**Project Description**

StudyBuddy is a collaborative learning app designed to enhance the academic experience of high school and college students by fostering a supportive and interactive study environment. The app allows users to create and join study groups based on their subjects or courses, facilitating peer-to-peer learning and resource sharing. Key features include user registration and profile setup, real-time communication tools such as chat and virtual whiteboards, shared document and resource libraries, and scheduling tools for organizing study sessions. By providing a platform for students to connect, collaborate, and share knowledge, StudyBuddy aims to improve study habits, increase engagement, and enhance academic performance.

**Requirements Summary**

* **User roles**
  + **Student User:**
    - **Profile Creation:** Set up and manage their personal profile.
    - **Join/Create Study Groups:** Search for, join, or create study groups based on subjects or courses.
    - **Resource Sharing:** Upload, share, and access notes, documents, and other study materials.
    - **Communication:** Participate in real-time chats and use virtual whiteboards for collaborative problem-solving.
    - **Scheduling:** Organize and attend study sessions using the scheduling tool.
    - **Progress Tracking:** Monitor their participation and review their study session history.
  + **Group Leader:**
    - **Manage Group Membership:** Invite and approve new members to the study group.
    - **Facilitate Group Activities:** Schedule study sessions and coordinate group activities.
    - **Resource Management:** Oversee the organization and sharing of study materials within the group.
* **Core Features**
  + **User Registration and Profile Management:** Allows users to create and customize their profiles.
  + **Study Group Formation:** Enables users to search for, join, or create study groups based on subjects or courses.
  + **Real-Time Communication Tools:** Provides chat functionality and virtual whiteboards for interactive discussions and collaborative problem-solving.
  + **Resource Sharing:** Facilitates the upload, sharing, and access of notes, documents, and other study materials within groups.
  + **Scheduling Tools:** Allows users to organize and manage study sessions, with calendar integration and reminders.
  + **Progress Tracking:** Helps users monitor their participation, review study session history, and track their academic progress.
* **Non-Functional Requirements**
  + **Usability:**
    - Intuitive user interface that is easy to navigate for users of all technical skill levels.
    - Consistent design and user experience across different devices and platforms.
  + **Performance:**
    - Fast response times for loading pages, accessing resources, and real-time communication.
    - Scalability to handle a large number of concurrent users and study groups without performance degradation.
  + **Reliability:**
    - High availability with minimal downtime.
    - Robust error handling and recovery mechanisms to ensure continuous operation.
  + **Security:**
    - Data encryption for user data and communications.
    - Secure authentication and authorization mechanisms to protect user accounts and group activities.
    - Regular security updates and vulnerability assessments.
  + **Compatibility:**
    - Cross-platform compatibility, supporting various operating systems (iOS, Android, Windows, macOS) and devices (smartphones, tablets, desktops).
    - Integration with common calendar and notification systems for scheduling.

**Modifications to the requirements:**

**Initial Evaluation Plan:**