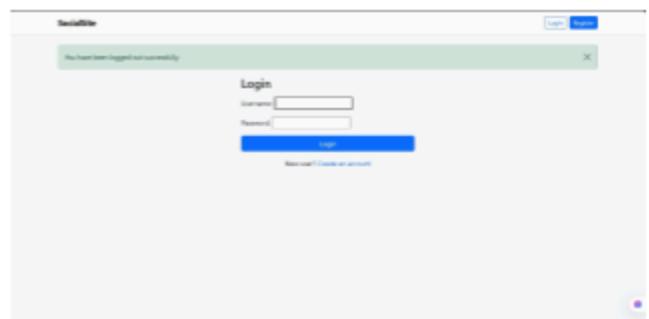- Profile update tests

8. Conclusion

This documentation covers the core functionality and setup of the SocialSite project. It is designed to help developers understand, run, and maintain the system effectively.

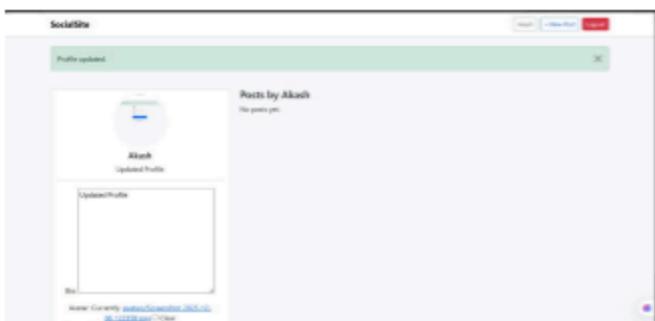## 9. Screenshots (Outputs)

Registration

Login

Profile Section

Select an Image

Feed

Ready to Post

Feed - Posts , Comments and Content