

# Project Specification for Group #175

Team Name: Group #175 - Study Buddy Finder

Domain:

Matchmaking and Learning Collaboration

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## Software Specification:

This program would allow users (students) to be matched with and connect with other students for collaborative study sessions, sharing study materials, tracking progress based on their courses, schedules, program, and availability. The system could also include features for setting study goals and tracking how much time users spend on various subjects.

## User Stories:

1. **Team User Story (Core Functionality):** As a student, I want to be matched with a study buddy who is in the same course as me and is available during my study times, so that we can collaborate effectively and keep each other accountable.
2. **Cooper:** As a student, I want to create and join study sessions, so that I can collaborate with my study buddy/buddies and stay on track.
  - I want to be able to cancel my study session or update the time of my scheduled study sessions if something comes up and I can no longer make it.
3. **Alexander:** As a student, I want to set and receive reminders about study sessions.
4. **Tanaya:** As a student, I want to be matched with other users based on our common courses and availability.

- If there are no available buddies taking the same course, I want to be able to choose if I would instead like to be matched with others in the same program, or simply with others sharing the same availability.
5. **Harris:** As a student, I want to set study goals which will be completed as I spend time studying.
  6. **Jinbo:** As a student, I want to be notified when I have completed a study goal, if I have set a reminder for the goal.

## Proposed Entities for the Domain:

1. **User (Student)**
  - Instance variables: username, email, password, courses of interest, schedule, study session availability, program, amount of time studied each course, amount of time studied with another user
2. **Study Session**
  - Instance variables: session ID, subject, time, date, participants, duration, study materials
3. **Course**
  - Instance variables: name, course code
4. **Buddy Match**
  - Instance variables: match ID, user1, user2, subjects of interest, availability
5. **Schedule/Availability**
  - Instance variables: available time slots (HashMap <time slot (e.g. Monday 10:00-11:00; see Time Slot below), boolean>)
6. **Time Slot**
  - For the functionality of the schedule/availability
  - Instance variables: day of week, start and end time (HH:MM)
7. **Reminder**
  - Instance variables: title of reminder, time of reminder
8. **Study Goal**
  - TimeGoal extends StudyGoal
    - i. Set amount of time wanted to study for a given course and be notified automatically when this goal is completed
    - ii. Instance variables: time spent goal, current time spent
  - CustomGoal extends StudyGoal
    - i. Custom goals (incomplete when instantiated, manually set as complete)

- ii. Instance variables: goal name, goal complete (bool)

## Proposed API for the project:

### 1. Reminder and Notification API (Google Calendar):

- <https://developers.google.com/calendar/api/concepts/reminders>
- A notifications API will send reminders about upcoming study sessions to all members of the session group who set a reminder.
- The API will also send reminders about completed study goals to the user with the goal, if they have set a reminder for that goal.
- The API will be used to keep track of when students have agreed to meet to study and for how long
- The API will be accessed to update the time and details of the appointment if necessary

## Scheduled Meeting Times + Mode of Communication:

Meeting time outside of lab:

- In addition to meeting in the lab each week, we will also meet virtually via Zoom once per week on Thursdays at 6 PM.

Mode of Communication:

- Communication during outside-of-lab meetings will take place via Zoom link and via Instagram messaging