REINVENTING COURSE REGISTRATION

Group 1

INTRODUCTION

Introduction

DePaul University CDM graduate students frequently encounter difficulties with course registration because of the system's intricacy and slowness. These problems make it difficult for them to match their career aspirations and interests with the courses they take.

Problem Statement

CDM graduate students struggle during course registration because they are unsure which courses best align with their interests and goals.

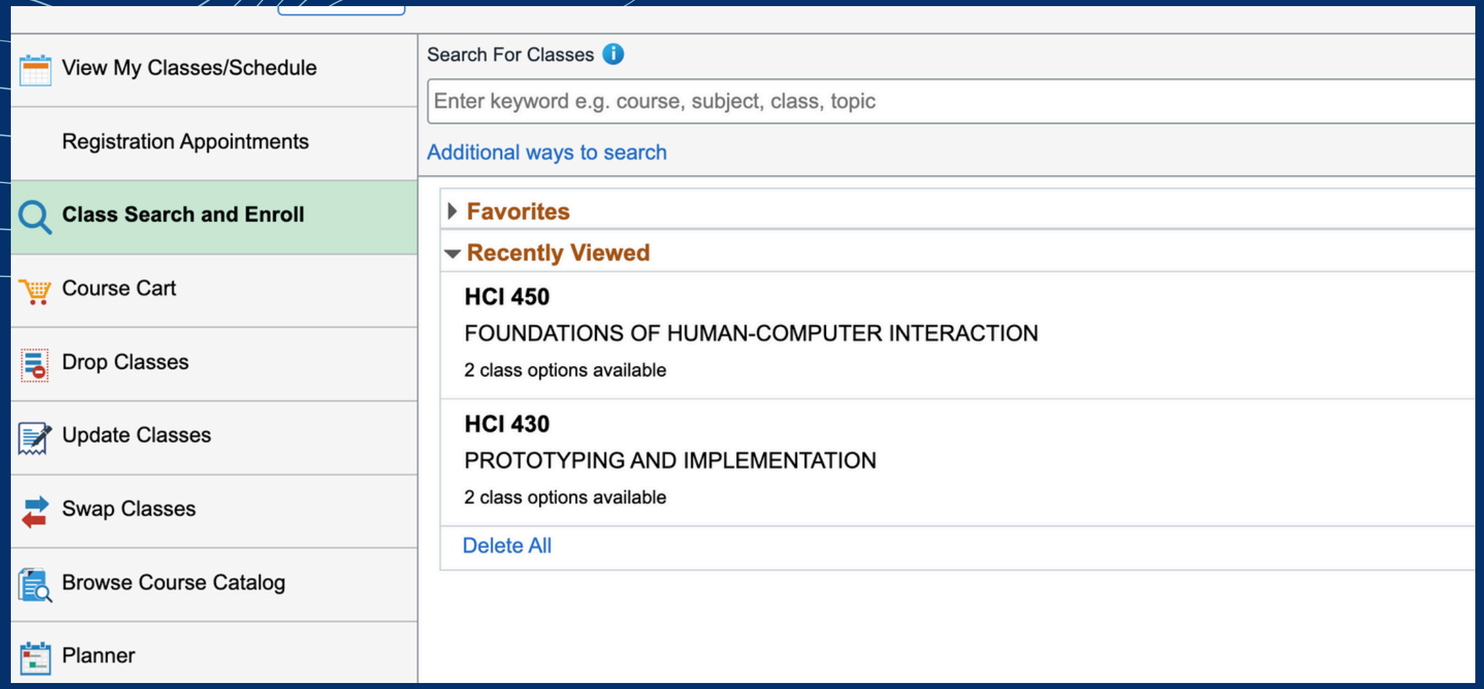
Hypothesis

We hypothesize that an AI-driven course suggestion tool will significantly improve decision-making efficiency and satisfaction among CDM graduate students by automating the process of matching student interests and career goals with suitable courses based on patterns in their academic history and course feedback data.

IDENTIFYING INSIGHTS & OPPORTUNITIES

We used a multidisciplinary approach to this study, using a range of techniques to guarantee a thorough understanding of the difficulties and goals related to course enrollment. In addition to sending out surveys and conducting user interviews, we also watched participants use the present registration system. We tried to record a comprehensive picture of the user experience using these techniques, covering all from specific problems to more general systemic problems.

DEPAUL TOOLS



Method Summary

Method of Research: A mixed-methods approach was used to fully comprehend the problems that the students were facing.

Techniques Used

- Surveys: Distributed to HCI graduate students to gather quantitative data on user preferences and behaviors.
- User Interviews: Conducted video interviews to collect qualitative insights into student experiences, needs, and pain points.
- Observation Tasks: Observed participants navigating the current registration system to identify user interactions, frustrations, and points of confusion.
- Focus Groups: Engaged groups of CDM graduate students in discussions to gather diverse perspectives on the redesigned registration system.
- Usability Tests: Evaluated the effectiveness, efficiency, and satisfaction of the redesigned registration system.
- Goal: To develop a thorough understanding of the challenges and opportunities in the current course registration process and inform the design of an improved system.

USER INTERVIEWS & THEMES

We conducted video interviews with DePaul graduate students to understand their experiences and challenges with the current course registration system. Collecting qualitative data on user needs, pain points, and areas of improvement.

1. Complexity and Inefficiency in Navigation:
Users need a straightforward, efficient process that minimizes time and effort spent on registration tasks.

2. Need for Streamlined Interactions Within a Single Platform:
Users require a single, integrated platform for all registration-related activities to simplify the process.

3. Desire for Personalization in Course Selection:
Students need a system that adapts to their schedules, learning preferences, and academic goals.

4. Lack of Accessible and Comprehensive Information:
Users need comprehensive, easily accessible course information.

CUSTOMER JOURNEY MAP FOR COURSE REGISTRATION

AWARENESS

Phase #1

Customer Action

Student receives an email about the upcoming registration period.

Touchpoints

University email, DePaul's academic calendar website.

Emotions

Curiosity mixed with apprehension about navigating the registration process.

Pain Points

Anxiety due to previous experiences of a complex registration process.

Quote

"I spend about an hour… It's a bit confusing."

Solutions

Notification system with preliminary course suggestions based on academic progress.

CONSIDERATION

Phase #2

Customer Action

Student explores available courses and requirements on the university's course catalog and degree requirements page.

Touchpoints

University course catalog, degree requirements webpage, department advisories.

Emotions

Overwhelmed by the volume and dispersal of information.

Pain Points

Difficulty in piecing together information from various sources.

Quote

"It's kind of like convoluted trying to find where I can see all the types of classes I'm able to take."

Solutions

A unified platform integrating all relevant information with enhanced search capabilities.

DECISION

Phase #3

Customer Action

Student selects courses and registers through the online system.

Touchpoints

Registration portal, course selection interface, academic advisor emails.

Emotions

Frustration with system glitches and lack of real-time assistance.

Pain Points

Course scheduling conflicts and inadequate system feedback on issues like prerequisites.

Quote

"It's kind of like a multi-step process rather than everything being laid out in one area."

Solutions

AI-powered tool for schedule optimization and real-time problem-solving assistance.

SERVICE

Phase #4

Customer Action

Student receives confirmation of courses and accesses their semester schedule.

Touchpoints

Confirmation email, online student dashboard.

Emotions

Temporary relief mixed with ongoing concern for potential schedule changes.

Pain Points

Uncertainty about course viability and instructor compatibility.

Quote

"Campus connect… I feel like that could really be refined and consolidated."

Solutions

Real-time chat support with AI-driven responses for immediate issue resolution.

75% of students (3 out of 4) created a personalized tool to better navigate the course selection process.

Intro Courses			Foundation Courses				Advanced Courses				
credits total:	16	Progress?	credits total:	12	Progress?		credits total:	20	Progress?		
	IT 411: Scripting for Interactive Systems	Completed	Winter 24	HCI 440:	Completed	Winter 24		HCI 445:	Registered	Fall '24	
	HCI 406: Web Site Design for HCI	Completed	Fall 23	HCI 450:	Completed	Winter 24		HCI 454/457	Registered	Fall '24	
	IT 403: Statistics and Data Analysis	Completed	Transfer Credit	HCI 430:	InProgress	Spring 24		HCI 460:	InProgress	Spring 24	
	HCI 412: HCI Design Fundamentals I	Completed	Fall 23	classes left:	0			HCI 472:	Registered	Fall '24	
								classes left:	2		

Major Elective			Capstone		
credits total:	16	Progress?	credits total:	4	Progress?
	HCI 511	Need to Take	Fall '24	HCI 594: Human Computer	Need to Take
	MKT 555	Registered	Summer '24	classes left:	1
		Need to Take			
		Need to Take			
	classes left	4			

Need to take:	7

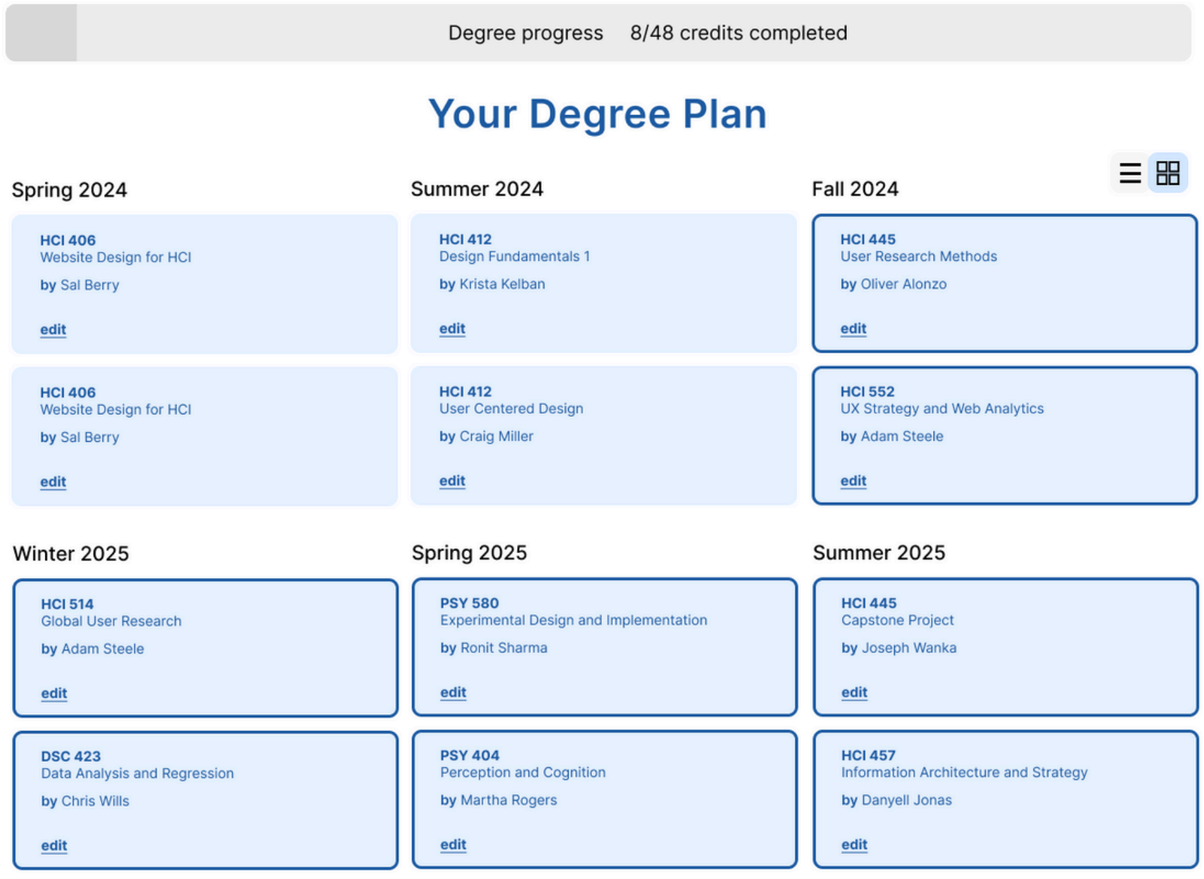
CONCEPT DESIGN GOALS

Ease in decision making about course selection

Ease in program planning

Higher satisfaction with course choice

UNIFIED REGISTRATION PLATFORM



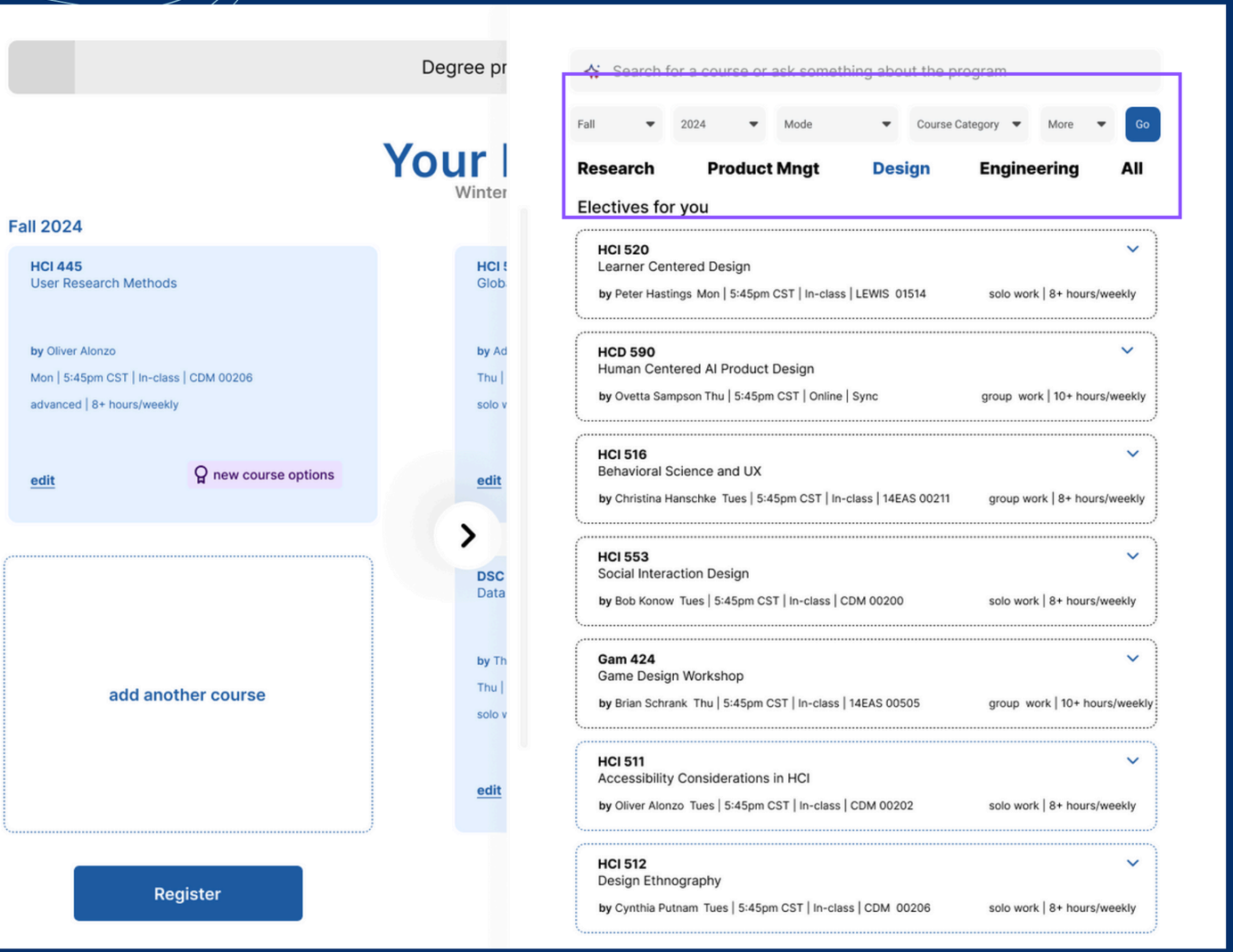
A single interface that consolidates all aspects of course selection including picking electives, balancing workload, scheduling, degree planning and enrollment.

Suggest electives that align with students' academic goals and interests, taking into account prerequisites and degree requirements.

AI-driven suggestions based on academic history, career goals, and student feedback.

Real-time data analysis to adapt recommendations as student progress.

ADVANCED FILTER OPTIONS



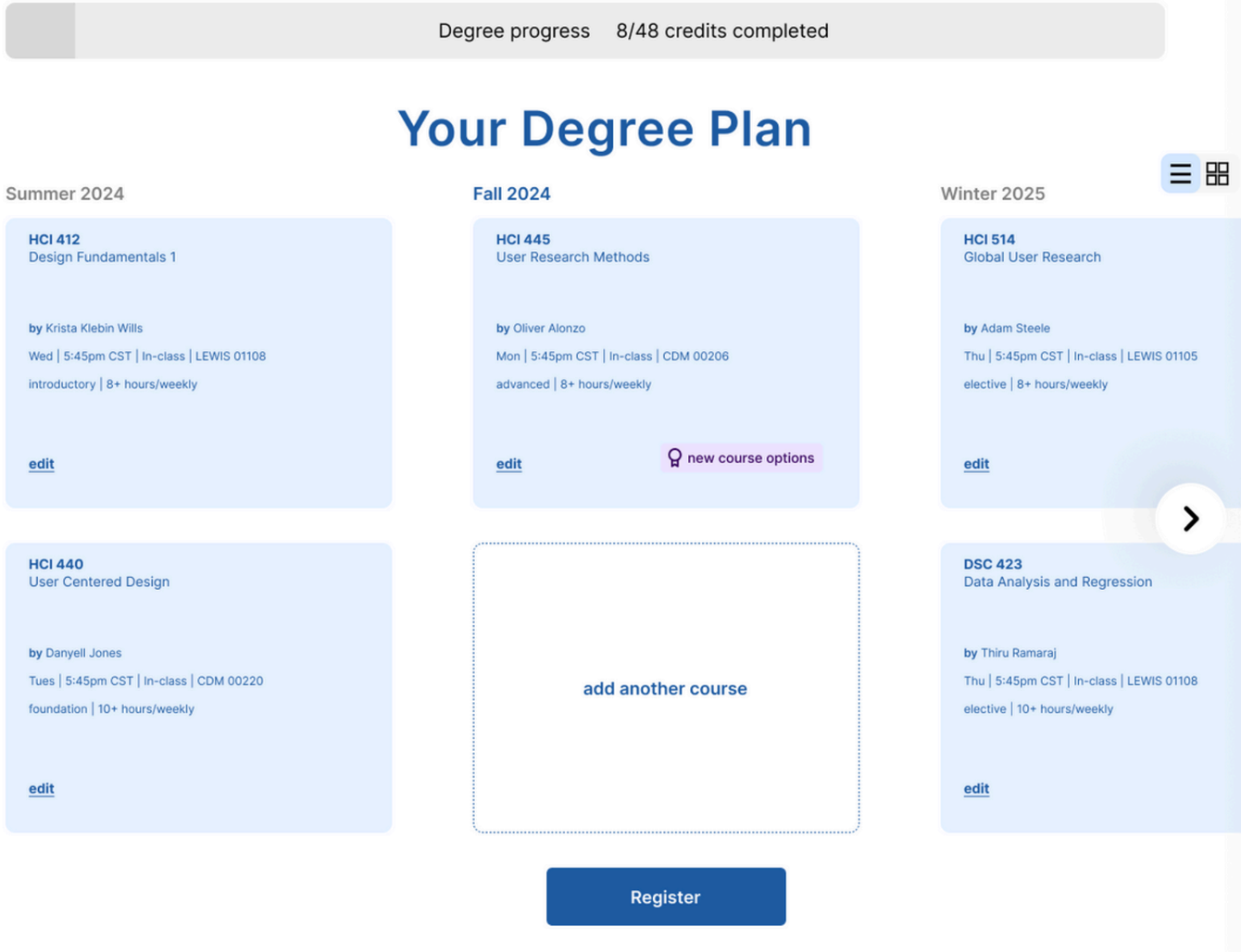
Solicit user input for desired preferences (mode of class, their interests)

Request user input and provide Tailored Recommendations

Provide filters for course modality (Online, In-Class, Asynchronous) and scheduling Preferences

Offer options to filter by preferred instructors and degree requirements

PERSONALIZED DEGREE PLANNING



Create individual degree plans based on students' academic goals, aspirations, and personal schedules.

AI enabled course reccomendations and plan generation

Onboarding process to collect information on student's personal goals and preferences.

DESIGN PROCESS

Team conceptual features discussion

Individual brainstorming

Idea discussion and brainstorming

Conceptual integration and prototype creation

CONCEPT TEST PLAN

Objective:
To evaluate the features' first impressions, attractiveness and alignment to solving the pain points.

Participant Recruitment Criteria:
Participants majoring in Human Computer Interaction at DePaul University.

Concept Testing Method:
Focus Group and Interview

Mode:
Online, via Zoom

Roles:
2 Facilitators, Notetakers/Observers

Concept Testing Process

Warm up questions

FLOW 1
Onboarding walkthrough

FLOW 2
AI Plan generation

FLOW 3
Editing the plan

Questions about overall experience

CONCEPT TEST FINDINGS: POSITIVES

- Better than current DePaul process/tools
- Extra information details
- Recommendations

CONCEPT TEST FINDINGS: THINGS TO CONSIDER

- Learning curve
- Wording issues
- Minor UI fixes
- Confusion during Flows 1 and 2
- Mixed results on some features

MAIN TAKEAWAYS

The tool is an improvement.

Flow 1 (onboarding process) clarity

Flow 2 (AI degree plan) clarity

Increased context overall.

METHODOLOGY

Objective:
To evaluate the platform's intuitiveness, efficiency, and user satisfaction.

Participant Selection:
Chose participant with Computer Science backgrounds and HCI studies for relevant evaluation.

Testing Environment:
Online testing using Zoom for real-time interaction and communication.

Roles:
Moderators guided the process; notetakers captured detailed observations.

Testing Procedure:

- Introduction: Briefing on the session’s goals and obtaining consent for recording.
- Task Execution: Participant performs specific tasks on the Figma prototype.
- Feedback Collection: Interactive discussion to explore the participant's experience and suggestions.
- Debriefing: Final thoughts and clarification of any unresolved issues.

TASKS

1

Onboarding and Initial Setup

2

Course Selection and Planning

3

Modifying Course Selection for Fall 2024

KEY FINDINGS

Task Completion:

- Participant was able to complete all assigned tasks, but varied levels of ease and frustration were noted.
- Specific steps within tasks, particularly in course modification, were less intuitive and required more effort.

User Feedback:

- Participant expressed satisfaction with the straightforward tasks but reported confusion and frustration during flows for AI degree planning and modifying the course plan.
- Suggested improvements included clearer instructions and simpler navigation pathways.

Interface Usability:

- There were positive reactions to aspects of the functions and design of the prototype.
- Navigation issues arose during more complex interactions, particularly when modifying the course plan.

General Observations:

- The platform's overall functionality met the basic needs of course selection and registration.
- Participant’s comfort level with the platform increased slightly with use, but specific areas still needed refinement to enhance user experience.

AI Integration Result

ONBOARDING

Collecting essential data to enhance the accuracy of BlueAI-driven course recommendations.

Conclusion

BY

GROUP 1

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