Report – Django Web Application with Authentication

1. Introduction

This project implements a secure, user-friendly web application using Django, enabling user registration, login, logout, and profile management. It is built to be clean, responsive, and professional, with an emphasis on modern UI and robust authentication.

2. Abstract

The application uses Django's built-in authentication framework, custom forms, and polished templates with password visibility toggles and success notifications. The UI is styled with warm beige colors for a pleasant experience. The project aims to provide an accessible yet secure portal for users to manage accounts seamlessly.

3. Tools Used

- Django: Web framework for rapid backend and templating development.
- SQLite: Lightweight, file-based database for development.
- HTML, CSS, JavaScript: Frontend development including password toggle icons.
- Google Fonts: Montserrat font family for typography.
- Python: Core programming language.

4. Steps Involved in Building the Project

- 4.1. Django Setup: Created the project and a core app ('blog'), configured URLs and settings.
- 4.2. <u>User Authentication</u>: Utilized Django's `AuthenticationForm` and a custom registration form for user signup.
- 4.3. <u>Templates Creation</u>: Developed clean, modern templates for login, registration, profile, and password reset flows.
- 4.4. Password Visibility: Added interactive eye icons enabling users to toggle password visibility.
- 4.5. <u>Success Messages</u>: Implemented toast notifications for user feedback after actions like account creation.
- 4.6. <u>Styling & Responsiveness</u>: Styled pages using CSS for a consistent beige theme and ensured mobile compatibility.
- 4.7. <u>Testing</u>: Verified functionality including superuser login, registration flow, error handling, and UI responsiveness.

5. Conclusion

The Django Web Application with Authentication meets the essential needs for user management in a professional, secure, and user-friendly manner. It provides a solid foundation for further feature development such as email verification, roles, and deployment readiness.

6. References

- Django Documentation https://docs.djangoproject.com/en/5.2
- Mozilla Developer Network (MDN) Web Docs https://developer.mozilla.org
- Google Fonts https://fonts.google.com
