

Empowering Future Tech Leaders for Career Success



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Design Maniacs

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Mentored by: Dr. Arun Aryal

Collaboration Tools used: MS teams, Power Point, and Figma

Methodology: Design Thinking

Design aspects: Empathize, Define, Ideate, Prototype, Test

DESIGN THINKING PROCESS STEPS

EXPLORATION Phase
Finding Out

EMPATHIZE

DEFINE

FOCUSING Phase
Making Sense

IDEATE

EXPERIMENTATION Phase
Trying Out

PROTOTYPE

TEST

CONTINUOUS COACHING Phase
Embedding the New

Acknowledgement:
IDEO, Stanford Design School

Project Overview

Introduction

Imagine yourself as a junior at California State University Los Angeles, deeply engaged in your coursework. You have a passion for technology and envision various career paths that align with your interests. Perhaps you see yourself managing databases in a healthcare setting, or maybe the idea of conducting data analysis for a business striving to expand its customer base captivates your imagination. Alternatively, you might find yourself in the uncertain position of not knowing your career path and lacking the tools to narrow down your options or enhance your skills to become more marketable post-graduation. Fortunately, you're in luck — this is precisely the challenge that my team and I have set out to address!

The Problem

Throughout the initial phases of our academic journey this year, a recurring sentiment echoed in our group discussions: *“Cal State LA is not considered a good school”* and *“Employers don’t value an earned diploma from CSULA.”*

These statements raised a critical question for our team: How can we effectively address and overcome the perception challenges faced by Computer Information Systems (CIS) students at Cal State LA? Specifically, how can we enhance their marketability and instill confidence as they prepare to enter the workforce?

Solution

Our team spent countless hours considering how to frame and best solve this problem. We settled on designing an application that focus on providing what CIS students need to be successful, curated by current and past CSULA CIS students.

Our application will provide:

Course Catalogs

Define Different IT fields as well as Job openings in those fields.

IT Event Calander

Self-learning Courses

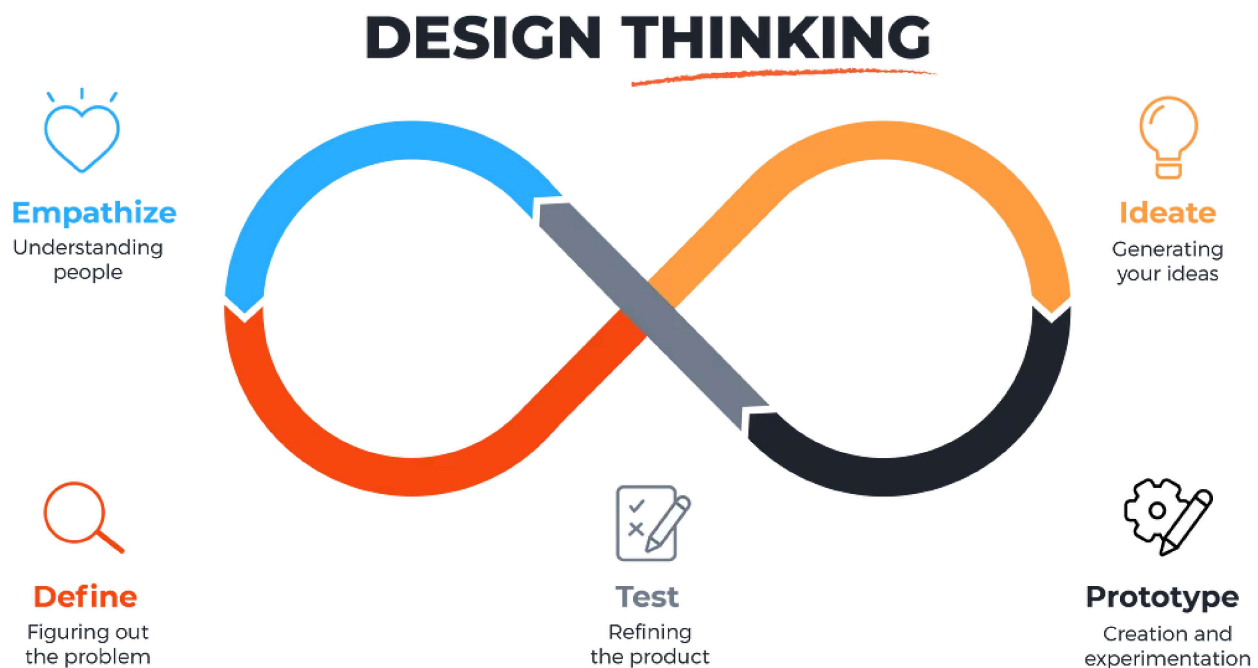
List of Professors who teach CIS courses.

A way to build a network and ask for advice and guidance.

Prototype Development

Design Thinking

To craft our application prototype, we embraced the Design Thinking methodology, a process that mandates a meticulous definition of our challenge. As detailed in the earlier section outlining the problem, we employed the principles of Design Thinking to guide us through the iterative and human-centric stages of ideation, prototyping, and testing. This methodology provided a structured approach, ensuring our solution aligns closely with the needs and experiences of our target users.

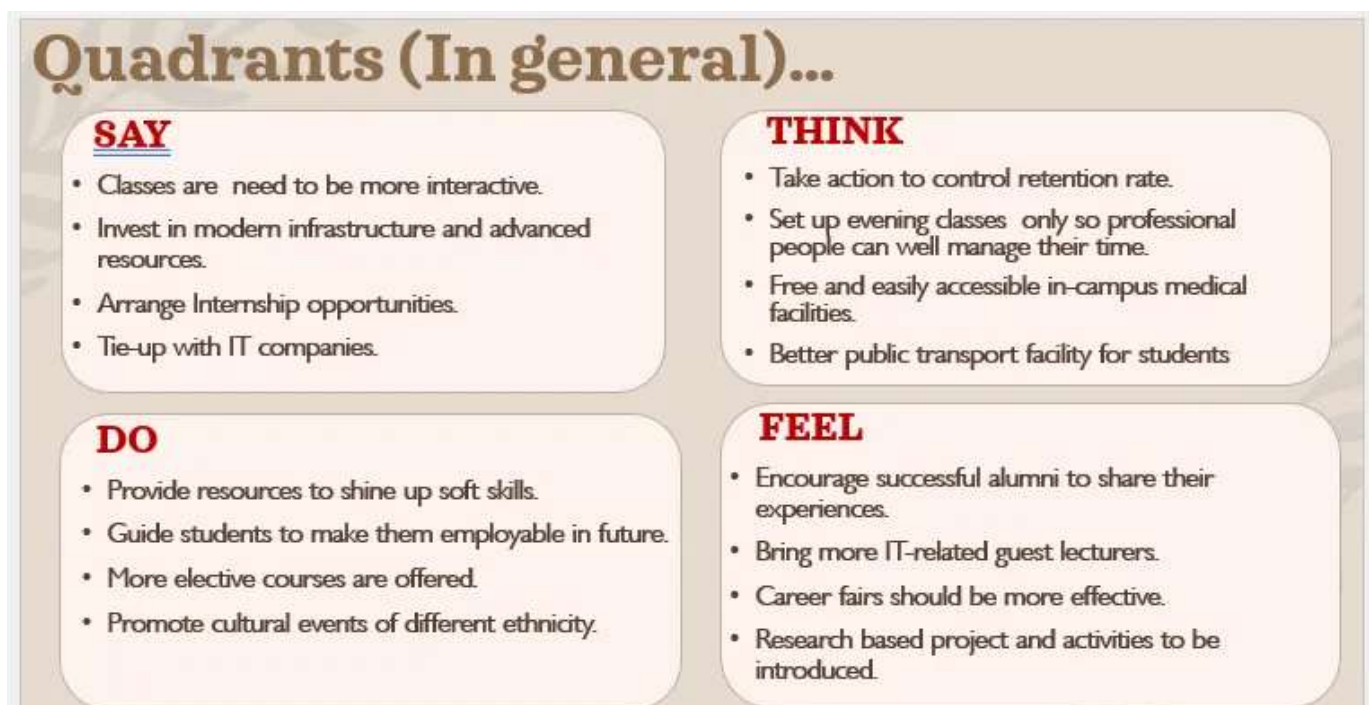


Research

In our market research initiative, we approached the assessment of CSULA from various perspectives. Employing a multifaceted methodology, we designed a comprehensive survey that was widely shared and completed by our peers. Additionally, we conducted in-depth interviews within focus groups to gather qualitative insights. Our overarching objective in this research was to discern the key factors influencing individuals' perceptions of what sets CSULA apart, specifically in terms of areas where they perceive it as lacking compared to other universities. Through a combination of quantitative and qualitative data, we aimed to uncover nuanced aspects that contribute to the perceived shortcomings and opportunities for improvement at CSULA.



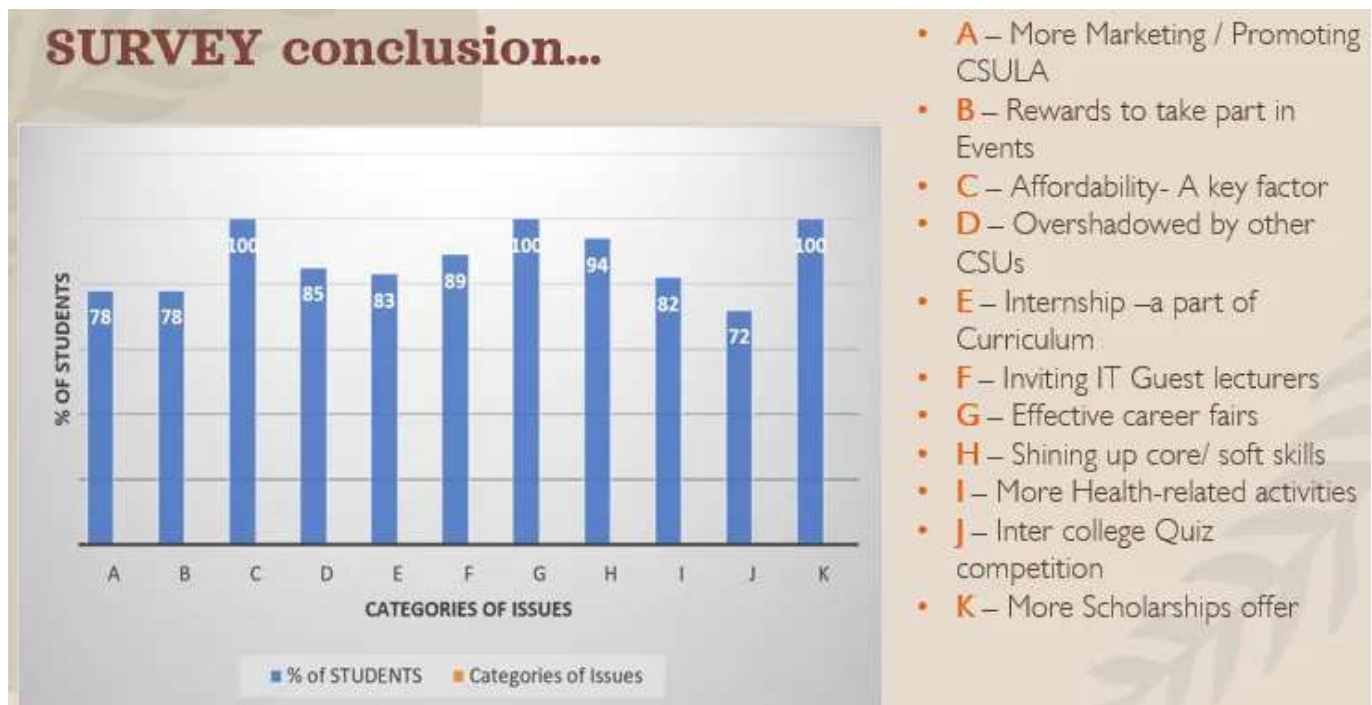
During the focus groups, we delved into a spectrum of questions, exploring topics ranging from the reasons behind the choice of CSULA to identifying the most significant barriers or struggles in education. Participants also shared insights on potential measures the university could take to enhance its reputation. The responses were categorized into distinct sections: 'What Was Said,' encapsulating the participants' actual statements; 'What They Thought,' encompassing their opinions and perspectives; 'What Could Be Done,' outlining potential actions and solutions; and 'What They Feel,' capturing the emotional and subjective aspects of their responses. This structured approach allowed us to systematically analyze and interpret the rich data gathered during the focus group sessions.



Based on the insights gathered from interviews and focus group discussions, we developed survey questions and utilized Qualtrics.com to administer our survey. The primary objective was to further refine our understanding of the specific services that our application should prioritize.

The survey results highlighted three key areas that were unanimously identified as needing improvement or increased emphasis: *affordability* (A), *effective career fairs* (G), and *quiz competitions & scholarships* (K).

Additionally, there was strong agreement (94%) on the importance of *enhancing core and soft skills* (H). Following closely, 89% of respondents expressed a desire for more *IT guest lectures* (F), indicating a significant interest in expanding knowledge in this field.



The sentiment that California State University, Los Angeles (CSULA) is *overshadowed by other CSUs* (D) resonated strongly, with 85% of participants strongly agreeing with this perspective. While other aspects of the survey received slightly lower percentages, they were still considered salient, with 83% of students expressing their belief in their importance.

Despite varying degrees of importance assigned to different aspects, we took all survey results into careful consideration during the design phase of our prototype. This inclusive approach ensures that our application addresses

the diverse needs and preferences of the student body, reflecting our commitment to creating a comprehensive and effective solution, completing the empathy portions of our design thinking process.

Define

Following the establishment of empathy, the next step involves revisiting the initial design challenge and precisely defining the problem. This process necessitates the creation of a persona representing the envisioned user of our application.

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Name: Sarah Lopez
Age: 24
Born: Los Angeles USA
Student: 1st sem. MSIS at CSULA

Sarah, a talented girl is pursuing masters in Information System at California State University, Los Angeles. She has been living with her parents and siblings in LA City since her birth. She has always been looking for school and college closer to her home so she can manage her studies while staying with her parents' home. Her career goal is to get a job in one of the well-known IT companies as a Data Scientist.

Her main reason to choose CSULA was not just only ease in commutation but also well affordable as CSULA receives significant amount of funds every year which makes local students to pay less tuition fees. She has also considered the popularity of this University as one of the factors while making decision.

She wishes that her profile receives good responses in a job market after finishing her study at CSULA and to get appreciation for skills and knowledge gained in this University.


She suggests that CSULA should put more efforts to attract talented students not only from US but all over the world and reach out the companies who get ready to send their talented employees as part time students to upskill themselves.

Some Inter-school quiz competitions are need to be arranged specifically for IS/IT students so they could face real time competitive atmosphere and realize where they stand. IT people mostly remain in stressful situations throughout their career so stress busting activities like yoga, meditation are also to be introduced.

Drawing from the rich qualitative data we have collected, we have carefully delineated our potential user base. This extends beyond current students to encompass the individuals we wish to attract to CSULA in the future. By considering both the existing student demographic and our aspirations for future enrollment, we aim to craft a persona that encapsulates the diverse needs and expectations of our user community. This approach ensures that

our design solutions are not only rooted in the current student experience but are also forward-looking, aligning with our strategic goals for the university.

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Name: Rahul Singh
Age: 23
Born: Mumbai INDIA
Student: 3rd sem, MSIS at CSULA

Rahul, Indian national has completed his under graduation from Mumbai University in Computer Science and is now pursuing masters at CSULA in Information Systems. While choosing this university, he was not aware of the different CSUs campuses and their significance. He only considered the state and location popularity.

He believes that CSULA has to send their representatives to the many locations especially in India and China to make the students aware with CSULA, on spot admission and offering scholarships to talented students. As international students are used to pay more tuition fees compare to local students so fees should be competitive and reasonable.

In this University, He likes to be a part of diversified culture and the same he desires to have in professional career in US after finishing his study, so he wants mandatory internship to be introduced as a part of curriculum to get real time professional experience and enhance his chances for employment. Guest lecturers from the IT companies are also to be invited frequently to motivate, guide and aware with current & future job trends.

As the International students mostly rely on buses and shuttles so public transport system should be more robust and efficient so they can save their valuable time considerably.

IDEATE

After completing the empathy and design steps, our focus shifted to the crucial ideation stage of the design thinking process. During this phase, our group grappled with determining the optimal delivery method for our solution and homing in on the specific focus of our project. This stage presented significant challenges, marked by multiple shifts in the project's goal, making it the most extended phase we encountered in the design thinking process.

After careful consideration, we arrived at the consensus that developing an application with a student-centric and student-controlled approach would be the most effective solution. This approach ensures that the application

remains continuously current and relevant, aligning with the dynamic needs of the student user base. Additionally, we made a strategic decision to narrow our project's focus to Information Systems majors. This deliberate choice aimed to minimize confusion and render the project more realistic within the constraints of our limited time and available data.

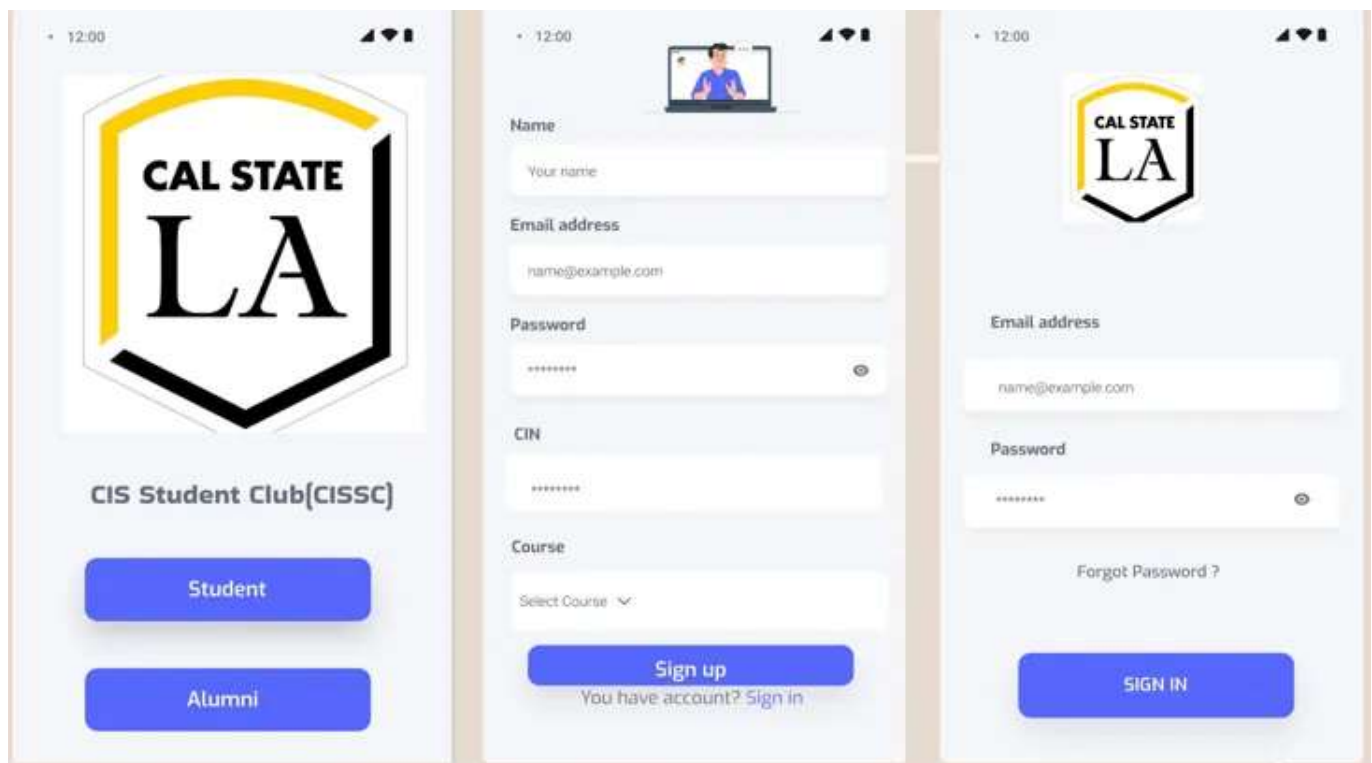
By adopting a student-centric application and concentrating on Information Systems majors, we aim to create a tool that not only addresses the identified challenges but also provides a tailored and realistic solution for our target audience. This strategic alignment ensures that our efforts are not only impactful but also achievable within the scope of our project timeline and available resources.

PROTOTYPE

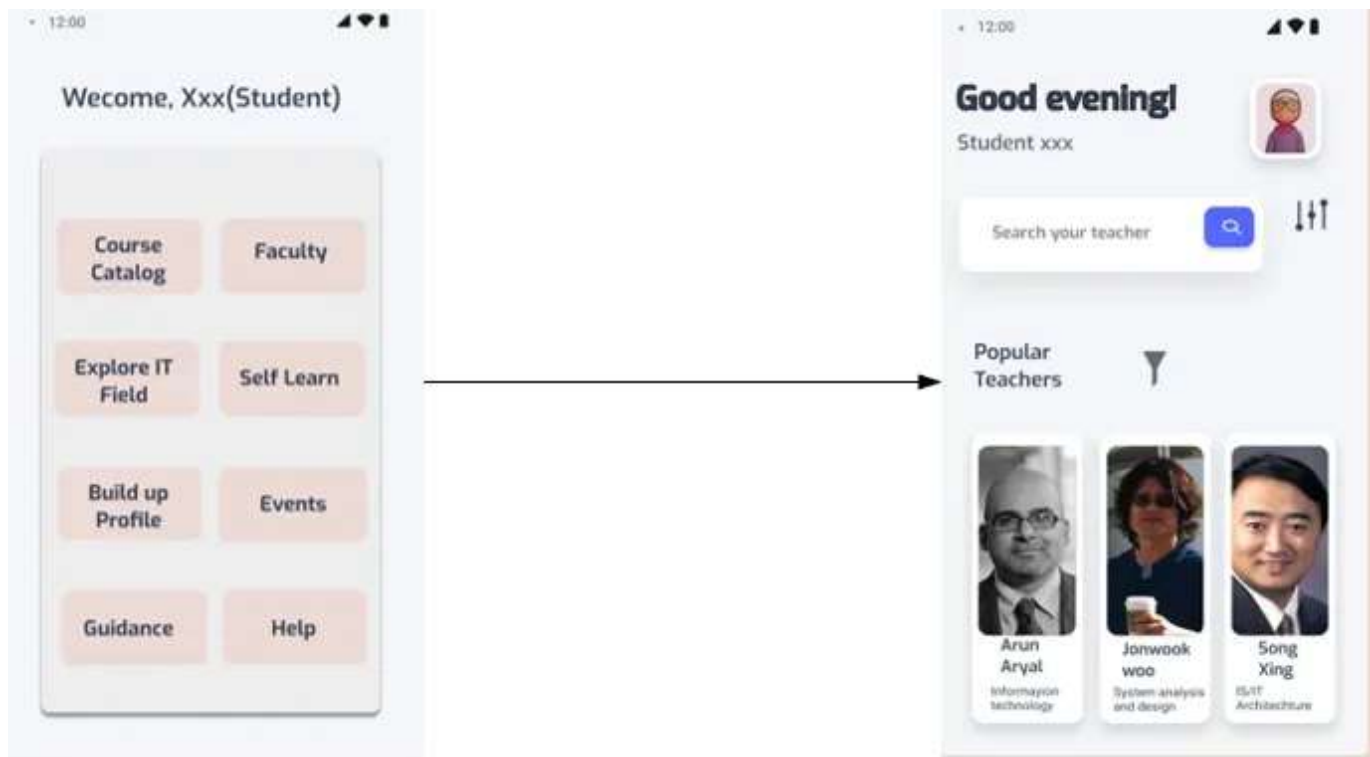
Entering phase four of the design thinking process, we delve into the prototyping stage. For our Prototyping we used *Figma* to show what our application will look like and function. Our chosen delivery mechanism for the solution is an application. In determining the services that align most effectively with our goals, our team has carefully deliberated and concluded on the following:



A new user would see the following:

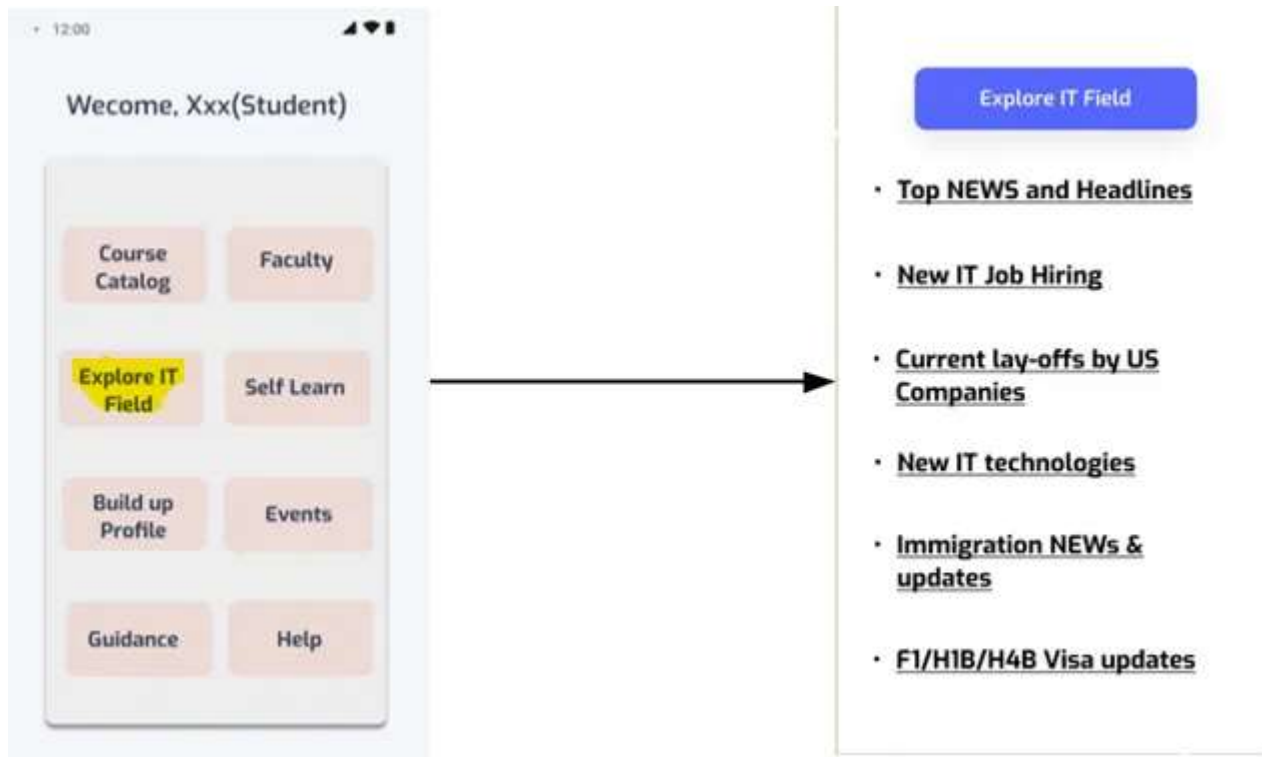


FACULTY Information:



In our *Faculty* window , students have opportunity to know all IT faculties, their background, experience, expertise and contact details.

Explore IT Field:



IT-related & Immigration (Intl. students) CURRENT AFFAIRS:

Sources:

-Techcrunch.com

-Thenextweb.com

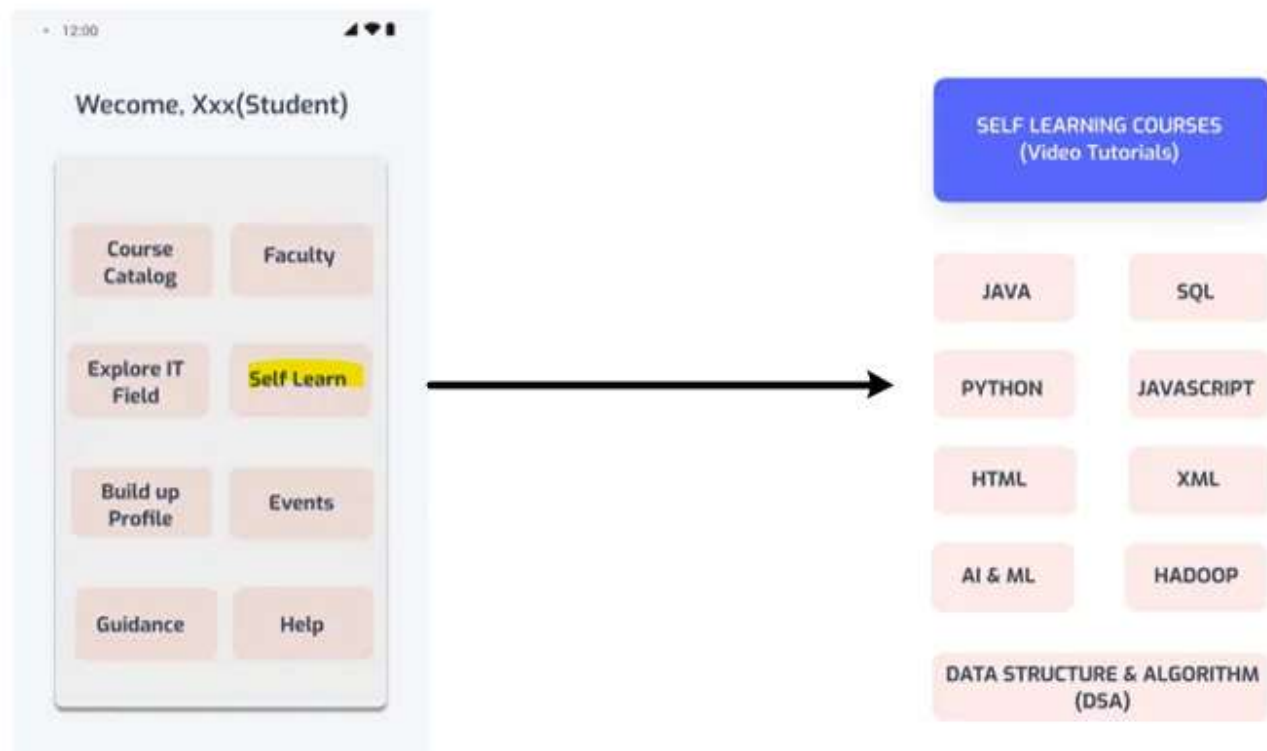
-Wired.com

-Wsj.com/tech

-Layoffs.fyi

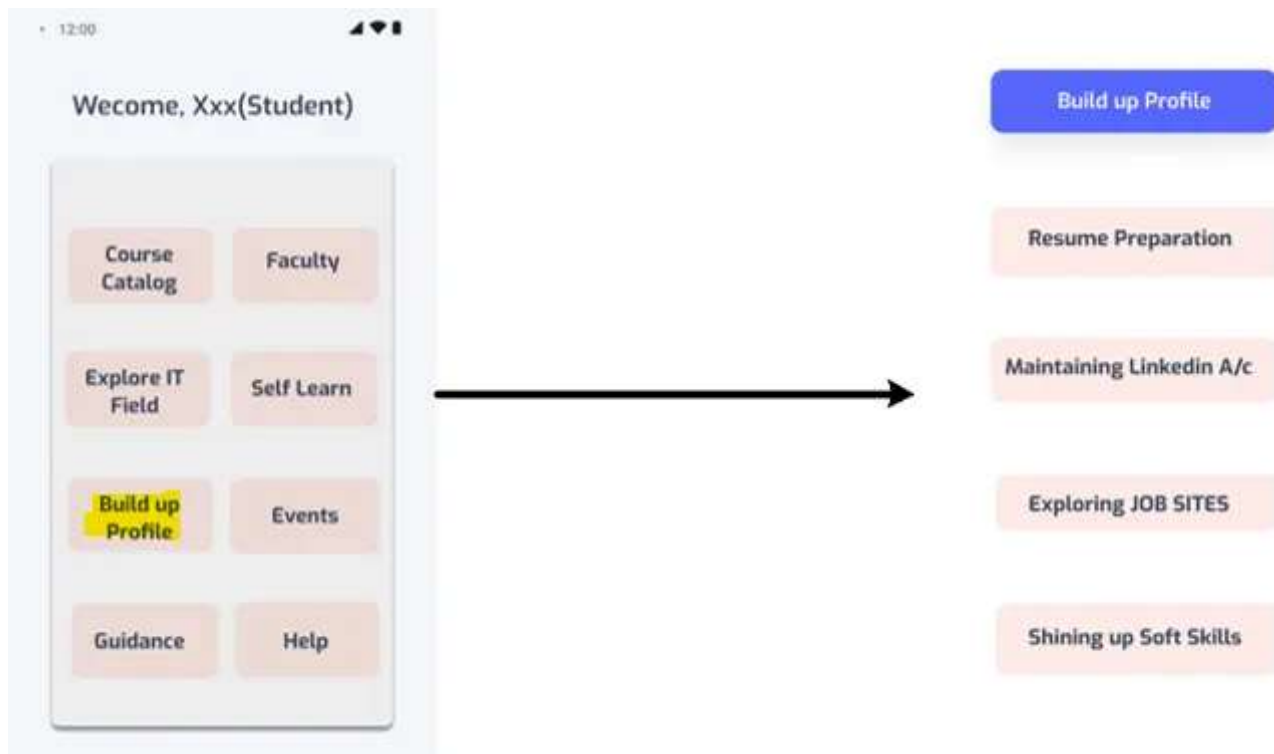
- USCIS.gov

Self-Learn:



Here is where our users can refine their skills through tutorials covering a wide range of relevant subjects in the IT field. Whether you're looking to acquire new skills or deepen your expertise, our curated content ensures you have access to quality learning materials. Here, our students actively prepare themselves for life after university, gaining the practical knowledge and proficiency needed to excel in the dynamic landscape of the IT industry.

Build Up Profile:



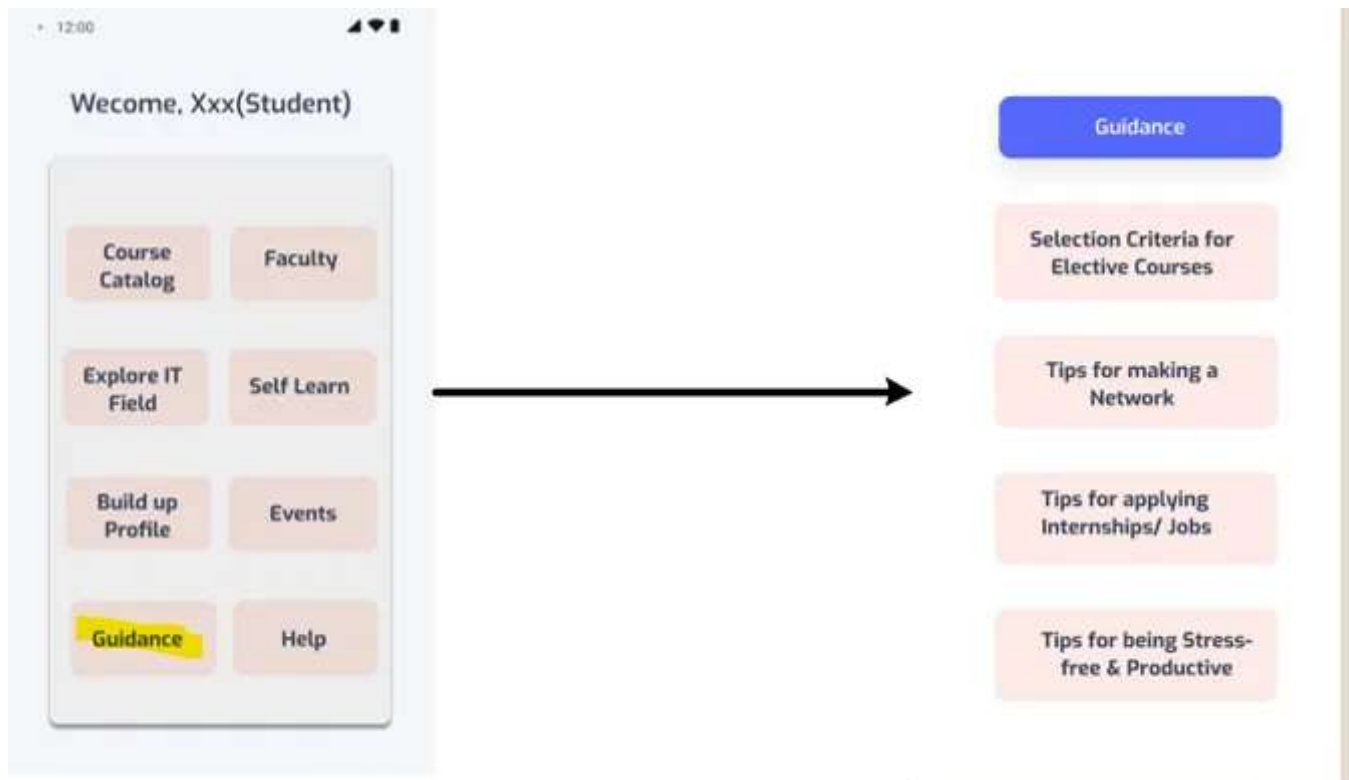
Within the *Build Up Profile window*, users will have access to a wealth of resources designed to enhance their professional presence. This includes guided materials and tips for crafting a compelling resume, optimizing their LinkedIn profile, and curated links to valuable job-finding websites. Our aim is to empower users with the tools and insights they need to make a lasting impression in the job market and facilitate their journey towards career success.

Events:



In the *Events* window, we aim to provide you with detailed information about specific IT-related fairs and events sourced from various reputable platforms such as Eventbrite.com, hackdavis.io, and directly from CSULA.

Guidance:



In our *Guidance* window, users will find tips and guided notes are provided for course selection, making network, jobs & internships and other health activities.

ALUMNI:

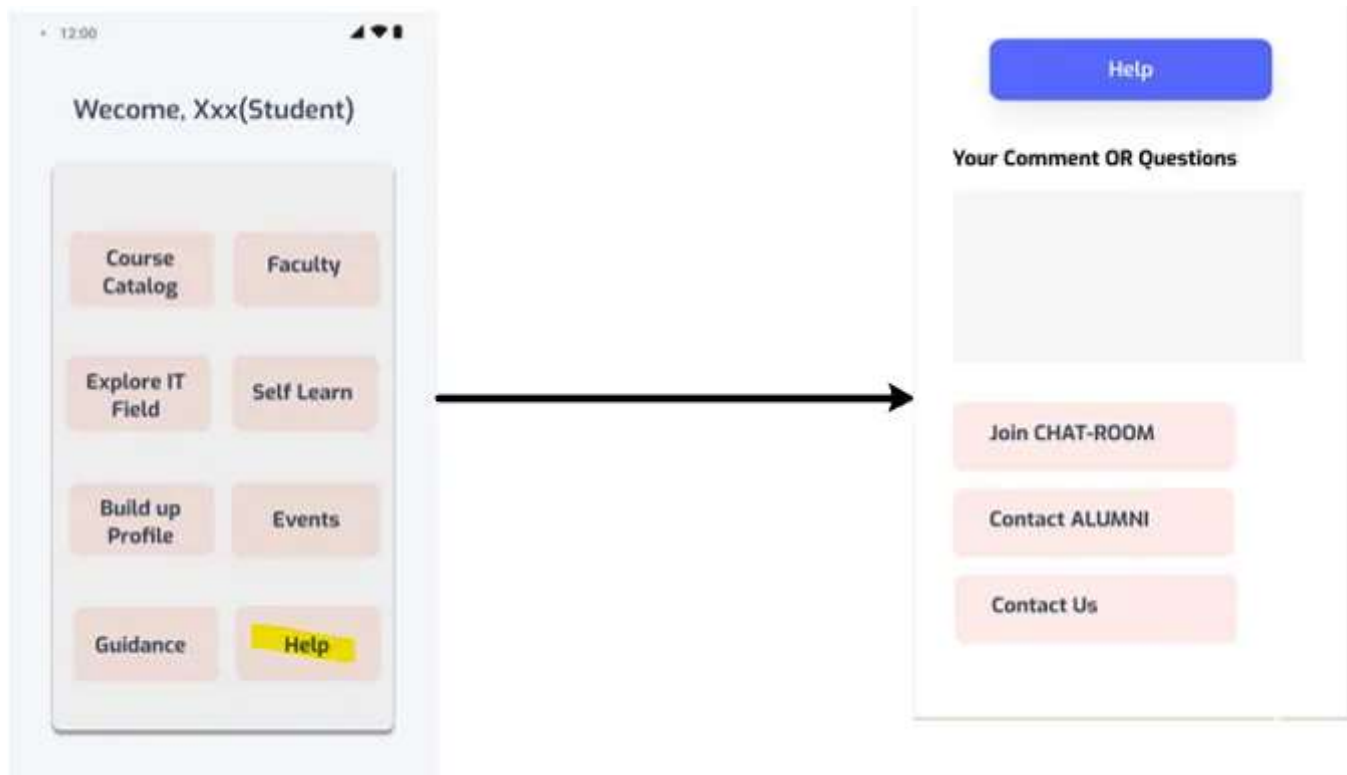
ALUMNI**Share your success story:****Upload files OR Materials**

pdf, doc, docx, jpeg only

[Open in app](#) ↗[Sign up](#)[Sign in](#)**Medium** Search Write

In our Alumni window, Alumnus will be able to provide guidance and right path to achieve success. as well as share their thoughts and materials to the existing students.

Help:



Our Help window will allow users to raise their issues and queries by writing brief notes. Also use chat room to get in touch with others. Contact alumni or to contact IT support.

TEST

Testing stands out as the pivotal phase in the Design Thinking Process, following the crucial step of Empathize. Here, our attention shifts to deploying our prototype to users, meticulously capturing their feedback, and subsequently initiating the process anew. Regrettably, the constraints imposed by the semester's duration hindered our ability to both construct and test our prototype. Nevertheless, we hold the optimistic expectation that a future team might seamlessly pick up the reins where we left off, advancing our collective pursuit of innovation.

SUMMARY

Through this application, our commitment is to provide unwavering support to CIS students in all conceivable aspects, enabling each of us to thrive in our careers and bring pride to CSULA and its esteemed faculty. As a cohesive team, we are dedicated to surpassing our limitations, firmly embracing the belief that “Success is not an overnight achievement; it is the outcome of sustained efforts driven by the right approach.

Education

Design Thinking

App Development

Project Management

**Written by Xavier Colin**

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