

IPro 497 Digital Service Design Software Makers – Project Direction

Group E

Problem statement

Please provide two problem statements. They are the same problem but take two passes at it.

Problem: **Reserving study space on campus**

1. Students are able to reserve/cancel at least 1 hour study sessions in a variety of different buildings within the selected space across campus, allowing them to be productive and have better focus on their coursework. This can be used in order to help with minimizing risks related to COVID-19 by limiting the number of students who have access to those spaces in an orderly fashion. This will help students feel safer and more secure while on campus during the pandemic.
2. IIT students are able to reserve/cancel study sessions in a multitude of different environments within the buildings at IIT. What this essentially means is that each building will offer a different type of study space, such as a quiet, library-esque environment or a louder, collaborative experience where students can assist each other and express themselves. This will allow for students with different learning processes to find a space where they can study in a manner that best befits them, which will improve grades and student morale.

Customer

Description

- Students who don't like studying in a cramped area like their dorms.
- Students who would like to have access to equipment like whiteboards and monitors.
- Students who don't have the time to go around campus to find areas to study at.

Customer Demographic

- Early-twenties
- For students starting with IIT and maybe extending to other campuses.

- Male and Female students

Other customer(s) or stakeholder(s)

- Possibly professors or teacher assistants
- Campus security
- Registrar's office

Application type (web app, mobile, website, native client, ...)

- A website that is accessible for IIT students would be the best for our application, because students would be able to quickly check it on their phones or laptops.

Tech stack

Client Tech

Any mobile phone or computer available to the user with internet access.

Server Tech

Some cloud hosting service which allows us to host our website.(Java, Javascript, HTML, CSS, Python, Node.js)

Top Application Capabilities (name at least 5)

1. Remote reservation and cancellation.
2. At least 1-hour session reservation across different buildings.
3. Realtime access to room availability and room features (Food Allowed, Quiet Space, etc..) using some database system.
4. IIT Login in order to reserve spaces required.
5. Verification code required for signing up. (IIT emails obtain a code for verification of student status)
6. Use GPS to tell the nearest study hall to the user.

Top Two to Three Scenarios

Your Scenario #1

Kira is attending his lecture and gets an assignment which is due this weekend. He decides to check 'bookmystudy' to check the real time availability of the study halls on campus. Bookmystudy would tell the availability of study halls near him and open the fill-up form. It sends a barcode which Kira can scan at the reception to get his access to the room. Kira can also check how many people can be in the room so he knows how many friends to invite to complete the assignment with him.

Your Scenario #2

Armin and Sasha want to study for their exam, but they can't focus because their roommate, Eren, is busy partying. They go to our website "bookmystudy" and search for available places on campus to study. Sasha also wants to eat meat during the study session so she asks Armin to find a room that allows food. They find the nearest building that is free near their dorm and book it for 1 hour. 15 minutes before the date, they get an email reminding them of their reservation to study in the location.

Your Scenario #3

Reiner is a commuter student on campus and always has a hard time finding a place to study during his breaks. He looks at the "bookmystudy" website advertised on campus and is able to find a wide variety of study rooms that are open for him to reserve and study without having to worry about the place already being used. Reiner is also trying to be very COVID-19 safe so he looks for rooms shown on the website that are labeled as not busy through the realtime data shown.

Team Members

Name	Location	Time zone offset from Chicago (Chicago is 0 offset)
Labib Kreidi	Carol Stream, IL	0
Mansoor Syed	Des Plaines, IL	0

Alan Palayil	Chicago, IL	0
Anwar Adam	Chicago, IL	0
Neil Bhandari	Chicago, IL	0

Team Working Agreement

We will use Google docs, Github, Discord and keep items updated as progress is made.

If we need to meet outside of class we have found a mutually agreeable time on campus or online on Tuesdays from 4-6 pm or Fridays after classes.

If we need to meet outside of class we will use the following tool/tech for meetings: Discord and WhatsApp for voice or video call.

When we are not meeting together we will use the following tool/tech for communications: Discord, Google Docs, and WhatsApp.

Team Governance Agreement

1. Only one person talks at a time.
2. Keep regular updates, through Whatsapp or in person.
3. Everyone has to contribute around 20% of the project.
4. Give notice if you don't think you can complete your share of assignments.
5. If a teammate wants to add more features he can share his idea during team discussions.