Submit your project proposal as a proposal.txt file to the corresponding assignment in CourseWorks. It should have the following contents:

```
None

    Title: tagline of your project, such as "Slack: Where work happens"
    Details:
        - Team members (name and UNI for each teammate)
        - Pain points you're addressing
        - What your SaaS does to address the pain points
        - Why is your SaaS unique/different from the solutions in the market
        - A link to a short YouTube video explaining your proposal
```

A few paragraphs are enough. No need to write a detailed business plan. The YouTube video will be played in class during our Proposal Day. The length of the video will be determined based on the total number of projects. Everyone in the team must speak (approximately equally). If time allows, we will conduct a quick live Q/A session for each proposal. Submit any additional materials such as a presentation deck you may have.

Only one member of the team needs to submit. Be sure to include in proposal.txt the names and UNIs of all team members.

After the submission, but before Proposal Day, post your proposal and video to the course discussion board and prefix the post title with "[Project Proposal]..." for the entire class to learn what you plan to do and provide feedback.

Grading rubric:

- Pain points are clearly explained (25%).
- Proposed solution is clearly explained (25%).
- Proposed solution is clearly differentiated from the solutions in the market (25%).
- Well-made proposal video (25%).

Title: "Study Transit: Find a spot to study"

Details:

- Zaryaab Khan (zfk2107), Rahi Mitra (rm381), Noel Negron (nmn2127), Erick Berlanga (eb3515)
- Pain points you're addressing:
    - Students waste valuable time searching for available study spaces in libraries and workspaces. They often spend 15-30 minutes walking between different floors, buildings, and rooms only to find every seat occupied. This inefficiency causes frustration, disrupts study schedules, and forces students to settle for suboptimal study environments, especially during peak times like midterms and finals when finding a quiet space to focus is most critical.
- What your SaaS does to address the pain points
    - Our SaaS solves this problem through a crowdsourced, real-time reporting system where students actively participate in sharing space availability. Users open the app and quickly report which library or workspace they're currently in and how full that specific room or area is. This creates a live, community-driven map of availability across all campus study spaces. Before leaving their dorm or class, students can check the app to see exactly which libraries have open seats, eliminating wasted trips and search time. The system leverages the power of the student community itself. The more people use it, the more accurate and comprehensive the real-time data becomes, creating a collaborative solution that benefits everyone without requiring expensive sensors or hardware infrastructure.
- Why is your SaaS unique/different from the solutions in the market
    - There are currently some alternatives to this, like CU Libraries. They have their own version of this idea. However, It is different from the market because it uses a different process to gauge the capacity of a given space. Columbia Libraries use a 'tap' system that uses an algorithm to more or less estimate how many people are in the building/space. Our approach is different and more robust. We are able to provide the capacity of spaces through real time testimony from our users. This eliminates the over/underestimation of the existing algorithms in the 'market'.
    - A link to a short YouTube video explaining your proposal

Video Script:

Problem introduction (Rahi):
"

Have you ever walked into Butler Library during midterm season, desperate to cram for an exam, only to spend over 40 minutes just looking for a seat? You start with the main floor, then the 4th, and eventually, God forbid, you even try talking to someone. After all that, you still can't find a spot and end up heading to Uris instead.

It's common here to have no idea how full certain library spaces are, wasting precious time searching for a place to study instead of actually studying.
"

Market Overview (Erick):
"

There are currently some alternatives to this, like CU Libraries. For example, Columbia Libraries use a "tap" system — an algorithm that estimates how many people are in a space based on ID swipes. But those estimates can be unreliable. Sometimes they overcount, sometimes they undercount, and they rarely reflect the real-time experience of students actually inside.

That's where our approach is different.

"

Solution Overview:
"

Introducing Study Transit — an application that allows students to share real-time updates about library room occupancy. With Study Transit, users can instantly see how crowded different study spaces are before they even leave their dorm.

Here's how it works:
A student opens the app and checks how others have rated various rooms. For example, they might see that Butler Main is completely packed, while Butler 4th Floor is relatively open. The student decides to head to the 4th Floor and, upon arriving, logs that they're studying there. The app then prompts them to quickly rate the room's crowd level on a scale from 1 to 5.

That rating updates Study Transit's live data, giving all users an accurate, real-time view of how full each space is at any given moment.

Unlike existing systems that rely on swipe data or estimation algorithms, Study Transit crowdsources its information directly from students — making it live, accurate, and community-driven. This eliminates the common over- and underestimations of current solutions and ensures everyone can find the best place to study, faster.
"

Inspiration (Zara):
"

This idea draws inspiration from apps like Transit, which not only show upcoming bus times but also display information about bus capacity and cleanliness. What makes Transit effective is its community-driven data model — it gathers real-time feedback from riders already on the bus. **This allows users waiting at later stops to know exactly how crowded the bus will be before it arrives.**

Similarly, Study Transit applies this same concept to library spaces, empowering students to share real-time occupancy updates and help one another make smarter study decisions.

"

🕐 Rahi (0:00–1:00) — Problem Introduction

Have you ever walked into Butler Library during midterm season, desperate to cram for an exam, only to spend over 40 minutes just looking for a seat? You start on the main floor, then the fourth, and eventually—God forbid—you even try 209 talking room.

After all that, you still can't find a spot and end up walking across campus to Uris.

It's something almost every Columbia student has experienced: wasting valuable time searching for a place to study, instead of actually studying.

During midterms and finals, this problem only gets worse. With every floor full and no reliable way to check how crowded spaces are, students end up frustrated, stressed, and less productive.

That's the problem Study Transit aims to solve — by helping students spend less time *searching* and more time *studying*.

🕐 Erick (1:00–2:00) — Market Overview

There are already a few systems that *try* to solve this issue. For example, Columbia Libraries use a "tap" system — an algorithm that estimates how many people are inside based on ID swipes.

But those estimates are often inaccurate. Some people swipe in and leave, others enter without swiping, and the data doesn't reflect what's really happening inside.

There are also national apps that track space usage with expensive sensors or Wi-Fi data, but those require heavy infrastructure that most campuses don't have.

That's where our approach is different.

Study Transit doesn't rely on sensors or static algorithms — it's powered by the student community itself. By leveraging crowdsourced, real-time updates, we can create a more accurate, dynamic, and affordable way to know exactly how full study spaces are — anytime, anywhere.

🕐 Noel (2:00–3:00) — Solution Overview

Introducing **Study Transit** — an application that lets students share real-time updates about library and workspace occupancy.

Here's how it works:
 A student opens the app and sees a live map of all campus study areas. Each space is rated based on how full it is. **(5 being packed 1 being empty)**

Say you check the app and see that Butler Main is overcrowded, but the fourth floor looks open. You head to the fourth floor, find a seat, and log that you're studying there. The app then prompts you to quickly rate the room's fullness from 1 to 5.

Your input instantly updates the map for everyone else, creating a continuously refreshed view of study space availability.

Unlike existing systems that rely on swipe data or guessing, Study Transit is live, accurate, and powered entirely by students — making it a true community-driven solution.

🕐 Zaryaab (3:00–4:00) — Inspiration & Uniqueness

The inspiration behind Study Transit comes from apps like **Transit**, which show real-time bus locations and even crowd levels based on user feedback.

Transit works because it uses the power of its community — riders already on the bus share quick updates that help others know what to expect. The app combines these reports with live GPS data to give riders an accurate, moment-by-moment view of each bus's status, making commuting faster and more predictable.

We're applying that same concept to study spaces. Just like Transit riders help commuters plan their trips, Study Transit helps students plan their study sessions.

What makes Study Transit unique is its simplicity, accuracy, and scalability. It doesn't rely on sensors or administrative systems — just students helping each other in real time.

By using the collective insight of the Columbia community, we're transforming the way students find places to focus — saving time, reducing stress, and making campus life more efficient.

Ultimately, Study Transit turns one of the most frustrating parts of campus life into a shared, collaborative experience — where helping others study better helps you, too.

Thank you for listening!