

Stakeholders

- MIT students living in dorms who want a roommate are the primary users of our app. These would be mostly incoming freshmen because they don't have a group of friends yet and have to live in a dorm.
- MIT Housing/dorm governments may be indirectly interested because roommates concern the housing process.

Resources

- We may use MIT certificates to authenticate users; we depend on how hard this is and what information this gives us (we need name and email)
- We may use Google to authenticate users; we depend on how hard this is

Tasks

List of tasks, expected effort, allocation to team members

- Teamwork plan, 2 hr, all
- Design doc, 4 hr, all
- Wireframes, 4 hr, all
- Users (auth, display), 6 hr, Olga + Alec
- Preference (define set, UI), 6 hr, Rujia + Peinan
- Matching (process, algorithm, UI), 10 hr, Alec + Peinan
- Supporting multiple roommates (process, UI), 5 hr, Olga + Peinan
- Moving users to/from available and unavailable (process, UI), 5 hr, Rujia + Alec
- Intra-app communication (process, UI), 10 hr, Olga + Rujia

Calendar of intermediate and final milestones for tasks

- 11/11 Design - Design: all parts except data design, and challenges relating to implementation
- 11/13 MVP: User can login, set preferences
- 11/15 MVP: User can see matches
- 11/16 MVP: User can send/accept matches with others
- 11/18 MVP implementation deadline
- 11/20 Implement multiple roommates
- 11/23 Enrich preferences and matching algorithm
- 11/25 Revised design - updated design document, with changes identified, data design and code design, challenges added
- 11/27 Add dorm-specific preferences
- 11/28 Finish final matching algorithm
- 11/30 Handle all security issues
- 12/2 Code for grading - programming: all parts
- 12/6 Intra-app communication
- 12/7 Final delivery of task - final version of code, deployed app
Teamwork: reflection
- 12/8 project fair - demo of deployed app

Risks

- complexity of ranking algorithm
 - for MVP it will be very naive (how many questions were answered the same)
 - we will build up from there
- number/type of preferences
 - for MVP they will be preset yes/no/no opinion preferences
 - later we will allow users to select preferences they care about
 - later we will create a sliding scale of preference answers (instead of boolean)
- dorms have limiting factors (cats, gender)
 - for MVP we don't take into account dorms
 - later we will include user dorm preference and their limiting factors
- user honesty
 - limit to MIT for now

Minimum Viable Product

- Some of sort of user authentication system (MIT Certs, Google, or self-created)
- On user creation, we give a survey of all preferences as a predetermined list
- All preferences are yes/no/no opinion
- Given your preferences, lists all users in order of how many preferences those users match
- You can see other users' contact information
- Will have user profiles with their full list of preferences
- Will be able to request/accept/deny matches and contact them
- Concepts included: suggested match, preference
- Potential issues/concepts postponed: dorms, non-boolean preferences, privacy (contact info), better ranking algorithm, intra-app communication