

UX celerator

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Project Overview

UCSD Cognitive Science students lack clear, centralized guidance on the major, leaving them to navigate requirements and career paths through fragmented resources and peer word-of-mouth.

Problem Statement

How might we create a centralized website, integrated with NotebookLM and an AI-powered assistant, to help UCSD Cognitive Science students easily access resources, plan their academic path, and connect coursework to career opportunities?

Project Scope

Goal:

Conceptualize an LLM-based website that guides new (entering/transfers) UCSD CogSci students in navigating the department.

Research:

Learn more about LLM tools, select an AI tool for training, and remotely interview CogSci students/alumni to identify key product goals/pain points.

LLM Training:

Feed the LLM files/documents/links related to UCSD CogSci courses, programs, and information.

Design:

Create wireframes & hi-fi prototypes that visualize the functions of the LLM-based website if it were to exist.

Users & Audience



Current

UCSD Cognitive Science (Design & Interaction) students, especially newer students who are still figuring out how to plan classes, find syllabi, and access advising info.



Future

Expand to undergraduates in Cognitive Science more broadly, allowing all students quick access to course information, advising resources, GE planning, and research opportunities.

User Research

[illegible]

- **Participants:** UCSD Cognitive Science – Design specialization students (mix of those who entered directly and those who switched in).
- **Method:** In-depth interviews guided by semi-structured questions.
- **Analysis:** Affinity mapping to cluster insights into themes.

Research Considerations

Based on our findings:

- Majority of people used the Cogsci website, word of mouth, and cognitive science course catalog to research and learn more about the cognitive science major

Therefore:

- We will aim to implement these resources into our LLM as well take into consideration for our final design and aim to fix the pain points mentioned by our interviewees these resources + additional ones

LLM Research

Which LLM: Notebook LM, Claude, or Perplexity?

Notebook LM

- Great for organization purposes.
- Excels in combining fragmented information into a digestible output.
- Most valuable in areas involving management, analysis, or studying.
- Can use external as well as internal sources



Claude

- Better in writing-intensive fields and/or coding.
- Transparency regarding its thinking process.
- More creativity, but risks providing inaccurate answers
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Perplexity

- Acts like a search engine.
- Provides fast and trustworthy information.
- Best in objective cases that involve summarizing, facts, and analysis.



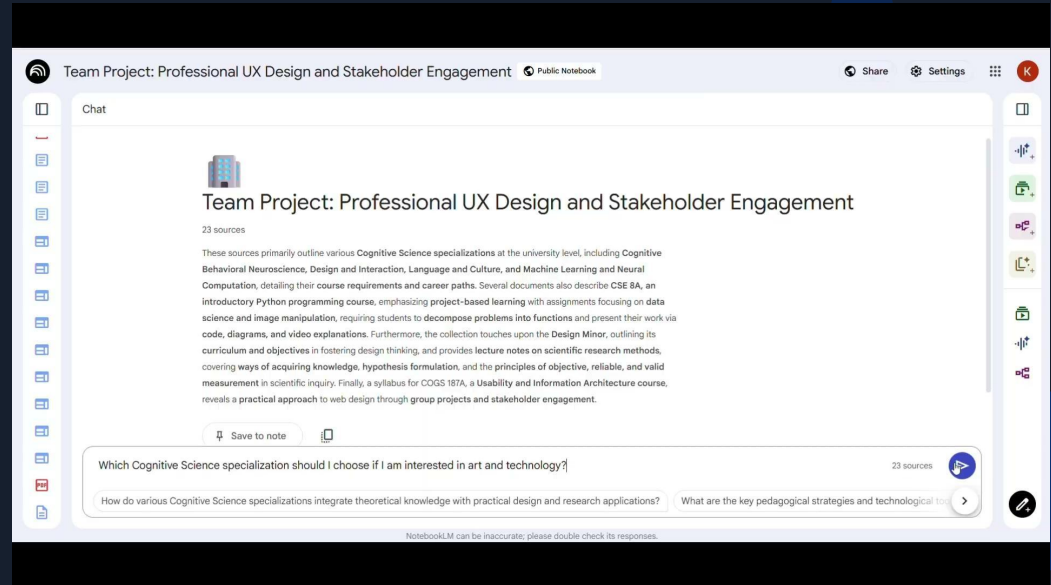
- Notebook LM is really good at areas involving management, analysis, or studying & can use external and internal sources
- Claude is better in writing intensive fields or coding
- Perplexity is like a search engine that provides fast and trustworthy information

Concluding Insights

- Claude might not be the best option:
 - susceptibility to hallucination and information inaccuracy
- Perplexity might be a good option to consider besides Notebook LM:
 - has a little bit more creative freedom while maintaining low hallucination
 - not ideal for custom product integration
- AI is capable of hallucinate and is often unreliable, however, Notebook LM has source grounding (information is double checkable)
- Our final choice: **Notebook LM is the winner!**

LLM Training Process

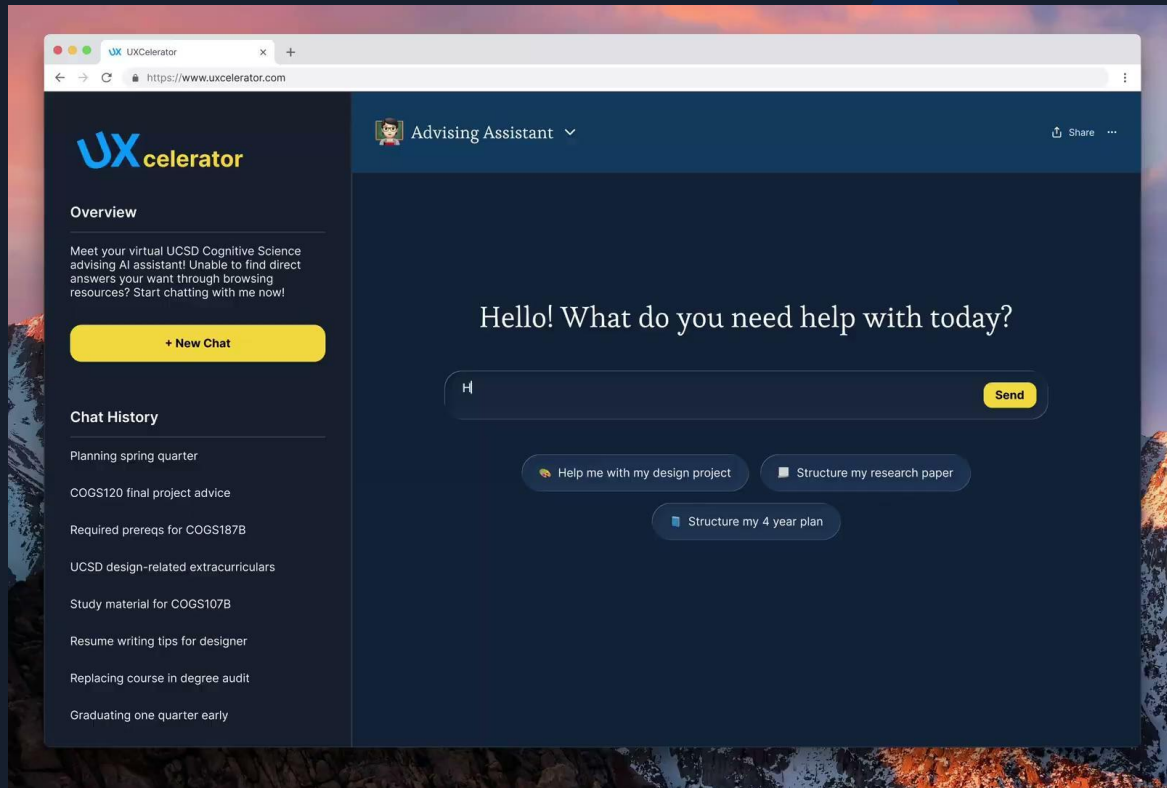
- Curated any accessible course syllabi/project guides for training.
- Compiled CogSci course information into grouped documents to save training capacity.
- Inserted relevant links into Notebook LM from the official UCSD website and CogSci Department.



The collage displays multiple instances of the UXcelerator website interface, illustrating different user journeys. Key elements visible include:

- Navigation Paths:** Buttons and links such as "New Chat", "Planning spring quarter", "Required prework for COGS101B", "UCSD design-related extracurriculars", "Study material for COGS101B", "Resume writing tips for designer", "Reporting course in degree audit", and "Graduating one quarter early".
- Content Sections:**
 - Four Year Plan:** A section titled "Create Your UCSD Four-Year Plan in Just Three Steps" with a large number "1" and a "Next" button.
 - Advising Assistant:** A section titled "Hi! Welcome to UXcelerator" with a "New Chat" button and a "Chat History" list.
 - Course Information:** A section titled "Choose where you'd like to begin: get advising support, plan your four year path, explore course information, or hear from alumni."
 - Alumni Advice:** A section titled "Commonly taken courses (Design and Interaction Focus)" listing various COGS courses.
- UXcelerator Logo:** The logo is prominently displayed in the top left corner of several screenshots.
- Chat History:** A list of previous chat sessions with timestamps and titles, such as "Planning spring quarter" and "Required prework for COGS101B".
- Related Resources:** A section titled "Related Resources" listing various UCSD resources like "UCSD Academic Plans", "The UCSD Degree Audit", "Capitol General Catalog", and "Capitol Undergraduate Major Requirements".
- Advising Overview:** A section titled "Advising Overview" with a "New Chat" button and a "Chat History" list.
- Course Information:** A section titled "Course Information" with a "New Chat" button and a "Chat History" list.
- Alumni Advice:** A section titled "Alumni Advice" with a "New Chat" button and a "Chat History" list.
- Commonly taken courses (Design and Interaction Focus):** A section listing various COGS courses.

Advising Assistant



Four-Year Plan

The screenshot shows a web browser window with the URL <https://www.uxcelerator.com>. The page has a dark blue header with the "UXcelerator" logo on the left and a "Four Year Plan" dropdown menu on the right. The main content area is divided into two columns. The left column contains an "Overview:" section with a paragraph about the Four-Year Plan and a "Related Resources:" section with a list of links. The right column features a large heading "Create Your UCSD Four-Year Plan in Just Three Steps:" followed by a large blue number "1". To the right of the number is a grid of buttons representing different undergraduate majors. A "Next" button is located at the bottom right of the grid.

UXcelerator

Four Year Plan ▾

Overview:

New to the Cognitive Science major at UCSD? The Four-Year Plan gives you a general outline of what classes to take each year to stay on track. Whether you're a first-year, transfer, or switching majors, this site is here to help you plan your time in the program. We've specifically tailored it for CogSci students, with course suggestions based on different focus areas like neuroscience, language, and machine learning. Use it to explore your options, plan ahead, and make room for things like research, internships, or studying abroad.

Related Resources:

- [UCSD Academic Plans](#)
- [The UCSD Degree Audit](#)
- [CogSci Tentative Course Offerings](#)
- [CogSci General Course Catalog](#)
- [CogSci Undergraduate Major Requirements](#)

Create Your UCSD Four-Year Plan in Just Three Steps:

1

Which of the undergraduate majors offered by the Cognitive Science Department at UCSD are you enrolled in?

Neuroscience Clinical Aspects of Cognition

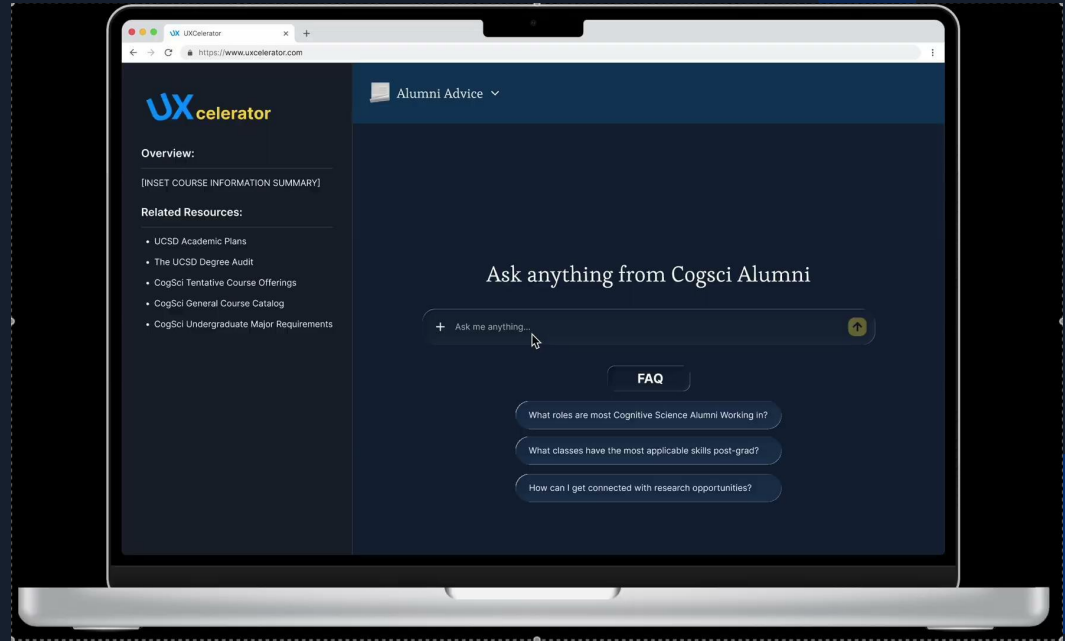
Language and Culture Machine Learning and Neural Computation

Cognitive Behavioral Neuroscience Design and Interaction

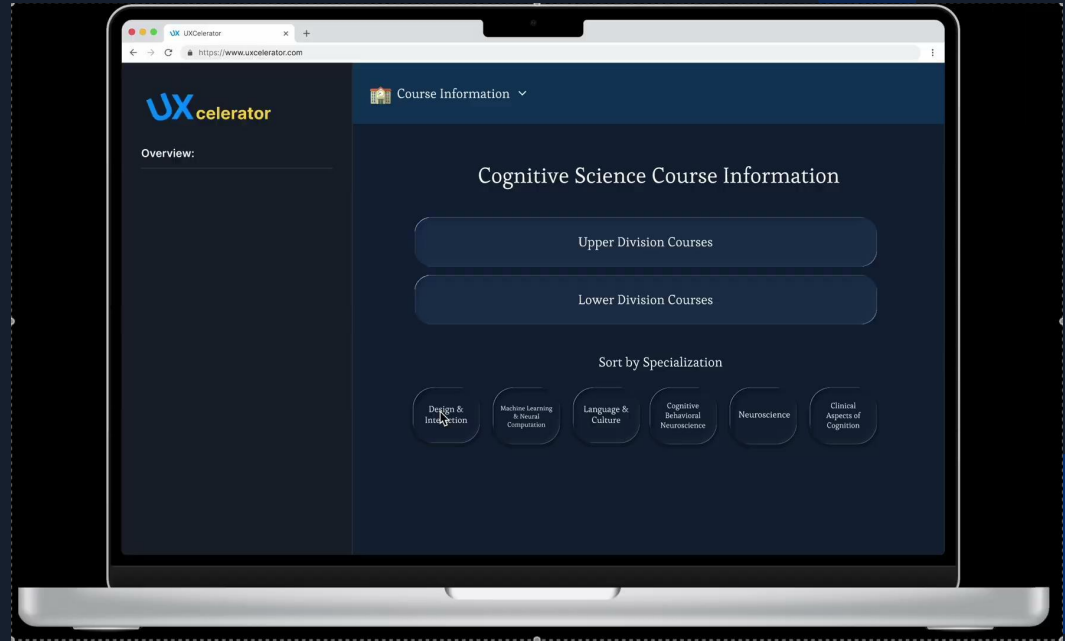
B.A. Cognitive Science B.S. Cognitive Science

Next

Alumni Advice



Course Information



Constraints & Obstacles

1. Notebook LM does not have a public API key.
2. We are using the free version of Notebook LM.
3. Sources are limited to what the team members have access to.
4. We have an insufficient amount of user research.
5. We are limited to a 10-week timeline.
6. We cannot invest money into the project.

Reflection / Moving Forward

1. Implement the design to an actual website with embedded link to the Notebook LM with all resources
2. Conduct user testing
3. Create a marketing and outreach strategy to ensure UCSD Cog Sci students actually use the site
 - a. Student Orgs and classes, social media, advising offices, etc

Thank You on Behalf
of Team

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