

# User Research

## 1. User Research Plan

### Background:

The Delta Project is committed to enhancing the academic experience by revamping the course registration system. Our objective is to innovate functionalities and optimize UI/UX design, ensuring the system is not just robust but also user-friendly and intuitive. To achieve this, it's paramount to understand the users' behaviors, experiences, and pain points with the current course registration system.

### Objectives:

- Understand User Behavior:
  - Explore how users navigate through the current system (Cornell's Student Center & Class Roster)
  - Identify common patterns and behaviors when using the course registration system.
- Identify Pain Points:
  - Unearth challenges, difficulties, and frustrations faced by users.
  - Understand areas where users feel the system can be improved.
- Gather Data for Functional Innovation:
  - Utilize survey data to support and inform our functional enhancement strategies.
  - Ensure that new features align with the actual needs and preferences of the users.
- Optimize UI/UX Design:
  - Gain insights into users' expectations and preferences for system design and interface.
  - Utilize feedback to create a more intuitive, efficient, and pleasing user interface and experience.

### Method:

Survey Research. The survey will focus on various aspects including but not limited to ease of use, feature relevance, problem areas, and potential improvements. The data collected will be meticulously analyzed to extract actionable insights for the betterment of the course registration system.

### **Expected Outcome:**

The insights garnered from this survey research will play a crucial role in the Delta Project's development phase. The direct feedback from users will ensure the final product is not just a technical upgrade but also a practical, user-centered solution that genuinely enhances the course registration experience for all students.

### **Target Interviewee:**

Cornell Students

### **Expected Number of Answers :**

30

### **Sample Survey :**

**Title:** User Research about Course Registration System

#### **Introduction:**

Hello!

You are invited to participate in our survey regarding your attitudes towards the current Cornell course registration system (Class Roster, Student Center). It will take approximately 5 minutes to complete the questionnaire. All questions are optional.

Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. Your survey responses will be strictly confidential and data from

this research will be reported only in the aggregate. Thank you very much for your time and support!

**Question List:**

1. What college are you enrolled in? Select all that apply.
2. What is your year of study?
3. How often do you use Student Center?
4. Cornell's Student Center is easy to use.
5. What features of the Student Center do you use most frequently?
6. I can find the courses I need easily through the Student Center.
7. I can easily add the courses I need to the waitlist through the Student Center.
8. I am able to add classes to shopping cart I need easily through the Student Center.
9. I prefer to click the checkbox in the shopping cart to enroll in the courses I need.
10. I prefer to directly enroll all the courses I need in my shopping cart.
11. Are there any features in the Student Center you find unnecessary or rarely use?
12. Are there any features in the Student Center you use but find frustrating to use easily?
13. The design of Cornell's Student Center is user-friendly.
14. What other features would you add to Student Center to make it better?
15. How often do you use Class Roster?
16. Cornell's Class Roster is easy to use.
17. What features of the Class Roster do you use most frequently?
18. I can find the courses I need easily through the Class Roster.
19. I can plan my schedule easily through the Class Roster.
20. The design of Cornell's Class Roster is user-friendly.
21. What other features would you add to Class Roster to make it better?
22. How often do you use Courses of Study?
23. Cornell's Courses of Study is easy to use.
24. I can find the courses I need easily through the Courses of Study.
25. What other features would you add to Course of Study to make it better?

26. What other sites do you use when considering courses to take?
27. Overall, how would you rate the efficiency of the Cornell course registration system?
28. How satisfied are you with the course registration system at Cornell?
29. Which features would you use in a redesigned course registration system?
30. Describe any other features you would like to see in the course registration system.
31. Do you have any additional comments you wish to share about the Cornell course registration system?

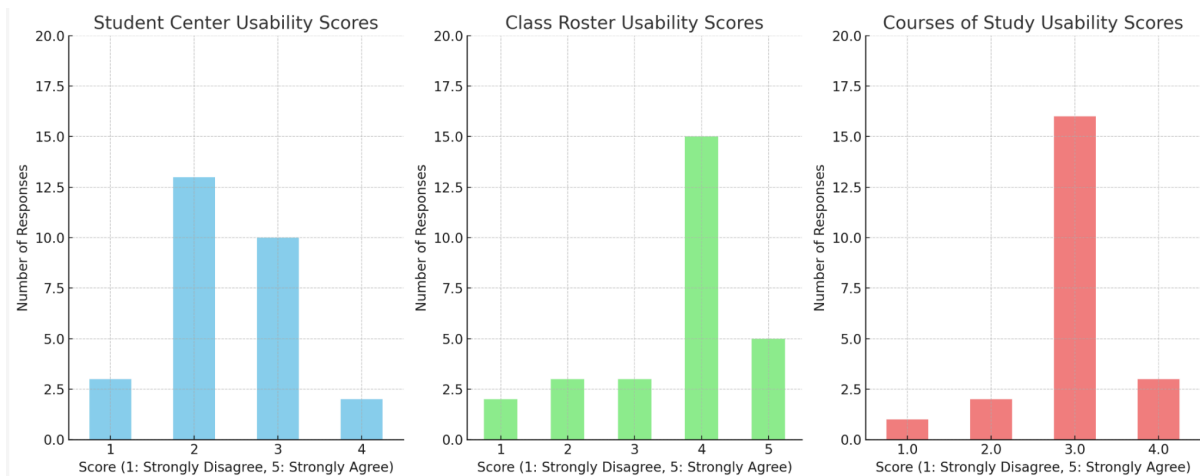
## 2.Survey Analytics Report

### ***Methodology:***

- The sample size for this survey research is 28 (N = 28).
- The survey was conducted online through Google Form, and the response was collected from Oct 3 to 10, 2023.

### ***Executive Summary:***

**1.Based on Cornell's three platforms, respondents believe that Class Roster has the highest usability and Student Center has the lowest usability. Course of Student is ranked second among the three platforms.**



### **Student Center Usability Scores:**

- The majority of respondents provided a score of 2 ("Disagree") regarding the ease of use of the Student Center.
- A smaller proportion of respondents rated it as 1 ("Strongly Disagree") or 3 ("Neutral").
- There were very few respondents who rated it 4 ("Agree"), and no respondents rated it as 5 ("Strongly Agree").

- Of the 6 short answers about Student Center usability, **complexity** was mentioned 4 times and **outdated user interface** 3 times

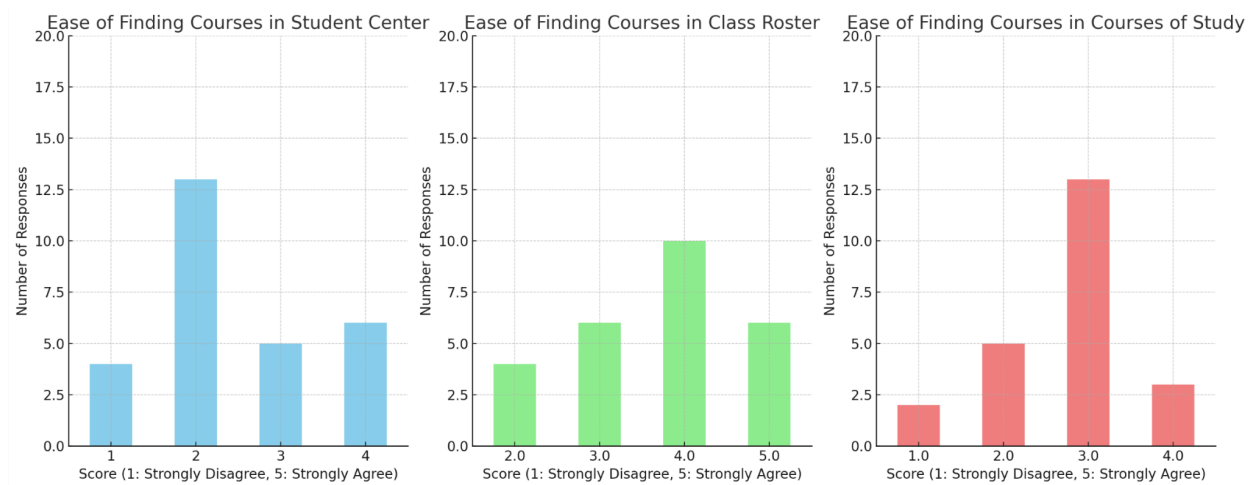
### **Class Roster Usability Scores:**

- The majority of respondents provided a score of 3 ("Neutral") regarding the ease of use of the Class Roster.
- A similar proportion of respondents rated it as 2 ("Disagree") or 4 ("Agree").
- There were fewer respondents who rated it as 1 ("Strongly Disagree").

### **Courses of Study Usability Scores:**

- The distribution for the Courses of Study is more evenly spread, with many respondents providing scores of 2 ("Disagree"), 3 ("Neutral"), and 4 ("Agree").
- Fewer respondents rated it as 1 ("Strongly Disagree").

**2.Search for a Course's ease of use follows overall usability trends. The order of ease of use from high to low is: Class Roster, Course of Study, and Student Center.**



### **Ease of Finding Courses in Student Center:**

- The majority of respondents gave a score of 2 ("Disagree") regarding the ease of finding courses in the Student Center.

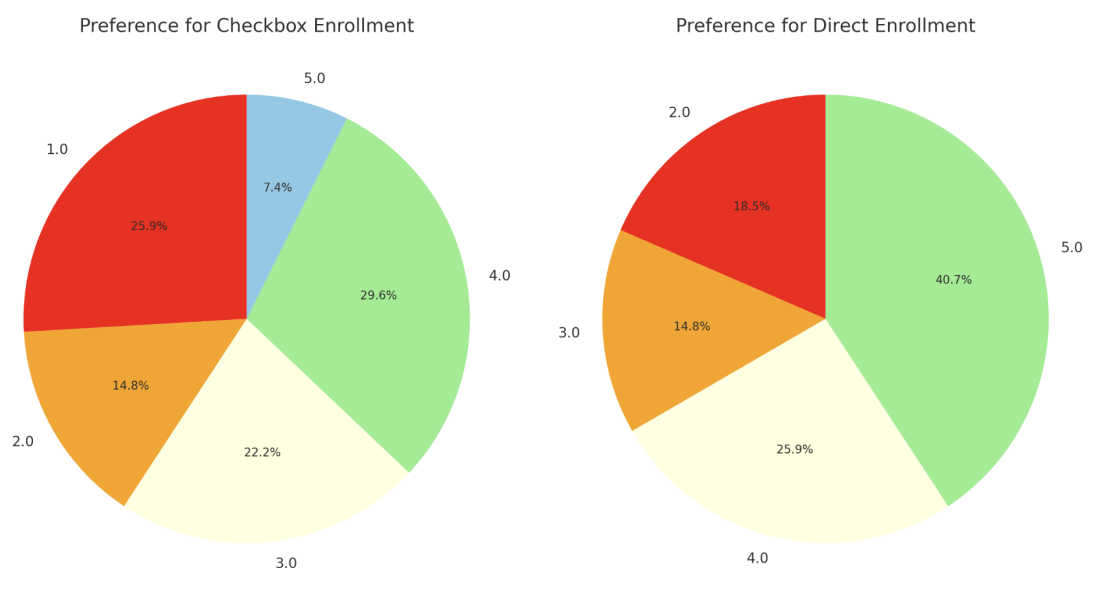
### Ease of Finding Courses in Class Roster:

- The majority of respondents provided scores of 3 ("Neutral") and 4 ("Agree").

### Ease of Finding Courses in Courses of Study:

- The distribution of scores is more spread out, but many respondents provided scores of 2 ("Disagree") and 3 ("Neutral").

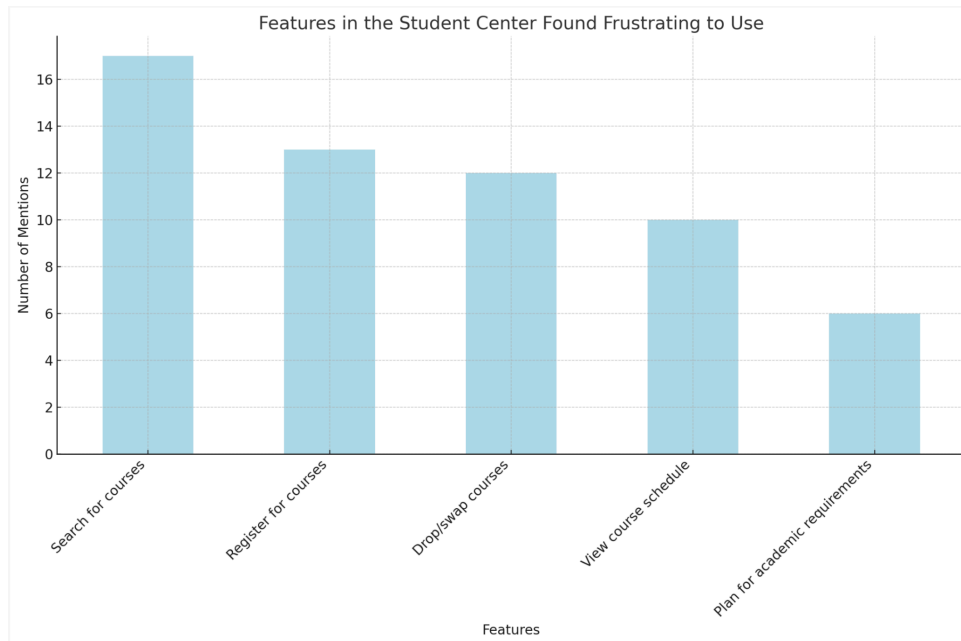
### 3. Respondents preferred to enroll in all courses directly in the shopping cart rather than through checkboxes.



### Comparative Insights of The Two Chart

- The direct enrollment method seems to be more favored among the respondents compared to the checkbox method.
- The checkbox method, while preferred by some, is not the predominant choice. This suggests that many users might prioritize efficiency and speed in the enrollment process over the granularity of choice that checkboxes offer.

#### 4.Respondents believe that the most frustrating feature in Student Center is searching for a class.

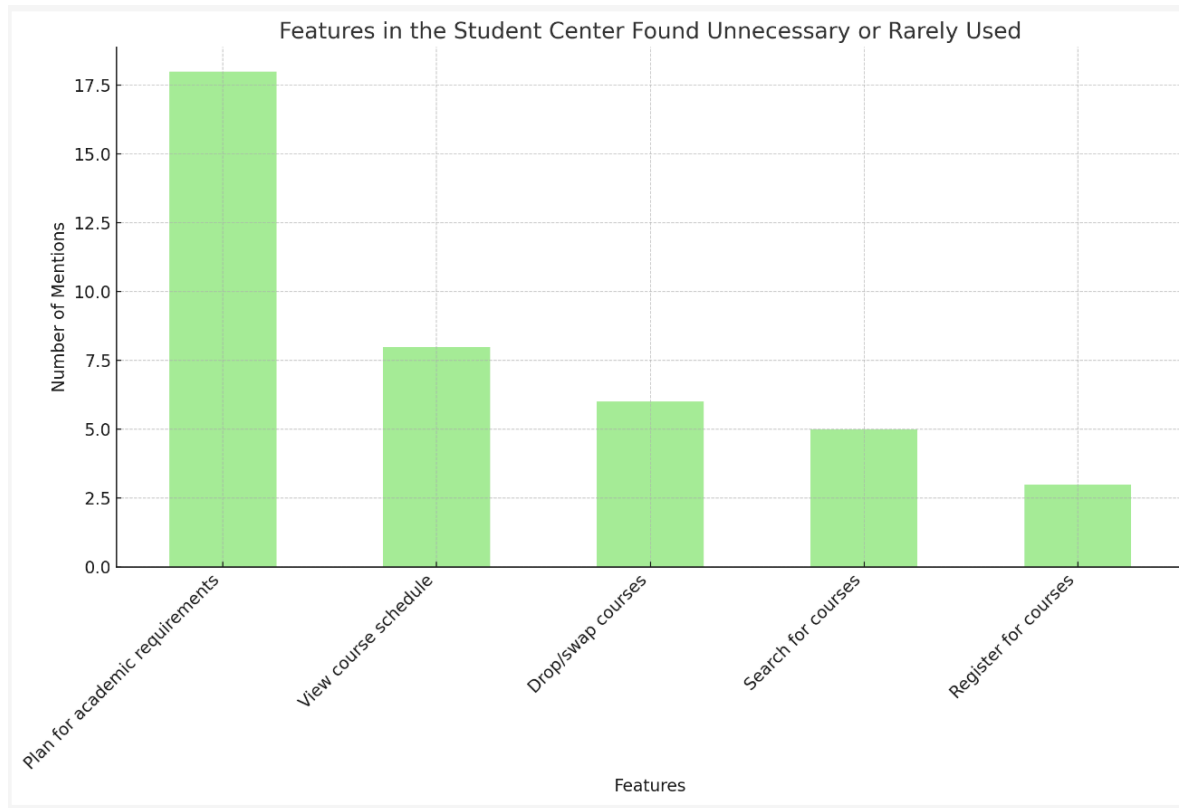


#### Insight of This Chart:

- From this analysis, it's evident that the processes related to course management (searching, registering, dropping/swapping) are the primary pain points for users. We can learn from Class Roster, which has the highest student satisfaction, to optimize the course selection process.



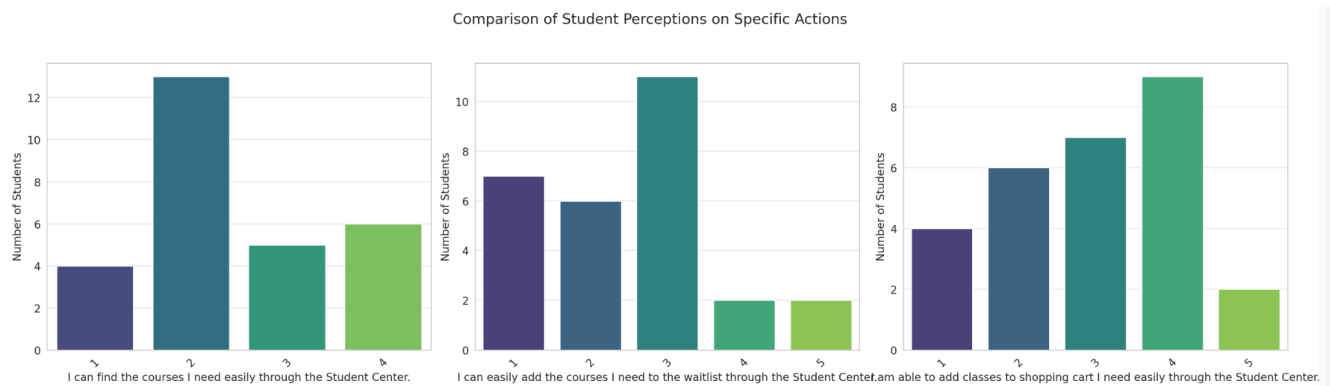
**5. More than half of the respondents believe that an unnecessary or rarely used function in the Student Center is “Plan for academic requirements.”**



**Insight from The Chart:**

- "Plan for academic requirements" has the highest number of mentions, with 18 respondents indicating that they find it unnecessary or rarely use it. This suggests that many respondents might either use other means to plan their academic requirements or find this specific feature redundant.

## 6. Adding to the waitlist for required courses in the student center was an



**inconsistent experience for different respondents.**

### Finding Courses:

- Most students seem to have a negative experience, with the majority indicating they can not easily find courses through the Student Center.

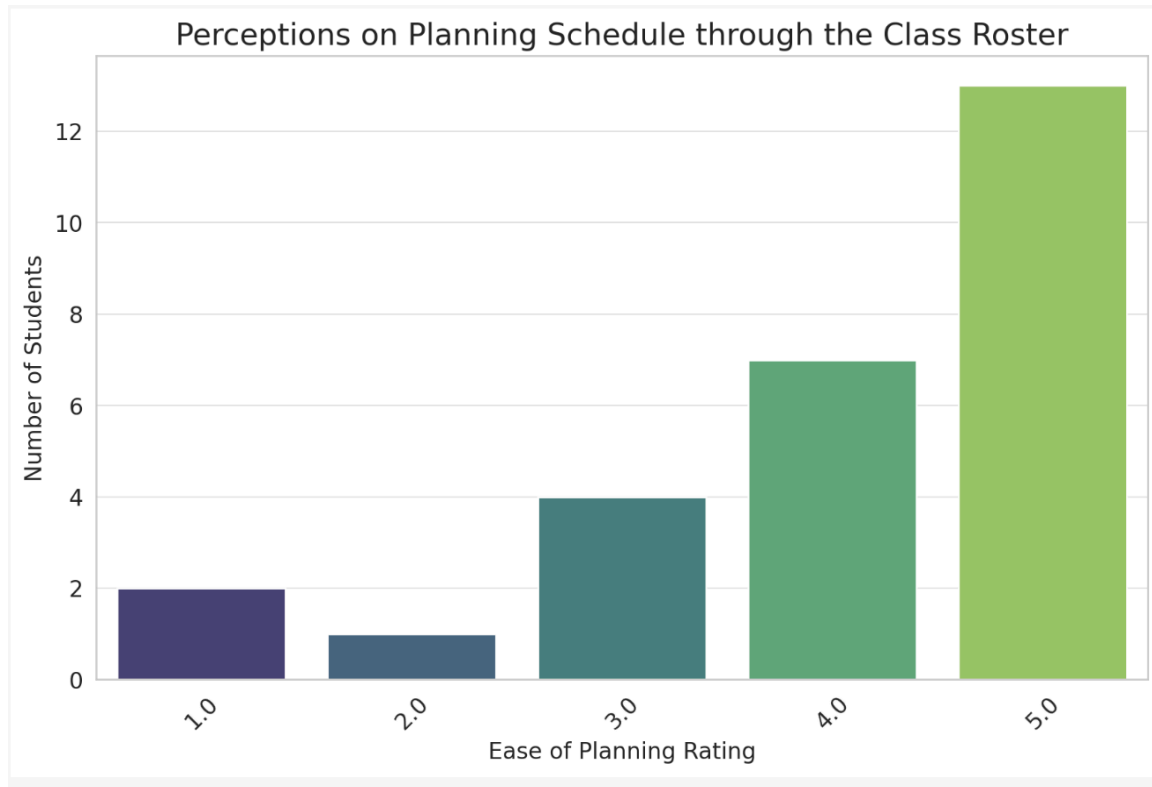
### Adding to Waitlist:

- The distribution here is slightly more varied. While a large number of students feel they can easily add courses to the waitlist, a noticeable portion finds it challenging.
- When further researching the relevant shots answers, I found that the interviewees mainly mentioned two points: "unobvious icon" and "have to switch different page"

### Adding to Shopping Cart:

- The majority of students feel they can easily add classes to the shopping cart through the Student Center, indicating a generally positive user experience for this action.

**7.Respondents are very satisfied with the plan for a schedule function in Class Roster.**

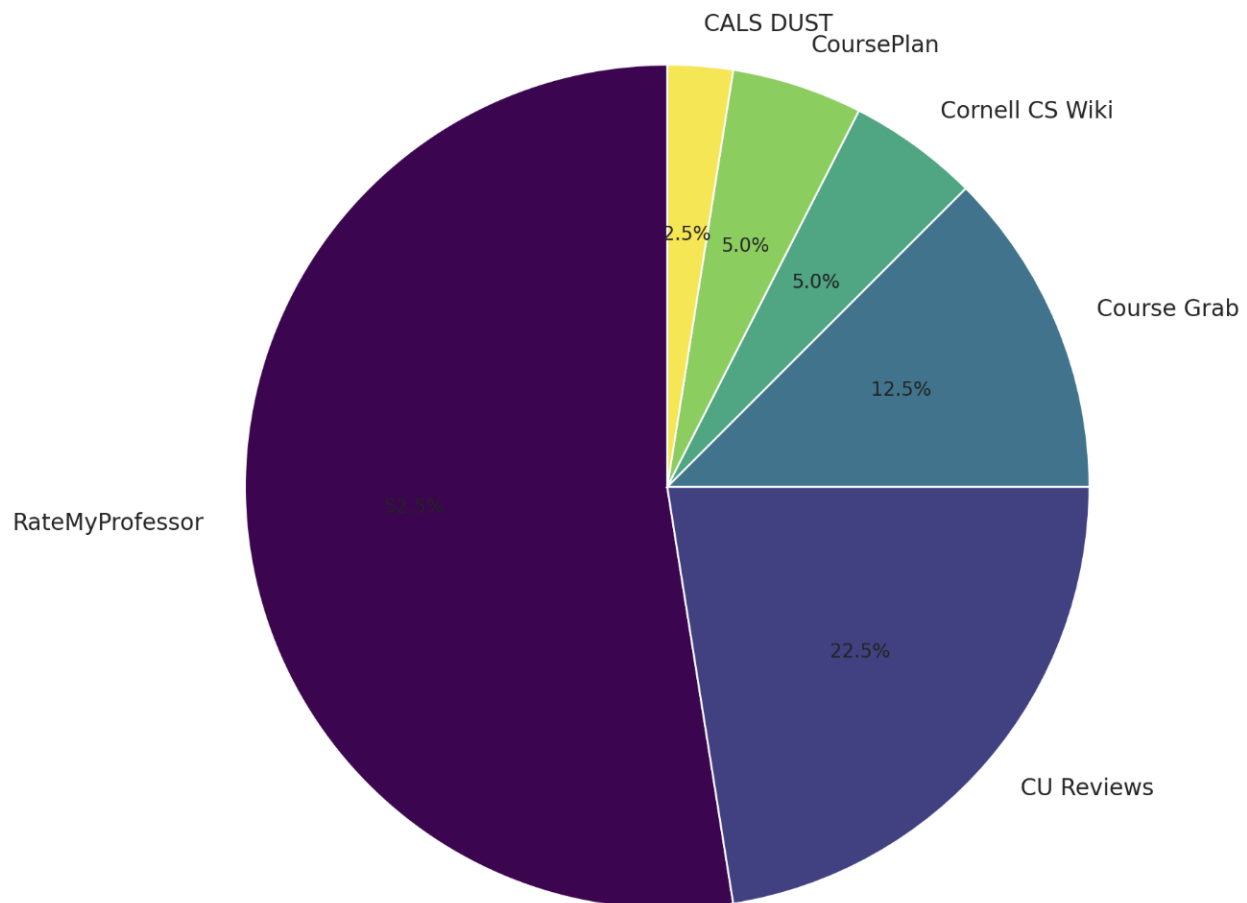


**Insight from this Chart:**

- A significant majority of students feel that they can easily plan their schedule through the Class Roster. This suggests that the Class Roster is effective in its design and functionality, allowing students to efficiently map out their schedules. We can learn from Class Roster.

**8. RateMyProfessor is the most common external website used by respondents during the registration process.**

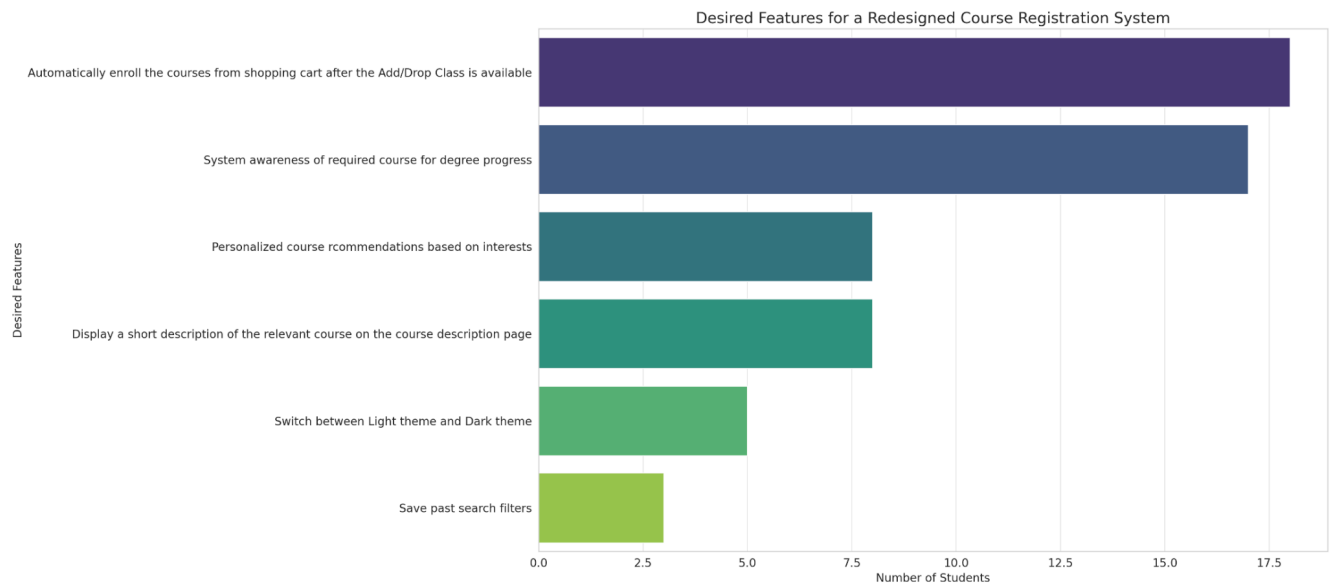
Sites Used by Students When Considering Courses



**Insight form The Chart:**

- The significant reliance on "RateMyProfessors" suggests that professor ratings and reviews play a crucial role in students' course selection decisions. We might consider incorporating a similar review system within its official platforms to provide students with more holistic information.

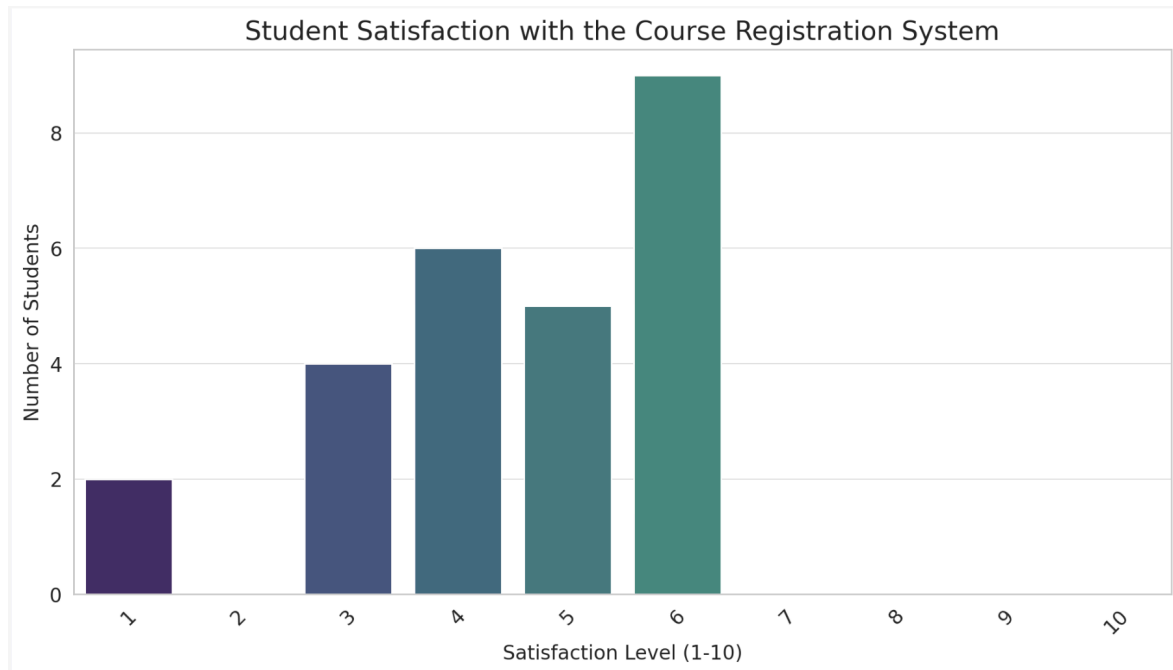
**9. For respondents, Automatic Enrollment and Display Required Courses for Degree are the features that students are most looking forward to appearing in the redesigned course registration system.**



**Insight from the Chart :**

Automation and convenience are primary desires for student users. Features like Automatic Enrollment and Display Required Courses for Degree emphasize students' preference for a seamless course registration experience. For a better user experience, we should strive to implement these functions.

**10. Overall, respondents were dissatisfied with Cornell's course registration system.**



**Insight from The Chart:**

- A peak in the neutral responses around the middle values (5 and 6).
- A noticeable number of students have given lower ratings (1-4), indicating dissatisfaction.
- There are no responses in the higher satisfaction range (7-10), suggesting that no students found the system exceptionally satisfactory.
- We need to avoid the problems and bad user experience seen in Cornell's system when developing a new course registration system.

## ***Discussion & Suggestion***

### **User Interface & Experience:**

- User-Friendly UI/UX: Design a layout similar to the Class Roster, which was perceived as user-friendly. Use clear labels, intuitive icons, and a responsive design that adapts to various devices.

### **Streamlined Enrollment:**

- One-Click Enrollment: Design a 'Quick Enroll' button next to each course, allowing users to add a course to their shopping cart instantly.

### **Waitlist & Shopping Cart Improvements:**

- Clear Waitlist Icons: Use distinct and easily recognizable icons for waitlisting, ensuring users can identify the function at a glance.
- Single-Page Navigation: Minimize the need to switch between pages. For instance, when adding to the waitlist, provide a pop-up or slide-out panel instead of redirecting to a new page.

### **Review System:**

- Embedded Ratings: Integrate a rating system for each course and professor directly within the platform. Allow users to leave reviews and read others' feedback.

### **Schedule Planning Tools:**

- User-Friendly Scheduling Tool: Equip students with a user-centric schedule tool that's both manageable and customizable.

### **Additional Features Based on Insights:**

- Automatic Enrollment: If students have added courses to their shopping cart, the system should automatically help enroll these courses after course registration begins.
- Degree Requirement Display: Clearly display which courses are mandatory for a student's degree program, helping them prioritize their choices.