Project Charter - Group 23

Team Members: Kalea Gin, Leanne Alsatie, Advait Panicker, Cadence Chan

Project Title: StudyNest

Problem Statement:

1. Study app to help students study together.
2. We aim to build a study app that helps students study together virtually. Most similar services cater to more community-centered features—working anonymously with other students or joining public study rooms—while ours is more about having a personalized group study experience. As opposed to Discord, our study app is explicitly designed for studying and delivers a distraction-free easy-to-use study platform. Our study app will have more unique features (whiteboard, PDF upload, YouTube watch together bookmarks, etc), which also separates it from any individual group study platform.

Project Objectives:

1. Create a web application where users can create an online collaboration space to privately share with a small group of friends.
2. Goal setting for the current study session.
3. Create a messaging feature that allows users to send messages to the group.
4. Integrate a system that allows users to upload, share, and view files simultaneously and create synchronized annotations and bookmarks.
5. Implement a music/video sharing system that allows users to watch the same content as they work.
6. A synchronized whiteboard that can be edited by multiple users in real time.

Stakeholders:

- **Users**: People who want to study with their friends
- **Developers**: Kalea Gin, Leanne Alsatie, Advait Panicker, Cadence Chan
- **Project Coordinator**: Nathan Joseph Schneider

- **Project Owners**: Kalea Gin, Leanne Alsatie, Advait Panicker, Cadence Chan

Project Deliverables:

- A Python web app of a virtual group study room using the Flask framework with a React frontend that implements various modular components:
    - Text Chat and Messaging
    - File Upload and Viewing
    - Whiteboard
    - Video Playlist
- A server system built in Python that manages the different private rooms for users to connect to, using the Python websocket library.
- A database (SQLite) will store study session data which users can come back to.
- Our backend will be hosted on Google Firebase.
- A user authentication system will be created through Google API (Google authentication)