## **Team Contract**

Expected level of achievement and effort for each team member:

- Jason: Aspirationally expecting an A. Willing to put in 15 hours/week (more if necessary) to achieve such.
- Piero (Fabrizzio): Hoping for a well-deserved A on the project and to put in 15hrs/week or more as we see fit.
- Derek: Would love for an A, willing to put in 12-15 hrs / week for this
- Cameron: I can put in 10 hrs/wk for this, schedule is a bit constrained by other classes

#### Personal goals for each team member:

- Jason: Creating a working product that I'm proud of/might use myself in the future.
- Fabrizzio: I'd like to create a usable and aesthetically pleasing product that I'd be proud to say I was a part of
- Derek: To get more experience, especially with backend development
- Cameron: I want to make a cool minimum viable product to prove out our product and deliver a polished user
  experience. I also want to experiment with the latest ideas in web development and get experience working
  on a software project with a team.

Frequency, length, and location of team meetings:

- Weekly check-in/stand-ups and virtual meetings as necessary throughout the week.
- Tuesdays 12-1pm

How quality of work will be maintained?:

- Code reviews across front/back-end and agree upon consistent style and ensure it is enforced. Most likely use OpenAPI spec for back-end.

How tasks will be assigned, and what to do if deadlines are missed?:

- Intra-week tasks can be assigned during weekly check-ins and set soft-deadlines depending on the workload. Communicate if a member may expect a deadline to be missed so that other members can help.
   At-least 24 hour notice if one suspects a deadline may be missed.
- If soft deadlines are missed, other team members are able to pick up slack.

How decisions will be made and any disagreements resolved:

Decisions and disagreements will be resolved during the weekly check-in meeting.

## **Problem definition:**

Develop a clear and compelling definition of the problem or opportunity that your app will address. You can propose a single problem for all your designs, or different designs can address different problems (in which case you need to articulate each one). Your problem definition should include at least: who will benefit from your application; what their current need or problem is; and what value the application will bring. A social/ethical analysis is not required (and will be conducted along with your convergent design).

Virtual learning has taught us many lessons about productivity and collaboration, especially about getting two people thinking about the same thing in the same room virtually. In the context of college classes, many students struggled to facilitate the same level of learning and collaboration virtually as they previously did in person, perhaps missing the real-time element of being able to receive insight and perspective on problems they were working on. Virtual office hours and discussion boards like Piazza currently fill this gap, but what's missing is the ability to easily walk into and talk with a room of students all working on the same problem- in real time.

A service that utilizes Canvas to import students' assignments and classes to connect them in real-time with other students working on the same problems, like a peer-to-peer, always-on office hours allows students to find real-time opportunities to collaborate, instead of waiting for office hours or their question to be answered on Piazza.

## Intro:

Collaboration within a community is one of the most fundamental parts of being a human, yet there are many applications in this space that have yet to be explored.

## **New Problem definition:**

Virtual learning has taught us many lessons about productivity and collaboration, especially about getting two people thinking about the same thing in the same room virtually. In the context of college classes, many students struggled to facilitate the same level of learning and collaboration virtually as they previously did in person. The high-school classroom has always been devoid of this collaboration, with students typically being lectured to during class and having to do homework largely alone in their homes. Virtual office hours and discussion boards currently fill this gap, but what's missing is the ability to easily walk into and talk with a room of students all working on the same problem-in real time. Having collaborative spaces to work together would get high school and college students alike more excited to work together.

## **Concept outlines:**

## The Infinite

#### Table:

**Purpose:** A service connects students in real-time with other students working on the same problems, like a peer-to-peer, always-on office hours allows students to find real-time opportunities to collaborate, instead of waiting for class the next day, office hours, or for their question to be answered on Piazza.

**OP:** Students can create and join tables specific to topics on their assignments to work together with other students in real time.

## **Exam Study Sessions**

#### Study session:

**Purpose:** A service that facilitates group study sessions for common exams, such as AP or IB tests. Tutors have a flexible broadcasting platform to reach lots of students and engage them on practice problems of their choice. **OP:** Tutors can create new study sessions, solicit problems for those sessions, and collect answers from their students in realtime.

## **Community Requests**

#### Request:

Purpose: To show locations with needed solutions on a campus map

OP: When an item or service is desired within a space, a request is created for it so admin can see it.

#### Upvote:

Purpose: Give a request more status (to rank requests)

OP: After a series of upvotes on a request, the request becomes important enough for admin to address it

#### bathrooms.mit.edu

#### Bathroom:

Purpose: Provide abstract datapoint of each bathroom on campus and allow students to read and post their opinions about each bathroom.

OP: Students post reviews and flag important datapoints such as accessibility, details of cleanliness, how busy, etc. Other users now have access to plethora of opinions about bathrooms across campus.

# **Interaction sketches**

https://docs.google.com/presentation/d/10vNMAXlfMokCG0wurjNxWCS8MTfGnbar32 0qzG7XGo0/edit?usp=sharing

# **Videos**

https://61040-fa22.github.io/portfolio-pforderique/assets/videos/diverge.mp4

## **Notes**

https://spec.openapis.org/oas/latest.html#specification https://stoplight.io/

Try to lean on Canvas integration for authentication (ask admin about oauth key and secret)