UX Evaluation Report

for

Enroll.wisc.edu

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Introduction

In order to replace the current outdated UW Student Center, DoIT is currently working on a beta course search and registration system for UW-Madison students - Enroll.wisc.edu. This website is expected to be used by undergraduate and graduate students at UW-Madison to search for and enroll in courses. An internet connection and web browser is needed to use the system.

Jack and Rulan conducted an onsite usability test using a live version of enroll.wisc.edu located on UX lab's computers. Two computers using Morae Software captured the participant's face, comments, navigation choices and the data loggers notes. The test administrator and data logger were present in the testing room. The testing sessions each participant's user journeys, task completion times, comments, overall satisfaction levels, and feedback.

Executive Summary

Jack and Rulan conducted an onsite usability test at the UX Testing lab on April 28th and April 30th, 2018. The purpose of this usability testing was to assess the   enrollment
system's usability including interface design, user flow, and information architecture.

Five attendees participated in all 4 tasks. We originally planned to recruit a total of seven to eight participants in order to ensure stable results. However, the website is always under construction, and we let our scheduled participants go because it would be a waste of time while refreshing the website. Luckily, we still have five successful interview sessions, each individual session lasted approximately 30 minutes. Test scenario is developed based on undergraduate enrollment requirement.

Overall, nearly all participants thought enroll.wisc.edu web site is user-friendly to   use.
3 of the 5 participants (60%) are very satisfied with this new enrollment system, and   2
of them would like to recommend it to a friend.
The 4 tasks identified some problems including:

- Lack of enrollment system tutorial (instructions) for first-time users.
- Technical issues especially for search engine.
- Lack of eye-catching design for important buttons.
- Users don't like the horizontal transitions
- Had to refresh the page in order to add another class
- Sidebar makes it hard to track

This document contains the participant feedback, satisfactions ratings, task   completion

rates, ease or difficulty of completion ratings, time on task, errors, and recommendations for improvements. A copy of the scenarios and questionnaires are included in the Attachments' section.

Methodology

Our research questions are:

- What the participant liked.
- What the participant disliked(Breakdowns).
- Recommendations for improvement.
- Design opportunities for the website

Jack and Rulan contacted and recruited participants via 5 undergraduate students (3 female, 2 male) were recruited from UW-Madison. They were recruited using convenience sampling. Most participants were volunteers from Helen C. White Hall. Others were co-workers and friends. None of the participants were compensated. During the interview, we know our participants' ages range from 19 to 23. All but one
of the participants was enrolled in a major unrelated to UX Testing. Likewise, three participants spoke English as their native languages. Age and education experience were similar between conditions. Each individual session lasted approximately half an hour. During the session, Rulan (the administrator) explained the test session and asked participants to read the task scenarios and tried to find the information on the website.

After they finished the last task, the interviewer asked the participant to provide feedback about their pain points and thoughts about the following aspects:

- Website Layout
- Website technological functionality
- Ease of the tasks for the first-time users
- Difficulty about keep track
- information architecture
- Site look & appeal

We also asked the participant to fill out a post-survey. This satisfaction questionnaire (see Attachment) includes a 5-point Likert Scale with measures ranging from Strongly
unsatisfied to Strongly satisfied.

- How would you rate your overall satisfaction with this system?
- How likely would they recommend this system to their peers?

The following chart is our data collection method:

Data	Purpose	Method
Participants' emotional facial expressions and oral comments (if any)	In the post-testing interview, we'll ask the participants the reasons of their unusual reactions.	Recorded by the note takers during testing sessions on papers and on the Morae Observer.
Notes of the interview	To get user's satisfaction about the system and suggestions on things to improve	Structured interview with open questions after testing sessions.
Time spent on each task	Effectiveness of search tool	Automatically recorded by Morae in its log.
Number of mouse clicks	Findability of information	Automatically recorded by Morae in its log.

Participants

Five participants in total attended in the testing. Three participants are test conductors' friends. Two participants are randomly selected undergraduate students. Five participants were scheduled on two testing dates. Two of the five participants finished on April 28th and three finished on April 30th. Of the five participants, three are female and two are male. Two are native Chinese speakers and three are native English speakers.

Evaluation Tasks/Scenarios

You are currently a Computer Science undergraduate student, and you're very interested in Communication Arts. So, you want to take 3 computer science classes and
one CA class in 2018 Fall semester. From your friends and advisor, you received some
suggestions about useful courses to take. Using the searching and filtering tools on "enroll.wisc.edu," you decided to search for some of the courses that would also meet
your needs.

Test participants attempted completion of the following four tasks (there is only one correct course that matches the description for each task):

- Find a 3 credit "Computational Photography" course by Computer Science Department
- Find a Computer Science course with the course number 412
- Find a 4 credit Computer Science course that has a Physical Science breathe
- Find a Communication Arts course that also satisfy Communication B requirement

Results

Task Completion Success Rate

All Participants were able to complete four tasks assigned to them without any prompting from the test conductors. In the case of this study, the test completion rate for each individual task is 100%.

	Student 1	Student 2	Student 3	Student 4	Student 5	Task Completion Success Rate
Task 1	√	√	√	√	√	**100%**
Task 2	√	√	√	√	√	**100%**
Task 3	√	√	√	√	√	**100%**
Task 4	√	√	√	√	√	**100%**

Number of Mouse Clicks

The number of mouse clicks a participant performs while attempting to complete a task. The number of clicks a participant performs during each task will be recorded in Morae's log separately. And we'll use those log data. These data show us Findability of information

	Student 1	Student 2	Student 3	Student 4	Student 5
Task 1	33	24	28	42	19
Task 2	18	15	27	18	18
Task 3	27	20	29	27	27
Task 4	15	19	12	12	21

Website Breakdowns

	Unfamiliarity with Website Layout	Technological issues with the resulting course list + search bar	Hardship to navigate at the first time	Difficulty about keeping track	Unclearness about the Information architecture	Dislike the site look & appeal
Student 1	∗	∗	∗	∗	∗	☐
Student 2	☐	∗	∗	☐	☐	∗

Student 3	*	*	*	☐	*	☐
Student 4	☐	*	☐	*	☐	☐
Student 5	*	*	*	☐	☐	☐
Breakdown Rate	60%	100%	80%	40%	40%	20%

Both our interview notes and Morae manager show us users come up with multiple breakdowns. There are issues that are brought out from all users, such as technological
issues with the search bar and the returned course list. We made a priority list according to the breakdown agreement rate:

1. Technological issues with the resulting course list + search bar
2. Hardship to navigate at the first time
3. Unfamiliarity with the website layout
4. Difficulty about keeping track of the information
5. Unclearness about the information architecture
6. Dislike the site look and appeal

Predicting Information Section

Our predicted overall satisfaction level would be somewhere around 4 (satisfied but not
very satisfied) when we recall our first encounter with the system. We assumed that each task would have an average completion time, but we ignore the fact that users need a significantly more amount of time to learn about the new system and its layout.

Time on Task

Task 1 takes the most time since users are familiar with the interface. The fourth task,
which is also the last task, takes the least amount of time since users are much more familiar with the new system

Time on Task (in minutes)

	P1	P2	P3	P4	P5	Avg. TOT*
Task 1	0.75	1.47	1.37	1.44	4.96	1.998
Task 2	1.60	0.53	0.44	1.24	0.33	0.84
Task 3	1.98	0.62	0.79	1.10	0.65	1.028
Task 4	0.70	0.53	0.61	0.46	0.88	0.636

Errors

Throughout the tasks, there isn't any critical error. Even though for few tasks each participants take a little more time, there was no significant error that lead to failure
of
a task

Summary of Data

Summary of Completion, Errors, Time on Task

Task	Task Completion	Errors	Time on Task
1	1	0	1.998
2	1	0	0.84
3	1	0	1.028
4	1	0	0.636

Overall Satisfaction: 3.4

Likelihood for recommendation: 3

Overall Metrics

Overall Ratings

Most participants (60%) have a pretty good reception of the system (rate the system as pretty satisfying). There is one neutral feeling and one not very satisfied, but there
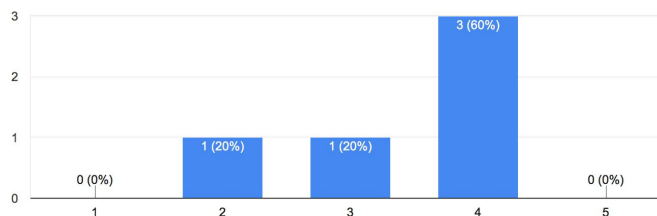is not significant dissatisfaction for the new system. But the ratings for likelihood to recommend to a friend is very neutral since the average is in the middle (between will
recommend and will not recommend).

See table below.

Post-Task Overall Questionnaire

How would you rate your overall satisfaction with this system?
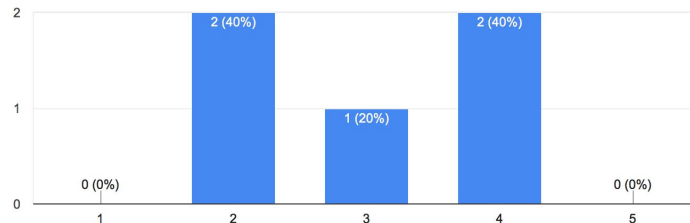
5 responses

How likely is it that you would recommend this system to your friends?

5 responses

Likes, Dislikes, Participant Recommendations

Upon completion of the tasks, participants provided feedback for what they liked most
and least about the website, and recommendations for improving the website. Our UX testing was extremely insightful in that they allowed us to map all of the breakdowns into a recommendation priority list. This opened the door to several opportunities for improvement in various sections of the website. Problems ranging from technical issues to website layout were all foundations for the ideas that went into our recommendations.

Liked Most
Participants seemed to like the breath/credit/level filter most. They expressed their satisfaction with this convenient feature which would allow them to find classes that can fulfill the graduation requirement easily. In addition, the participants especially seemed to like the condensed class enrollment steps a lot.

Liked Least
The following comments capture what the participants liked the least:

"The resulting course list is incorrect."
"The search engine is problematic."
"I don't like the horizontal transition."
"Hard to track, sidebar very distracting."

Recommendations for Improvement

"keyword search should be expanded to include breadth options, credit options, etc. Yes those functions are searchable below but some people only know how to do a keyword search and that's what they'll use. Or provide video walkthroughs before implementing this at registration. Maybe both?"
"Change the color of important buttons, and make them stand out."
"I think the horizontal layout would make it easier for me to enroll in classes."

Recommendations

Change	Justification	Severity
Provide a detailed video tutorial to first-time users.	Participants take a significant amount of time during the first task since they do not have any experience with the system. They usually find the entire new system layout to be overwhelming. A tutorial video would ease their anxiety for the new website.	High
Clearer keyword search or Fix the technological functionality	The keyword search bar is very unclear to the participants since there are different options such as search by course number, course name, and professor name. Yet, when the participants search by course name or professor name, the system usually gives some relevant but inaccurate results	High
Redesign website components	Participants reflect that they want to see important buttons to be in more obvious colors such as "ADD TO CART". DoIT can use other colors/fonts/logos in order to draw users' attention and accomplish their goals	Medium
Reorganize the navigation from top to bottom	Many participants reflect that they are not used to the left to right layout of the navigation system. Some of them say that they are more used to a top-to-bottom layout (might because of the old system)	Low

Conclusion

Generally, users have good experience with the new course enrollment website. They were able to complete the given tasks with success and a reasonable amount of time,
but there are some aspects that could be improved according to the participants.

1. Provide a detailed video tutorial to first-time users

2. Fix the technical issues (provide correct course return list)
3. Keyword Search need to be more clear: "Just number is allowed"
4. Reorganize the navigation of the site (from top to bottom, instead of left to right)
5. Remove unnecessary content
6. (Make the design more visually appealing)

Reflection

Overall, our interviews went really well and we were able to collect data that pointed us
towards the breakdowns in Enrollment System website. The easiest part was
conducting the interviews themselves. The subjects were very good at communicating
their thought processes. One of the biggest struggles was that there were so many
issues with the website that we had a hard time picking which ones were the most
important. We found problems such as Keyword Search, Search Engine Filter,
organization/layout, aesthetics, ambiguous information, technical breakdowns, etc.
With so many issues, we had to put a lot more thought into which issues have greater
weight than others. We were able to sort this out by looking at our transcriptions and
seeing which themes recurred the most, but it would have been more straightforward if
we asked more specific questions during the interviews. For example, if the user
pointed out many breakdowns, we could have asked them more specifically what they
thought of each issue and which ones were the most critical.

One way we could have definitely improved our interviews would be to be more specific
on the task to complete for the user. We just gave them the general direction of adding
classes from the website but it might have been beneficial to specify the classes ahead
of time or exactly what we wanted them to accomplish. Furthermore, we could have
scripted out our speech and devised a plan to handle problems from the beginning so
we would be prepared for problems such as the unexpected breakdown of keyword
filter technical issues.

As a team, Jack and I organized the work sessions that went extremely well. We were
all able to bounce ideas off of each other during our affinity diagramming which helped
us see ideas that weren't clear. Additionally, we were able to meet and discuss the plan

for UX testing, finish them separately, and then discuss them together to make improvements. This turned out to be a very efficient process for collecting and processing the data. We were thoroughly satisfied with the results of our work which allowed us to highlight and formally represent many of the problems with the enrollment website. We believe our proposal to solve the most critical breakdowns will
help all users of the website to allow for a more streamlined in the future.