

CS 411W Lab 1

Project Characteristics

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1 Introduction

- Bachelor's degrees are not enough to qualify for early career positions.
- College students are surrounded by other students who want an opportunity to use their skills.
 - o E.g. film student wants to make a short film: English majors, theatre students, etc. who may enjoy working on the project as well.
 - o Problem: students do not always seek each other out.
- Solution: service that allows college students who want to create a project to meet students who want opportunities to use their skills.
- Increased enrollment: Veera Korhonen tracked both high school and college graduates by population percentage from 1960 to 2022; number of college graduates has continued to increase. This increase is shown in Figure 1.

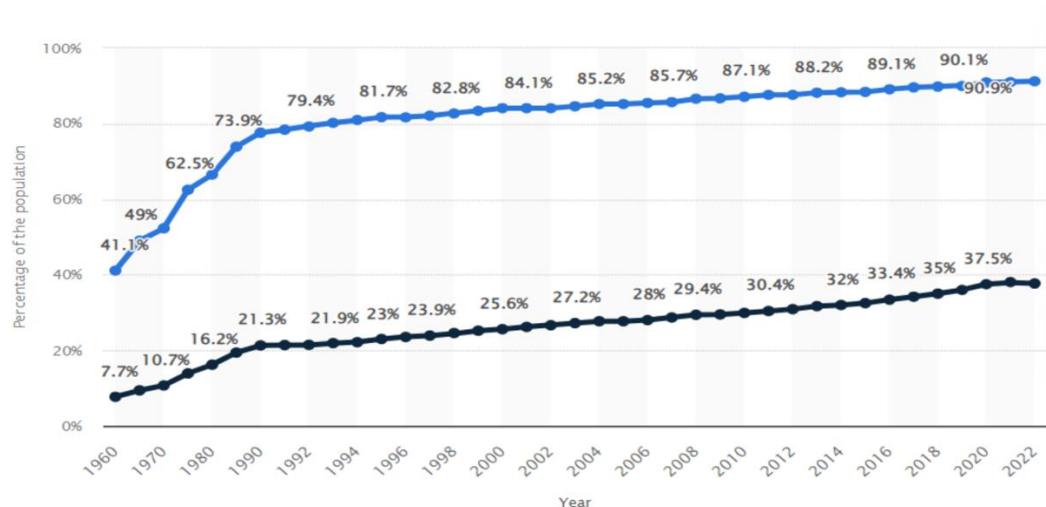


Figure 1: Graph of enrollment increase from 1960 - 2022 (Korhonen, 2023).

- Few internships: A study performed by Sarah Zehr in 2016 showed that 75% of students had some form of internship experience by graduation; another conducted by Kapoor and Gardner-McCune in 2020 highlighted that these numbers are lower. For computer science graduates, only about 40% had landed internships. The distribution of internship participation by household income and gender is highlighted in Figure 2.

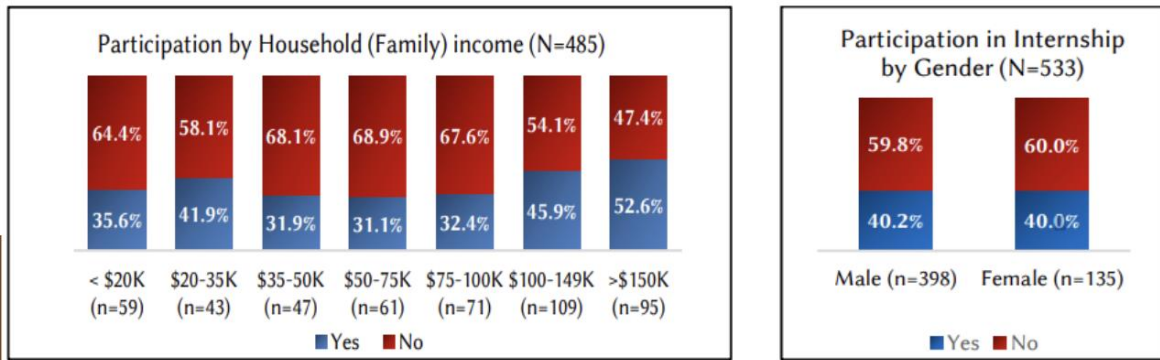


Figure 2: Participation in internships by household income and by gender: (Kapoor & Gardner-McCune, 2020).

- Experience inflation: Verve Search, with Hannah Salton, explored the phenomenon of “experience inflation.”
 - o Experience inflation: as time goes on, employers require more experience for entry level jobs.
 - o In the U.S., entry level jobs in several fields are requesting more years of relevant work experience for job listings marketed as “junior level” or “entry level” (see Figure 3).

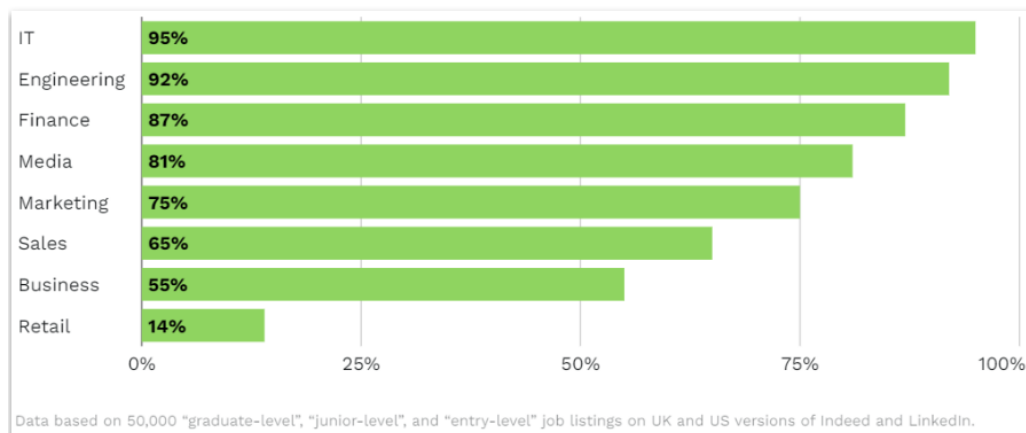


Figure 3: Percentage of jobs, by industry, that required at least two years of experience or more, based on data from LinkedIn and Indeed (Search & Salton, 2022).

- Students who are looking for people to join their project must currently search different platforms to try and find project members. (See Figure 4).
 - o They also must seek them out individually and wait for a response.

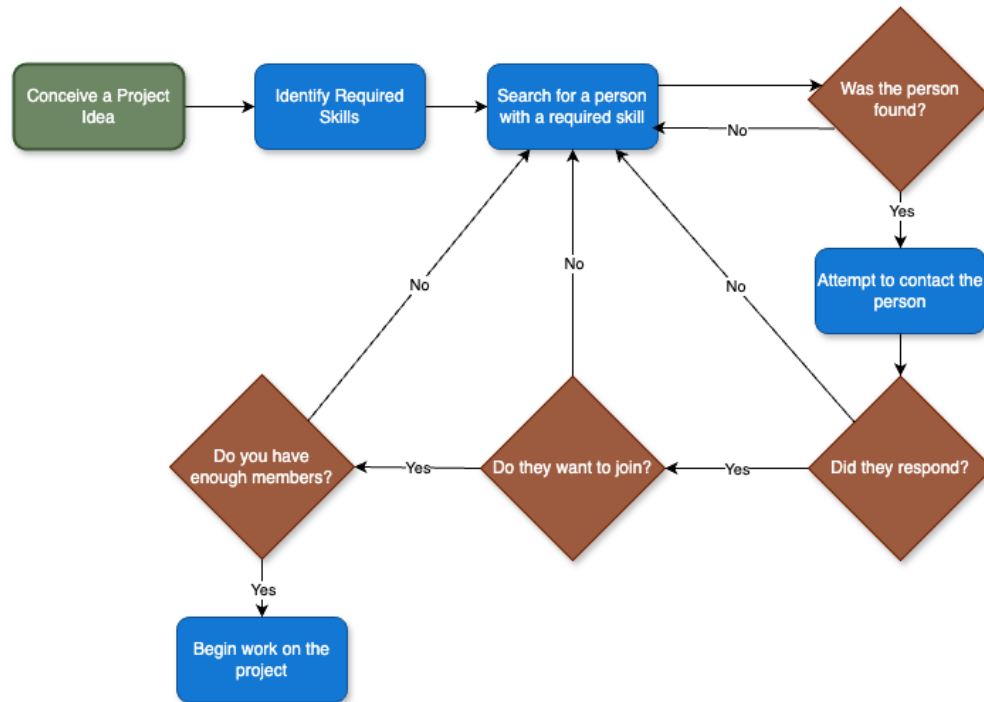


Figure 4: Current process flow for project launchers.

- Students who are looking for experience can either explore traditional employment opportunities or search for other student organized projects (see Figure 5).
 - If they search for traditional employment opportunities, they must find suitable internships/jobs in their area, then they must meet the requirements, then they must apply and be accepted.
 - If they search for student-created projects, they must use different platforms to try to find these projects (face-to-face and/or online).
 - Can face rejection.
 - Can be difficult to find projects.

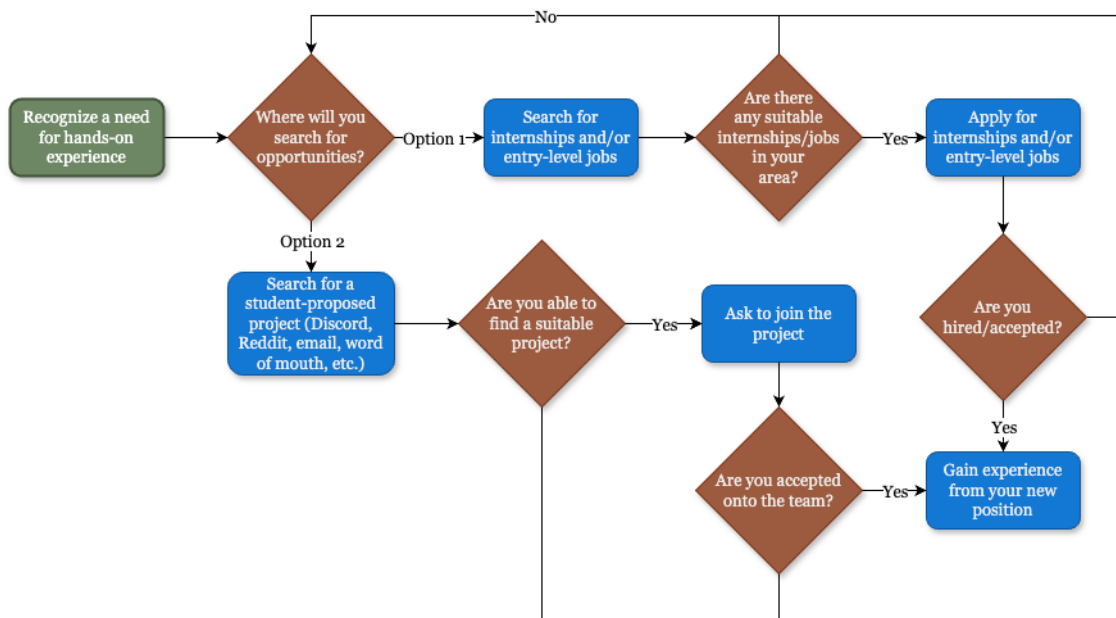


Figure 5: Current process flow for project seekers.

2 UConnect Description

- UConnect will be a web application that allows college students to reach out to each other and work on projects for experience that they can put on their resumes.
- A “Project Launcher” can make a post describing the project they wish to launch, along with needed skills or fields of study for the project.
 - o Process of finding members for a project becomes much simpler: only need to advertise on one platform (see Figure 6).

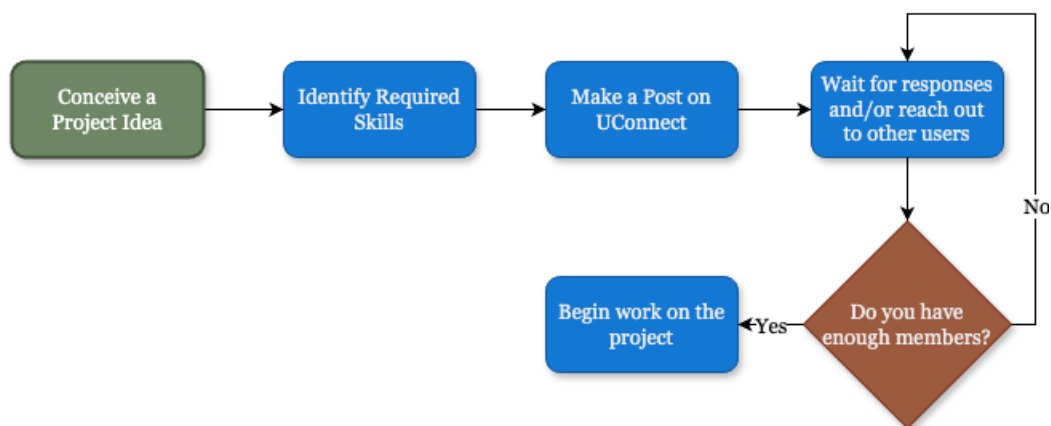


Figure 6: Solution flow of a project launcher.

- A “Project Seeker” can browse posts to find projects they wish to join. They can reach out to Launchers.
 - Students can still pursue traditional employment opportunities.
 - Finding student-created projects to join becomes much easier: only need to search on one platform (see Figure 7)

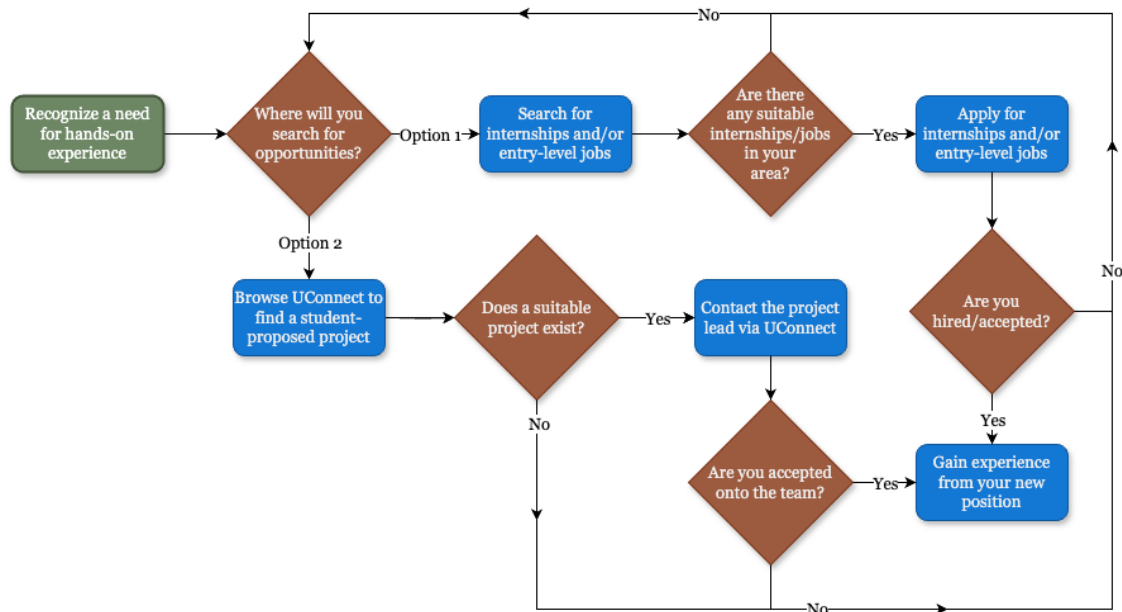


Figure 7: Solution flow of a project seeker.

- Any user, at any time, can be launchers or seekers.

2.1 Key Product Features and Capabilities

- Users can act as project launchers.
 - Create posts to advertise projects. (see Figure 8)
 - Browse user profiles (see Figure 9), reach out to potential team members to recruit.
 - Use the My Projects page to keep track of current and archived projects (see Figure 10: A mockup of the "My Projects" page. An active project is green, an archived project is gray, and a deleted project is red. The number of interested seekers is shown on the right side next to the name of the project..

UConnect
Search Launch My Projects Inbox Account

*Project Name :

Sample Project

Number seeking :

☒ Exact :
☐ From To

Estimated Length of Project:

☐ Exact :
☒ From To

Project Tags :

*Seeking Tags :

*Required to post

12 pt | B / U A

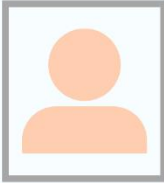
I want to make a pop-up shop that caters to dietary restrictions! It can be so hard for many people to find what they're looking for in food, but people who have restrictions deserve to be able to go out and have a good time too!

After a lot of research I realised that it's nearly impossible to make a diverse meal that avoids all major allergens (eggs, soy, wheat, fish, peanuts, milk), much less several! So what I want to do instead is have it so that, for each day of the week, we caters to different allergens. So maybe one day all meals have no soy and/or no fish, one day they have no eggs and/or no milk, etc. I am obviously interested in people who can cook, maybe 4-5. I also want someone who has experience in sanit

Last save : 3:36:22 ... 3 min ago

Figure 8: A mockup of a project launcher creating a post on UConnect.

UConnect
Search Launch My Projects Inbox Account



Tom Verran
Connect!

Skills:

Artist


Pixel

Pop Art

Logos

Flyers

Animation

Filter by 

Reviews:

Gene W.
Direct, professional, fast-return. It was a two week project and I needed pixel art for 4 32x32 characters in all stages of walking. Excellent work.
Pixel

Sana A.
He did very good work. He made a flyer for a fitness event and made corrections through three iterations.
Flyers

Figure 9: A mockup of a user profile on UConnect.

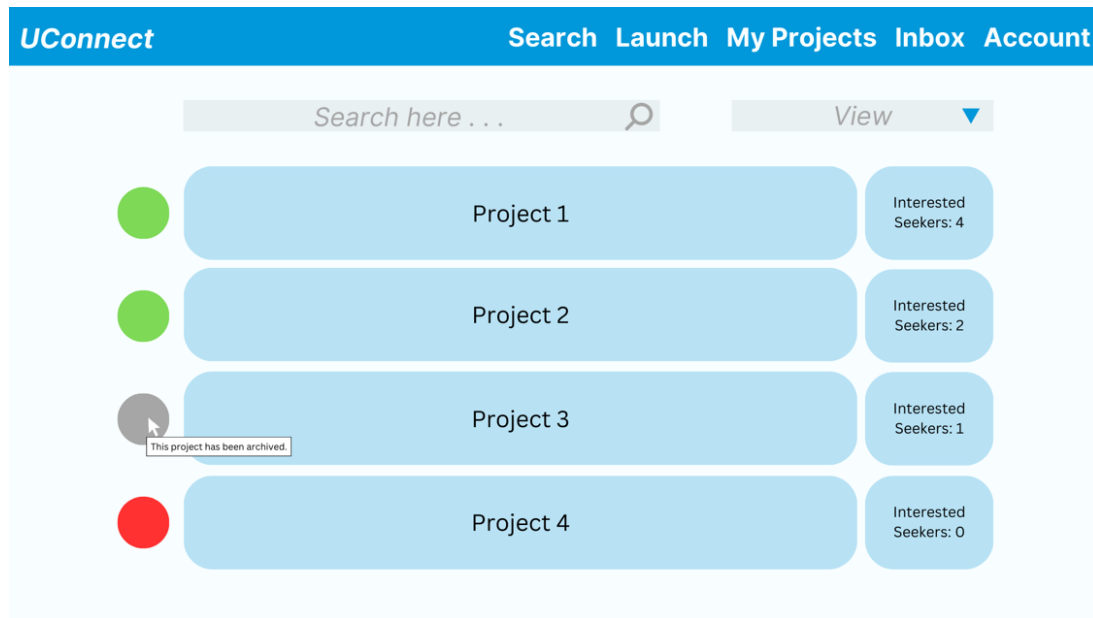


Figure 10: A mockup of the "My Projects" page. An active project is green, an archived project is gray, and a deleted project is red. The number of interested seekers is shown on the right side next to the name of the project.

- Users can act as project seekers.
 - o Create personal profiles to describe their skillset.
 - o Browse posts from project launchers (see Figure 11).
 - o Message users about their projects (see Figure 12, Figure 13).

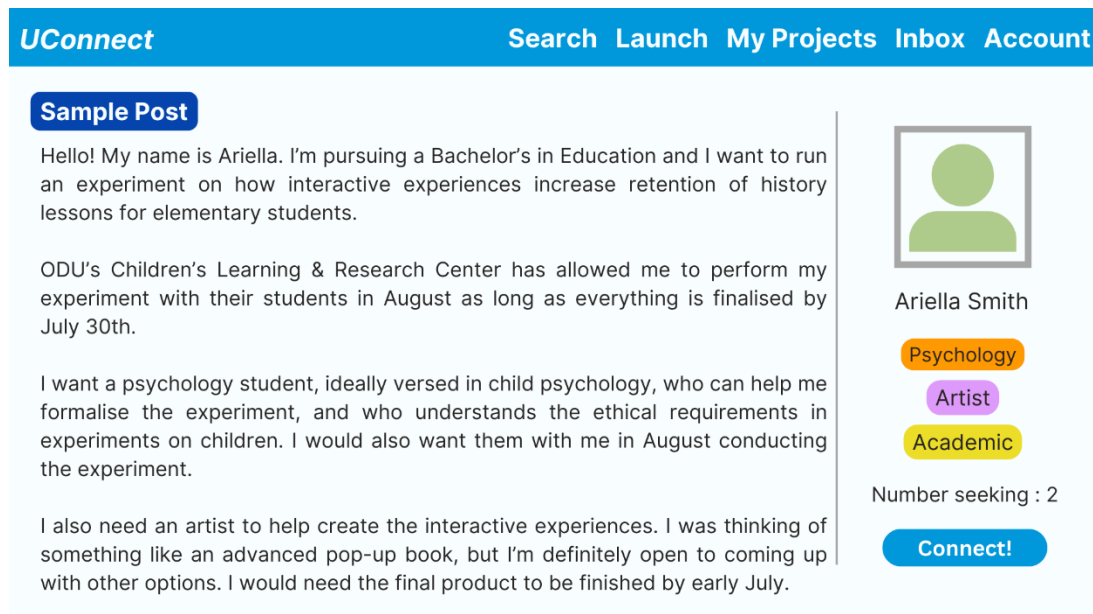


Figure 11: A mockup of a post, from the perspective of a project seeker, on UConnect.

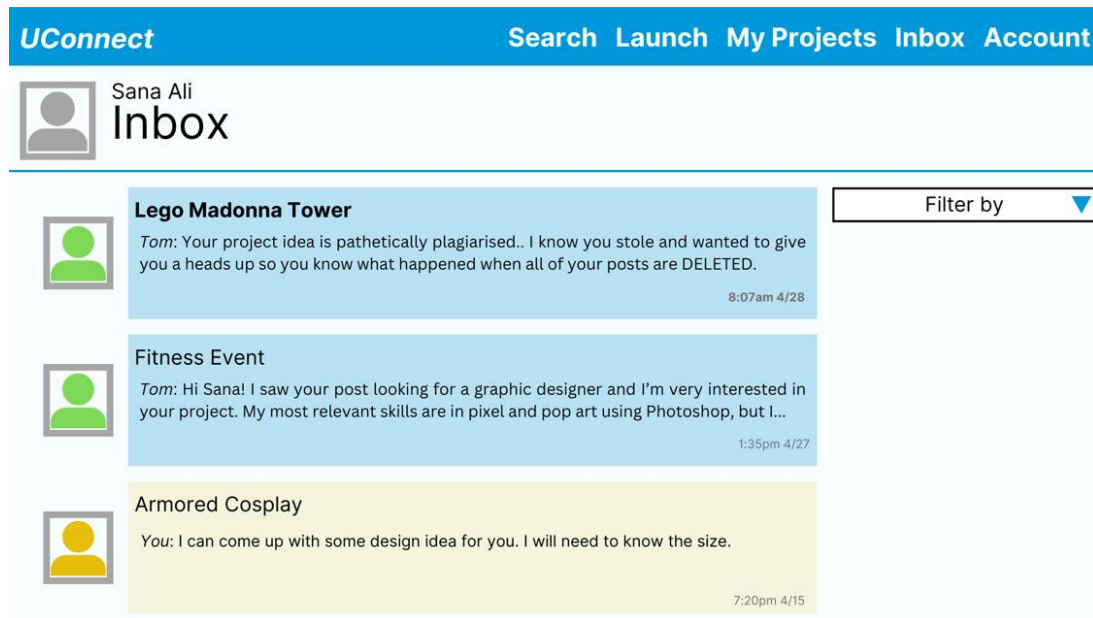


Figure 12: A mockup of a user inbox. A blue message box shows a project the user launched. A yellow message box shows a project the user joined. A new message has a bolded subject line.

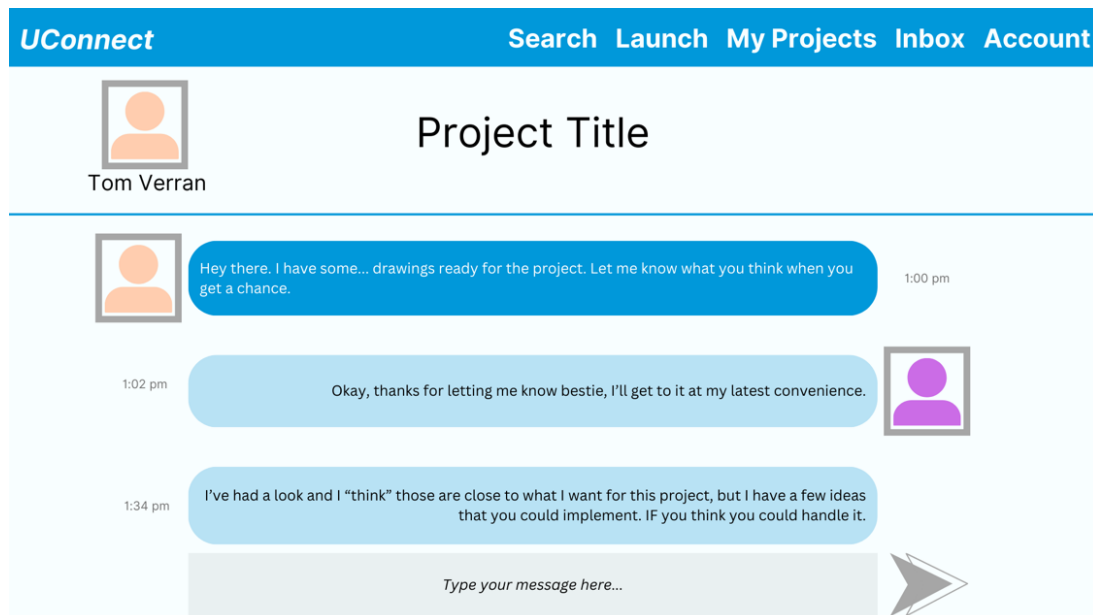


Figure 13: A mockup of two users, a project launcher and project seeker, messaging. The title of the related project is at the top of the message. The recipient is dark blue; the sender is light blue.

- Tagging system

- E.g. “graphic design”, “psychology”, “academic”, “short-term” etc.; describe general areas of expertise/skill or project characteristics.
- Can be applied to user profiles (highlight areas of skill/expertise).

- Can be applied to project posts (highlight areas of needed skill/expertise or define relevant project characteristics).
- Searching
 - Users can use the home page to navigate through UConnect (see Figure 14).
 - Users will use search queries to find relevant projects and/or users (i.e. potential team members) (see Figure 15).
 - Users can use various filters, or search by tags and/or keywords.
 - Not a matchmaking service (cannot match students to other students).
- Reviews
 - Users can leave reviews on profiles of other users that they have worked with.

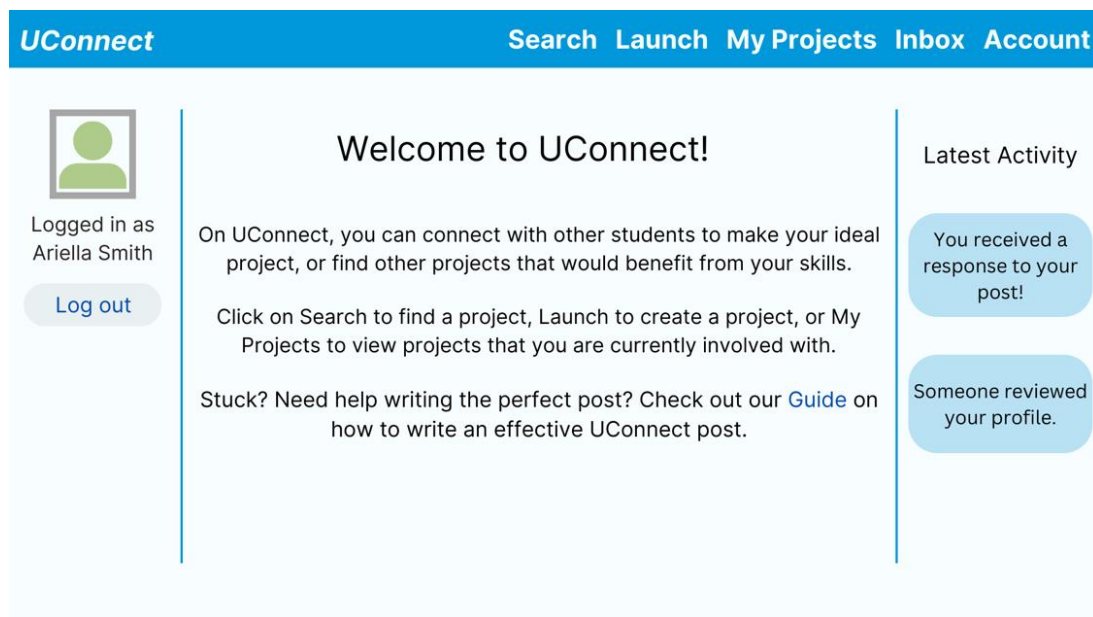


Figure 14: A mockup of the UConnect homepage after a user has logged on.

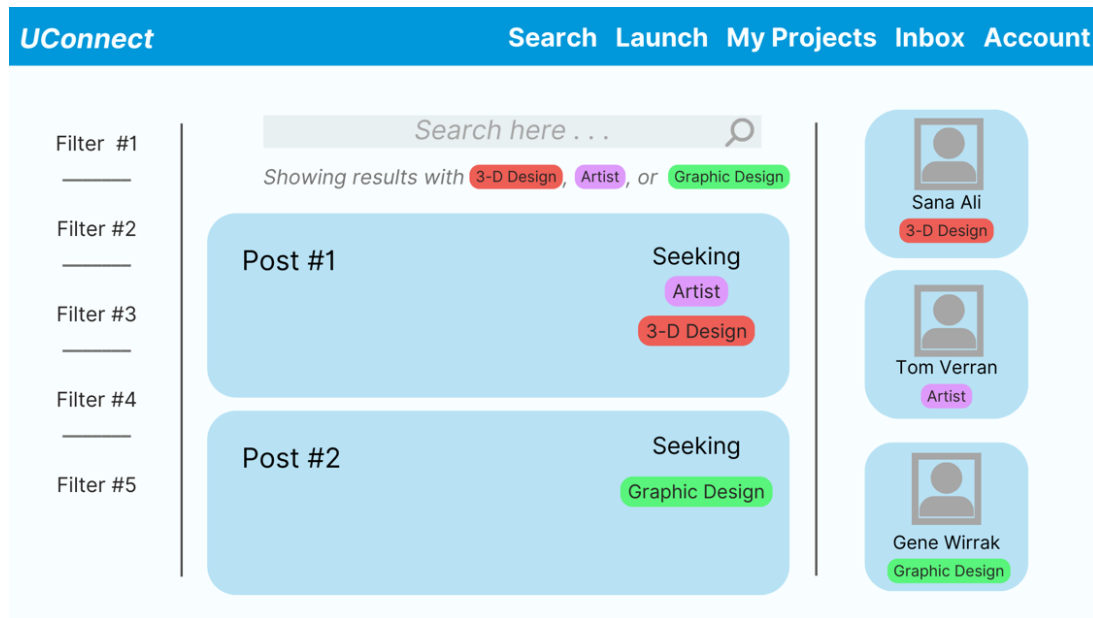


Figure 15: A mockup of UConnect's search page, after making a search for the tags "3-D Design", "Artist", and "Graphic Design"

2.2 Major Components (Hardware/Software)

- Django for web development
- PostgreSQL for databases
- OAuth for user authentication

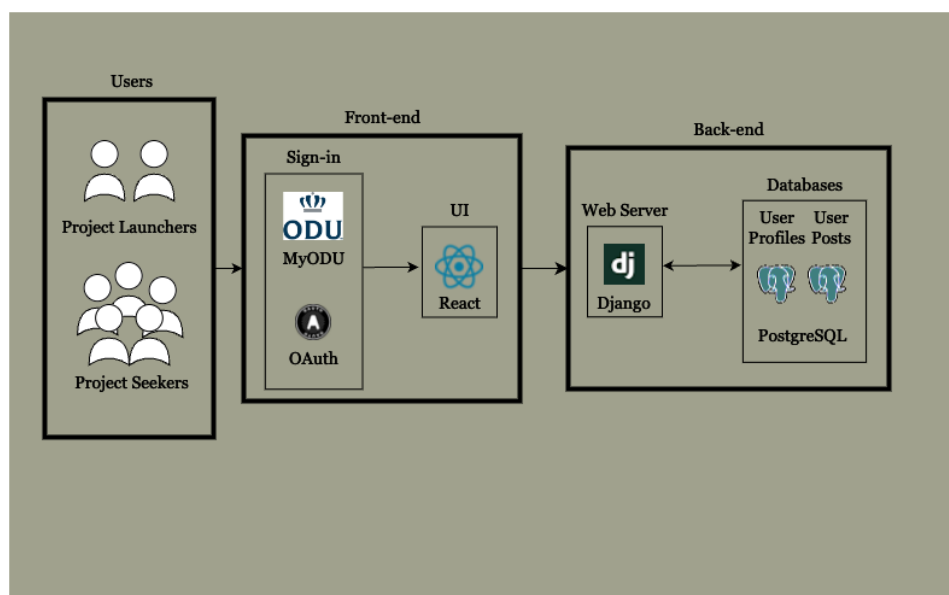


Figure 16: Major Functional Component Diagram for UConnect

3 Identification of Case Study

UConnect's users are students actively enrolled in a college, university, or other institution of higher education. UConnect's customers are university administrators.

4 Glossary

Project Launcher: User who has a project they are interested in recruiting students to work on

Project Seeker: User who is interested in using their skills to contribute to a project

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