> HobbyVerse Project Report

Mini Social Media Platform for Hobbies

♦ Abstract

HobbyVerse is a web-based social platform that allows users to share their hobbies, view other people's hobbies, and interact with them through likes and comments. The project is built using HTML, CSS, and JavaScript for the frontend and Firebase for backend services like Authentication and Firestore Database.

♦ Objectives

- Provide a platform where users can log in securely.
- Allow users to post their hobbies with descriptions.
- Enable users to view hobbies posted by others.
- Support likes and comments on hobby posts.
- Store user and hobby data securely using Firebase Firestore.

♦ System Requirements

- Web Browser (Chrome, Firefox, Edge)
- Internet Connection
- Firebase Project with Authentication and Firestore Database enabled
- Basic HTML, CSS, JavaScript knowledge for frontend customization

♦ System Architecture / Workflow

- 1. User logs in through the login page using Firebase Authentication.
- 2. After login, the user is redirected to the Dashboard.
- 3. On the Dashboard, the user can post a new hobby (title + description).
- 4. Posts are stored in Firestore under the 'hobbies' collection.
- 5. All users can view hobbies posted by others.
- 6. Users can like and comment on posts.
- 7. Data dynamically updates in real-time via Firestore listeners.

♦ Modules & Features

- Login & Registration using Firebase Authentication
- Dashboard with hobby posting functionality
- Firestore Database integration for storing hobbies
- View others' hobbies dynamically from Firestore
- Like and Comment system for user interaction

• Attractive and user-friendly interface

♦ Firebase Integration

The project integrates Firebase services for authentication and database storage:

Authentication: Manages secure user login and signup using email and password. **Firestore Database:** Stores user profiles and hobby posts with likes and comments. **Storage:** Can be extended to allow users to upload hobby-related media files.

♦ Conclusion

HobbyVerse provides a simple yet effective platform for users to connect through their hobbies. The combination of Firebase and frontend technologies ensures a real-time, scalable, and secure solution.

♦ Future Scope

- Enable image and video uploads for hobbies.
- Add chat or messaging functionality between users.
- Implement notifications for likes and comments.
- Introduce categorization and filtering of hobbies.
- Develop a mobile app version using Flutter or React Native.