

UConnect Lab 1

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Version 1

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1 Introduction

Bachelor's degrees are no longer sufficient for early level career positions. Employers now want experience, but in order to gain experience, one needs a job or an internship. College students are surrounded by other college students who have the same issue as them, but often do not seek each other out for help.

Veera Korhonen tracked high school and college graduates by population from the years 1960 to 2022. The number of college graduates has continued to increase. This is represented in Figure 1, where the top blue line represents high school graduation rates, and the bottom black line represents college graduation rates.

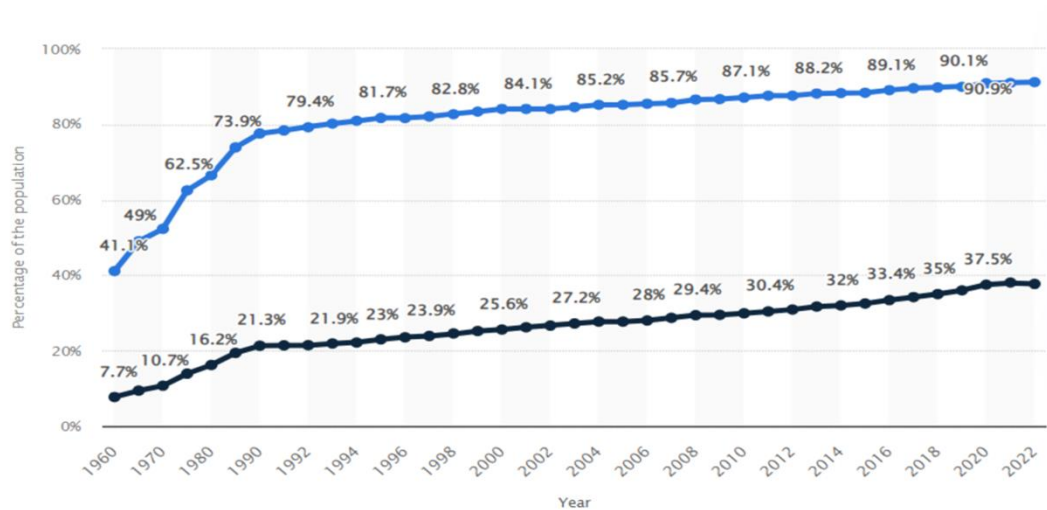


Figure 1: Graph of increased enrollment from 1960 to 2022 (Korhonen, 2023).

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Despite the increase in enrollment, there have been few internships. While a study by Sarah Zehr in 2016 showed that 75% of students had some form of internship experience by graduation, another study conducted by Kapoor and Gardner-McCune in 2020 showed that the numbers are lower than that. Figure 2 represents the distribution of internships based on household income and gender.

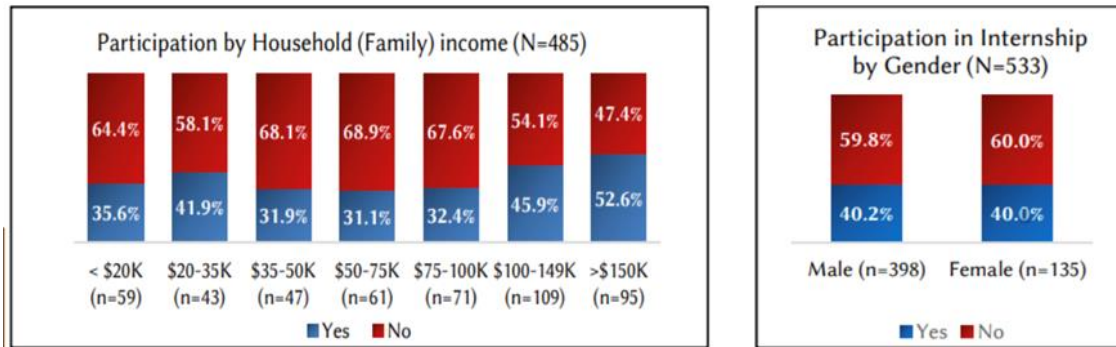


Figure 2: Participation in internships by household income and by gender (Kapoor & Gardner-McCune, 2020).

Verve Search with Hannah Salton explored the phenomenon of what has been referred to as “experience inflation.” This phenomenon is one that as time goes on, employers require more experience for entry level jobs, making it harder for newer graduates or those seeking internships to be able to get an entry level job or internship. In the U.S., entry level jobs in many fields are requesting more years of relevant experience, despite their marketing as “entry level” or “junior level.” Figure 3 showcases listings by industry that require two or more years of experience for entry-level positions.

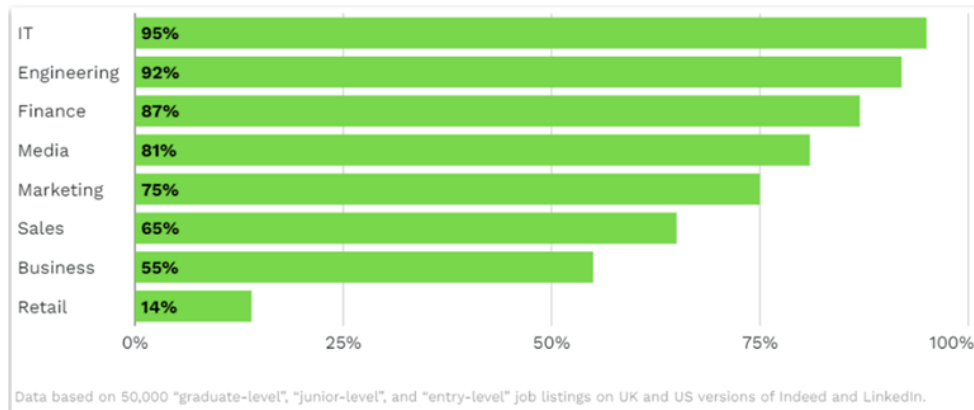


Figure 3: Percentage of jobs that require two or more years of experience by industry based on data from LinkedIn and Indeed (Search & Salton, 2022).

If a student wishes to create their own project to get experience, they currently must seek out other students on different platforms. That student must then reach out to each person individually and wait for a response. Figure 4 shows the current process flow for a project launcher.

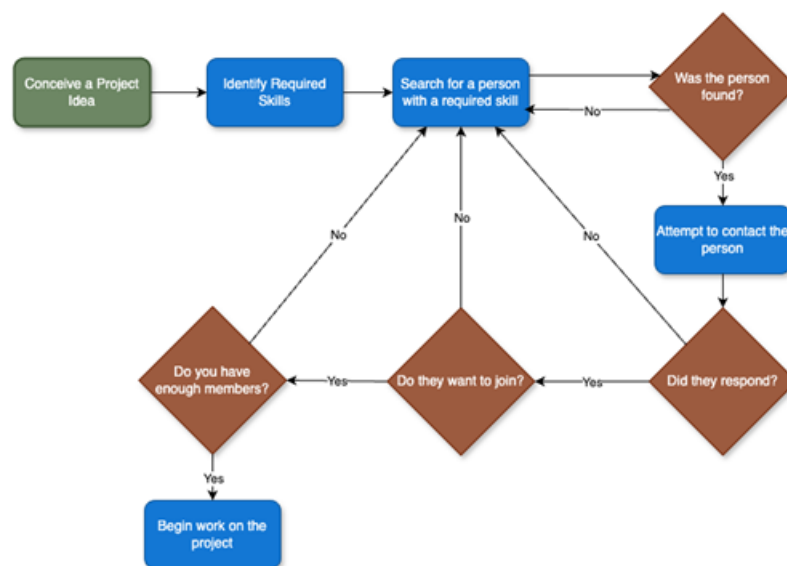


Figure 4: The current process flow for a project launcher.

Students who are interested in gaining experience can explore traditional employment opportunities or search for projects organized by other students. If students choose to search for employment opportunities by the traditional route, they must find suitable internships or jobs in

their area, meet the requirements, apply, and be accepted. If students decide to search for student created projects, they must use different platforms to seek out these projects, whether that be face-to-face or online. This brings up the possibility of being rejected for a project, and it is difficult to find projects. Figure 5 showcases the current process flow for a project seeker.

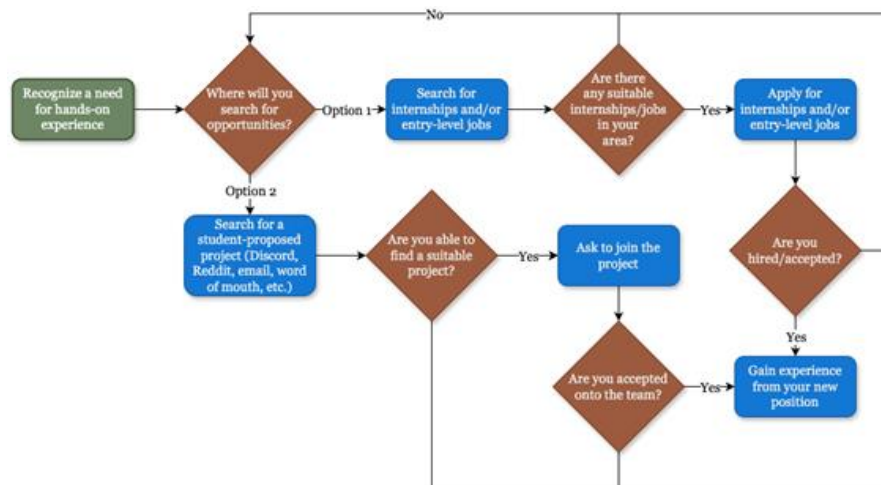


Figure 5: The current process flow for a project seeker.

This is where UConnect comes into play. UConnect will be a service to allow students to connect with one another to participate in projects. These projects will allow students to gain the experience needed to get an entry level position.

2 UConnect Description

UConnect will be a web application that will allow college students to reach out to each other and work on projects for experience that the students can put on their resumes. A Project Launcher will be able to make a post that describes the project they wish to launch, and what skills or fields of study are needed for the Project Launcher's project. Figure 6 shows how the process to find members for a project will be simplified with UConnect.

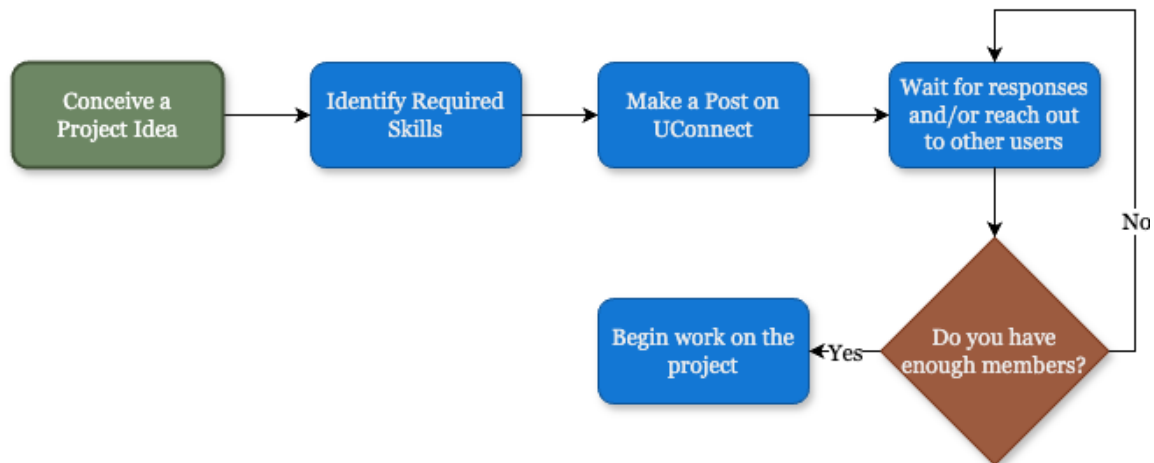


Figure 6: Solution flow of a project launcher.

A Project Seeker will be able to browse available projects to find one that they wish to join. When a Project Seeker finds a project that piques their interest, they can then reach out to a Project Launcher for permission to join the project's team.

Students will still be able to pursue traditional employment opportunities, but UConnect will make the process to find student-created projects much easier. Rather than searching through many platforms, students will only need to search on one platform. Figure 7 shows how UConnect will simplify the process for Project Seekers.

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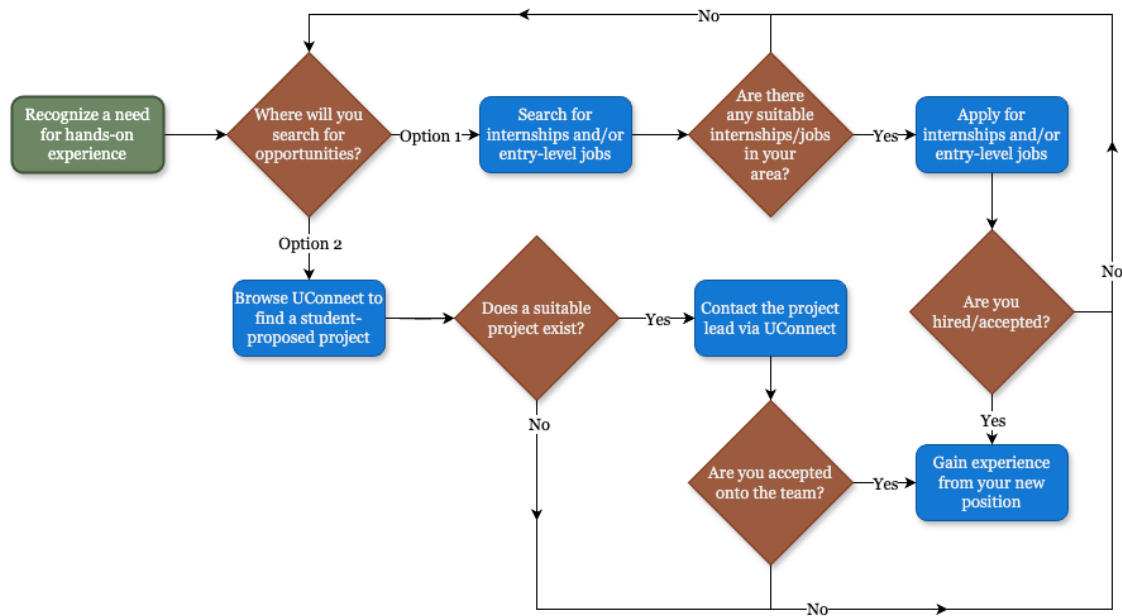


Figure 7: Solution flow of a project seeker.

Any user, at any time, will be able to be a Project Launcher or a Project Seeker. Users will be able to simultaneously look for a project to participate in as a Seeker, while recruiting for their own project as a Launcher.

2.1 Key Product Features and Capabilities

Users will be able to act as Project Launchers. As a Project Launcher, users will be able to create posts to advertise their project, shown in Figure 8, browse user profiles in order to reach out to potential team members, shown in Figure 9, and use the My Projects page to keep track of all projects, whether they are active, archived, or deleted, shown in Figure 10.

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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

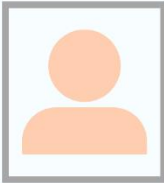
I want to make a pop-up shop that caters to dietary restrictions! It can be so hard for many people to find what they're looking for in food, but people who have restrictions deserve to be able to go out and have a good time too!

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

Skills:

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.

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


Filter by 

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

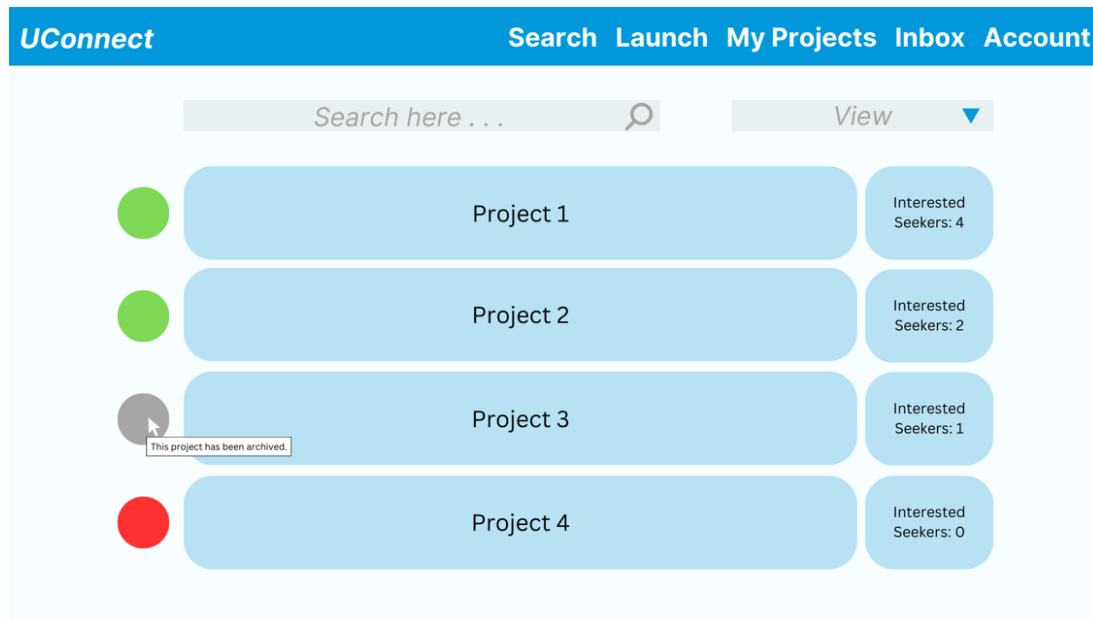


Figure 10: A mockup of the "My Projects" page. An active project is green, an archived project is gray, and a deleted project is red. The number of interested seekers is shown on the right side next to the name of the project.

Users will also be able to act as Project Seekers. As a Project Seeker, users will be able to create personal profiles to describe their skills. They will also be able to browse posts that were posted by Project Launchers. Figure 11 shows a post from the perspective of a Project Seeker. Project Seekers will also be able to message users about projects with which they are involved. Figure 12 shows a user's inbox, and Figure 13 shows a conversation between two UConnect users.

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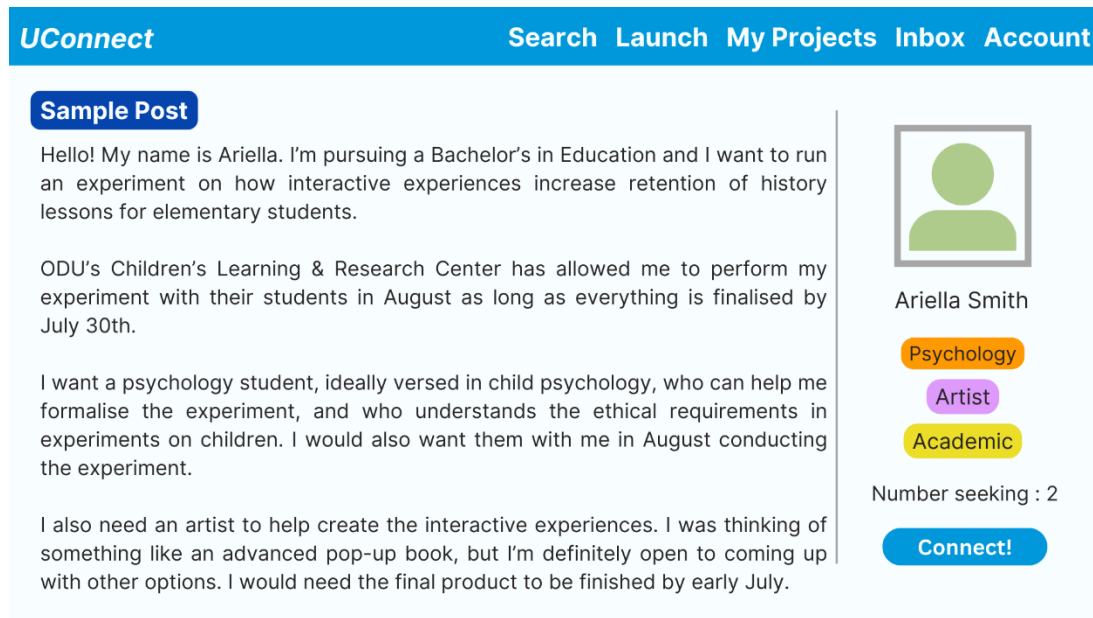


Figure 11: A mockup of a post, from the perspective of a project seeker, on UConnect.

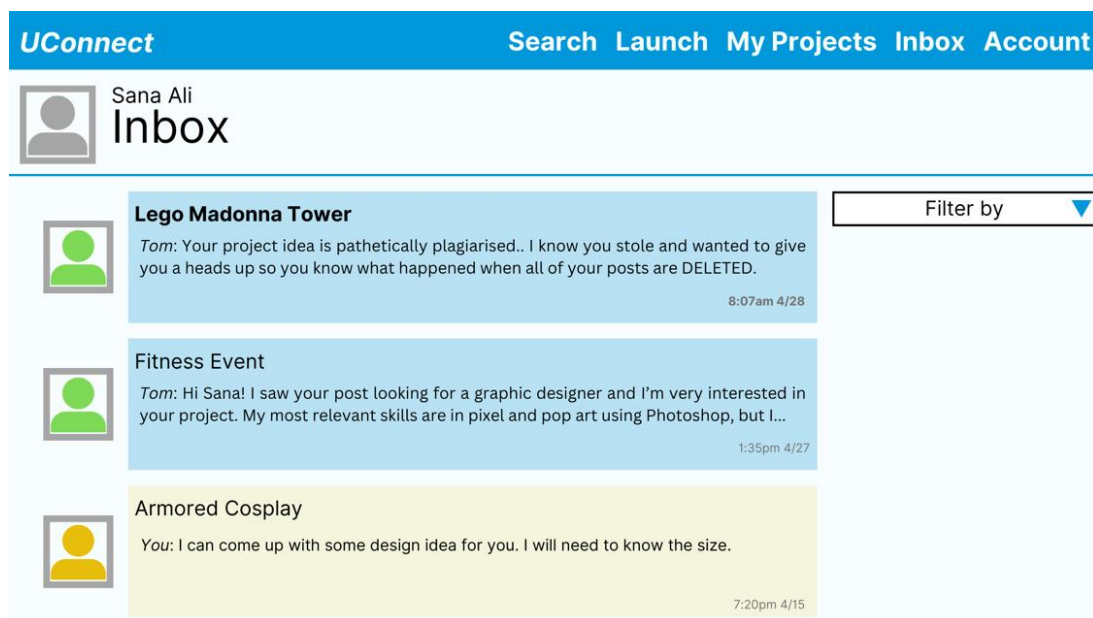


Figure 12: A mockup of a user inbox. A blue message box shows a project the user launched. A yellow message box shows a project the user joined. A new message has a bolded subject line.

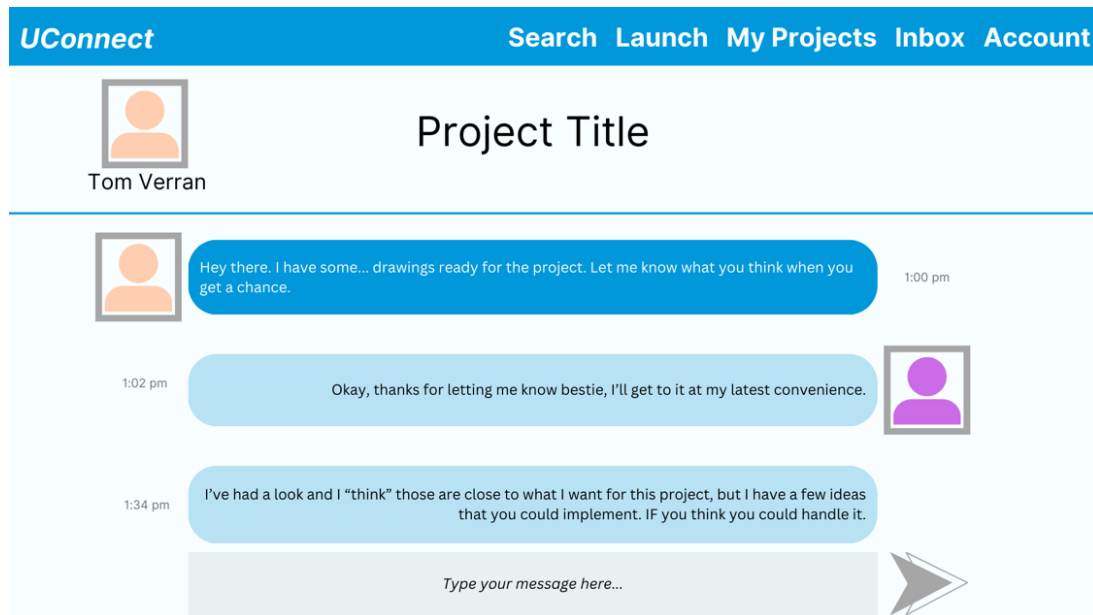


Figure 13: A mockup of two users, a project launcher and project seeker, messaging. The title of the related project is at the top of the message. The recipient is dark blue; the sender is light blue.

UConnect will also have a tagging system. Tags will be a useful way for users to find each other and projects that they are interested in, as there will be no matchmaking. Tags will be able to be applied to user profiles to highlight areas of expertise, and project posts to highlight areas of needed skills, or to define relevant project characteristics.

The home page, shown in Figure 14, will allow users to navigate UConnect, as well as offering users who are stuck a guide on how to write a UConnect post. Users will also be able to search for relevant projects or users, as shown in Figure 15. Users will be able to use filters, tags, or keywords to search. Users will also have the ability to review profiles of users with whom they have worked.

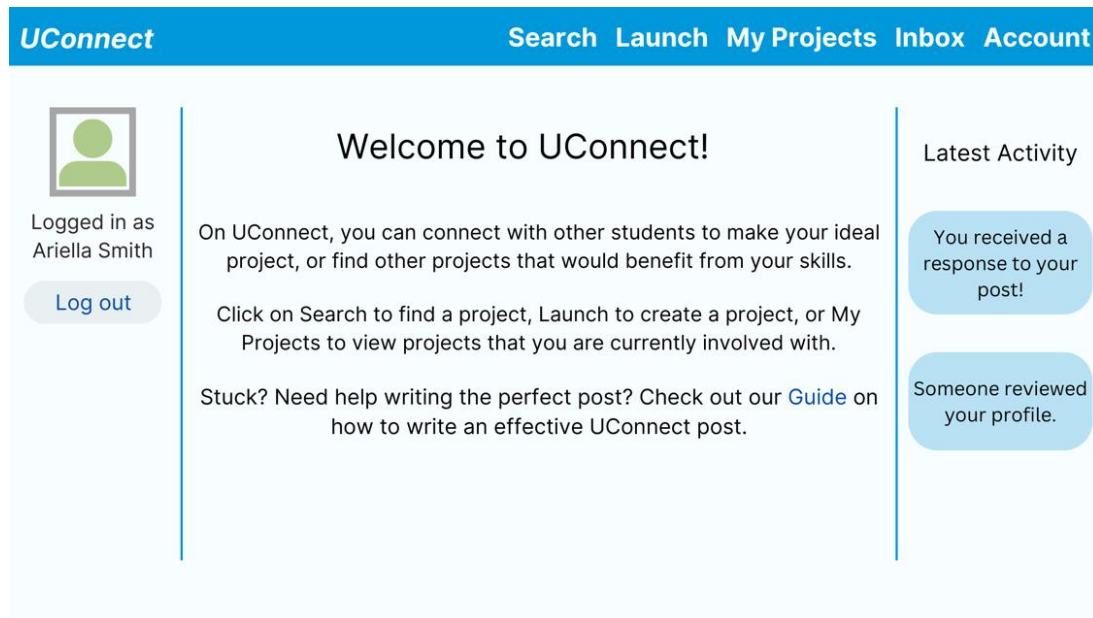


Figure 14: A mockup of the UConnect homepage after a user has logged on.

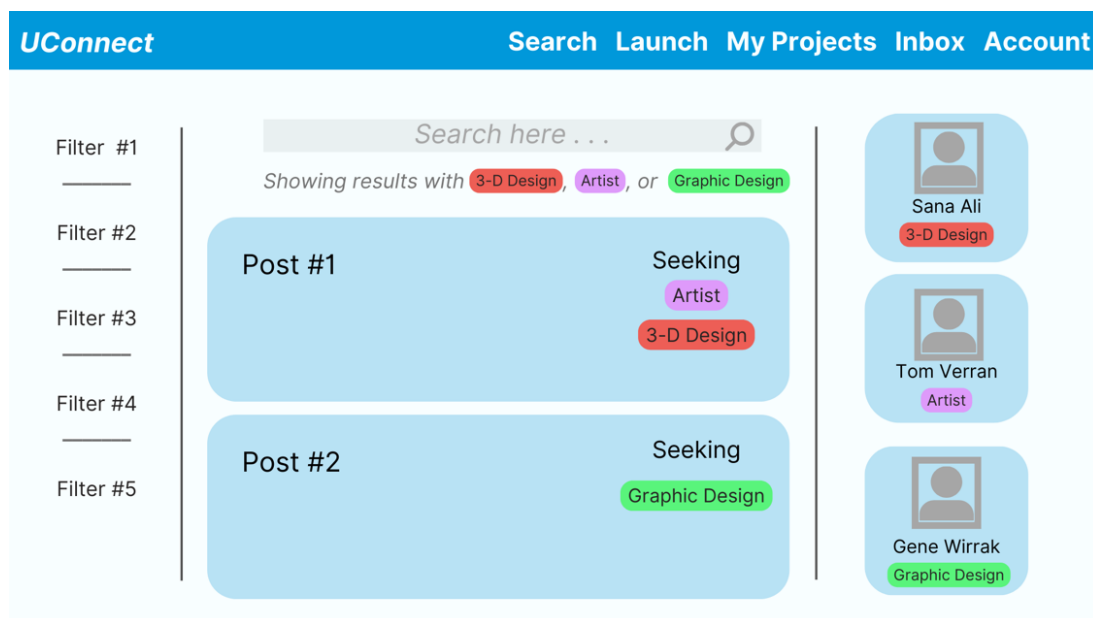


Figure 15: A mockup of UConnect's search page, after making a search for the tags "3-D Design", "Artist", and "Graphic Design"

2.2 Major Components (Hardware/Software)

Figure 16 shows the major functional component diagram for UConnect. UConnect will use Django for web development, PostgreSQL for databases, and OAuth for user authentication.

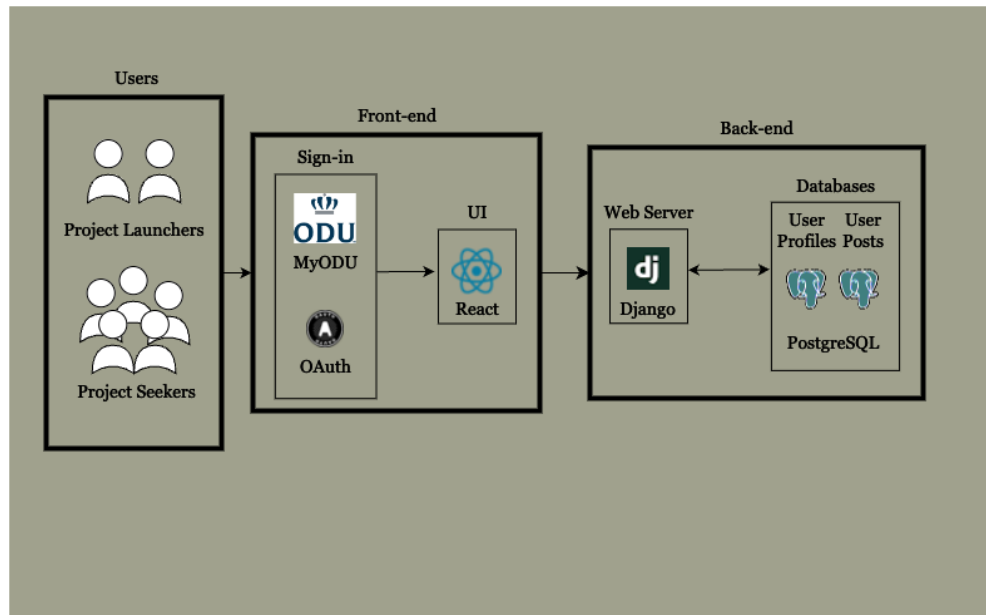


Figure 16: Major Functional Component Diagram for UConnect

3 Identification of Case Study

UConnect's users are students actively enrolled in a college, university, or other institution of higher education. Students will benefit by using UConnect to find projects to join or to put their own projects out for others to join. The experience students gain from these projects can then be put on their resumes.

UConnect's customers are university administrators. University administrators will make UConnect available for students to use through their school's website.

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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