**Project Synopsis**

**Project Title:** Twyster (A Twitter based social media app)

**Objective:** To develop a social media platform inspired by Twitter, with various additional features such as enhanced recommendation system algorithms, fact-checked posts etc.

**Features:**

1. User authentication/login system: Secure and reliable authentication mechanism for users to create accounts, log in, and manage their profiles using Firebase Authentication.
2. Real-time updates: Users receive immediate feedback through notifications or any real-time updates related to the app.
3. Customizable user preferences and themes: Users can personalize their experience by adjusting settings and selecting from a variety of themes.
4. Advanced search and filtering options: Enhanced search capabilities allow users to find specific content more efficiently through advanced filtering criteria.
5. Fact-checking system: Integration with fact-checking APIs to automatically verify the accuracy of posts. The system will categorize posts as True, False, or Uncertain based on API responses, and display fact-checking results to users to promote reliable information.

**Technology Stack:**

**Frontend:** React, JavaScript, HTML, CSS

**Backend:** Node.js, Express.js

**Database:** MongoDB

**Authentication:** JSON Web Tokens / Firebase Authentication

**Real-time updates:** WebSocket / Pusher

**Expected Outcome:** The project aims to provide a user-friendly social media platform that encourages accurate and meaningful content creation, fostering a community where credibility and reliability are valued.

**Key Challenges:**

1. **Implementing real-time features:** Integrating real-time updates for notifications, post interactions, and user activities while ensuring smooth performance and synchronization.
2. **Integrating fact-checking APIs:** Finding and implementing reliable fact-checking APIs to verify the accuracy of posts, and designing a user-friendly interface for displaying fact-checking results.
3. **Testing and debugging the application:** Developing comprehensive test cases and identifying bugs during development, focusing on functionality, usability, and security issues.

**Timeline:** Estimated to span approximately 2-3 months, divided into structured phases for project setup, frontend and backend development, testing and debugging, performance optimization, and final deployment and documentation.

**Team Members:**

**Awais Chaudhary** : Project Manager, Frontend Developer, Backend Developer, Database Administrator.