Usability Test Report

Team-7
CS Scheduling App

UX Consultants
1. Nikhil Nandala
2. Thanuja Maddali
3.Satyanarayana Velamala

Nikhil Nandala
Date : April/22/2024

Test Schedule:

Nikhil Nandala	CS Scheduler	In-person	04/09/2024 2:00 PM	Luis Delgado	lmdelgad@mtu.edu
Nikhil Nandala	CS Scheduler	In-person	04/11/2024 2:00 PM	Tyson Watson	tysonw@mtu.edu
Nikhil Nandala	CS Scheduler	Zoom	04/09/2024 5:00 PM	Conor Cantrell	ctcantre@mtu.edu
Nikhil Nandala	CS Scheduler	Zoom	04/11/2024 5:00 PM	Andrew Mleczek	aemlecze@mtu.edu
Nikhil Nandala	CS Scheduler	Zoom	04/07/2024 2:00 PM	Makenna Typner	mrtypner@mtu.edu
Nikhil Nandala	CS Scheduler	Zoom	04/07/2024 3:00 PM	Richie Shadibaeva	dtshadib@mtu.edu

Total Tests Scheduled: 6 Sessions

Location: 4(Zoom), 2(In-person)

Requirements Needed before attending the Testing Room

1.Smartphone or Laptop
2.Access to Internet
3.Time period of atleast ranging from 40 to 45mins

Introduction

This report presents the findings and analysis of the usability testing conducted for CS Scheduler a tool designed to assist Michigan Tech College of Computing students in creating class schedules. The purpose of this usability test was to evaluate the effectiveness, efficiency, and user satisfaction of the app in fulfilling its intended purpose.

Throughout the testing process, participants were tasked with creating sample class schedules while providing feedback on their experience. Key aspects assessed included ease of use, clarity of interface, effectiveness of error detection, and overall user satisfaction.

This introduction outlines the methodology employed, including participant demographics and testing procedures, before delving into the detailed findings and recommendations derived from the usability test. The insights gathered from this evaluation aim to inform further refinements and enhancements to Cs Scheduler, ultimately ensuring a seamless and intuitive user experience for Michigan Tech College of Computing.

App Description

CS Scheduler: Revolutionizing Academic Planning for Computer Science Departments. This innovative scheduling application is tailored to streamline the academic planning process, powered by advanced algorithms and insights gleaned from past data. CS Scheduler intelligently generates schedules for upcoming semesters, prioritizing efficiency and minimizing conflicts.

Users can effortlessly manage course details such as descriptions, prerequisites, and instructor information, ensuring precision and relevance. The app's cutting-edge conflict detection system promptly notifies users of potential scheduling clashes and offers real-time solutions, reducing administrative burdens.

Faculty members benefit from instant notifications regarding course assignments and schedule adjustments, fostering seamless communication and coordination. The integrated note-taking feature enables administrators to capture important

insights and decisions, facilitating improved planning and collaboration among stakeholders.

Tailored preferences cater to the specific needs of faculty and students, while robust reporting and analytics empower administrators to make informed decisions and optimize future scheduling endeavors. With CS Scheduler, Computer Science departments can streamline workflows, minimize inaccuracies, and elevate academic planning to new heights.

Pre-Survey Questions(Before the test start)

1. How well are you comfortable using the mobile/Laptop ?
a. Strongly agree
b. Agree
 c. Natural
 d. Disagree
e. Strongly disagree.

 2. Do you have any prior knowledge about CS Scheduling App?
a. Strongly agree
b. Agree
c. Natural
 d. Disagree
 e. Strongly disagree.

3.Do you have any prior experience in testing applications?
a. Yes
b. No

Test Scenario 1

Test Goal: To verify whether admin users can successfully add a course and instructor while using the "Add Item" feature.

Scenario description:
In the usability testing session, participants are tasked with adding a course and Instructor section. They receive admin login credentials from the administrator to access the app. After logging in, participants navigate to the course and instructor. Moving to the "Add Item" section, they input course details and instructor. Upon submission, they return to the Section to confirm the successful addition of the course and instructor. This scenario tests participants' ability to efficiently use the app's features and ensure accurate course.

Task List:
• Access the website.
• Click on the login
• Navigate to the "Add Item"
• Navigate to the "Course"
• Fill out the details of Course code and course name
• Click on the Submit Button
• Navigate to the "Instructor"
 • Fill out the details of Instructor name
 • Click on the Submit Button
• Navigate to the "Calendar or Section list view"
• Check the course and Instructor you added.

Qualitative measurement list:
 • Is it easy to navigate and log into the app.
 • type of errors encountered by participants while using the app
 • ability to quickly understand how to use the app

Quantitative Measurement:

    a. Time spent on Navigating Between Pages
    b. Features of the Page Shouldn't be broken/unable to Perform.

Post Scenario Interview Questions

• Do you like this application?
• Do you want to use this application again?
• Was it easy to perform the task?
• Were there any steps in the process that were confusing?

BUG REPORT FORM

BUG NUMBER

BUG DESCRIPTION

STEPS TO REPRODUCE

Test Set-up Details: The test will be conducted in a silent room at MTU library with an active internet connection. Participants can use their own device to perform the test.

Test Scenario-2:

Test Goal: To verify whether Viewer users can successfully Filter the courses in the section list view menu.

Scenario description: In the usability testing session, participants are tasked to filter the courses in the viewer user section list view menu. They receive viewer login credentials from the administrator to access the app. After logging in, participants navigate to the section list view section and explore the list of courses available in the section. They select one filtering criterion from the options (course code, course name, building name, class days, or instructor name.) and apply the selected filter criterion by clicking on the filter button, and they verify whether the filtered courses are correctly displayed in the list view

Task List:
• Access the website.
• Click on the login
• Navigate to the "Section list view"
 • filtering criterion from the options (course code, course name, building name, class days, or instructor name.)
• Click on filter button
• Verify the filtered course.
• Qualitative measurement list:
• Is it easy to navigate and log into the app.
 • How many times has the application crashed.
• Is it easy to add the course to the calendar view

Qualitative measurement list:
• Is it easy to navigate and log into the app.
• type of errors encountered by participants while using the app
• ability to quickly understand how to use the app

Quantitative Measurement:

    a. Time spent on Navigating Between Pages
    b. Features of the Page Shouldn't be broken/unable to Perform.
    c. Time Spent to filter the courses in Section List View

Post Scenario Interview Questions

- How long did it take to complete the scenario?
- Did you face any issues or errors during the process?
- Was the user interface easy to understand?
- Would you recommend any suggestions to improve the process?

Potential observations of participants

 a. Participant may not grasp the intended use of the app.
 b. Participants could face challenges in navigating through the website using the navigation bar
c. participant could face problem in Filtering the Courses in Section List View
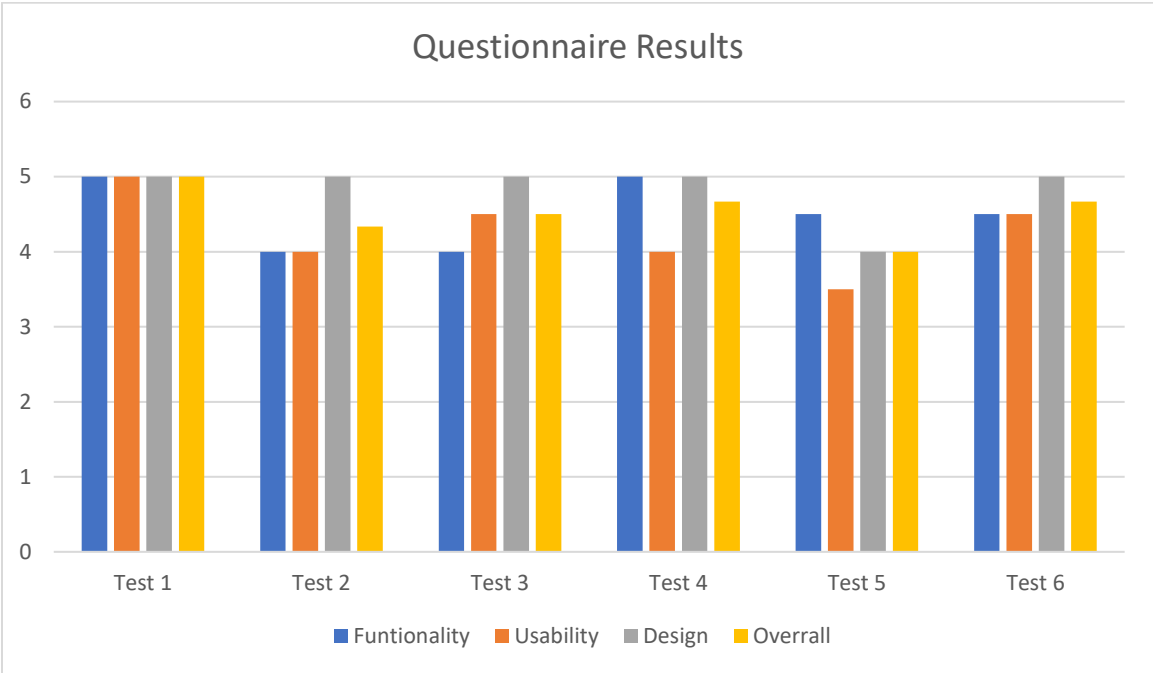
BUG REPORT FORM

BUG NUMBER

BUG DESCRIPTION

STEPS TO REPRODUCE

Test Set-up Details: The test will be conducted in a silent room at MTU library with an active internet connection. Participants can use their own device to perform the test.
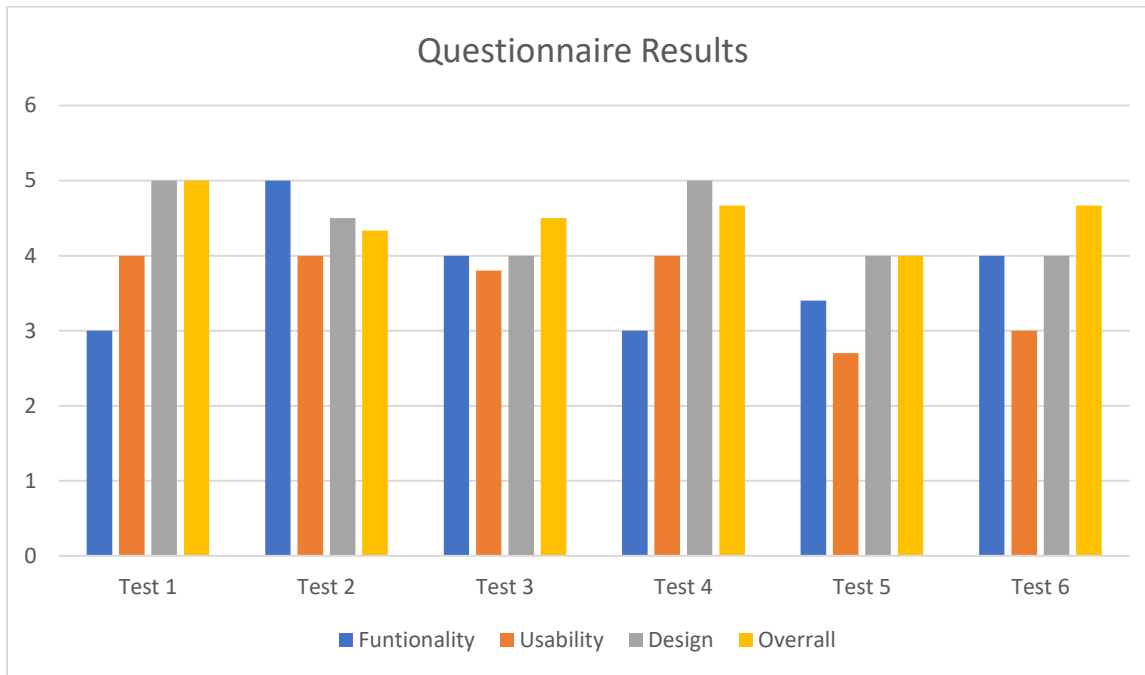
Results

- **First Scenario**

Questionnaire Results

During the first test, participants generally found the app's purpose clear and understood its functionality immediately, indicating a successful initial impression. However, some users encountered difficulty in distinguishing between sections and courses within the app's interface. This suggests a potential need for clearer visual differentiation to improve user navigation and comprehension. Additionally, it was noted that newly added content required manual refresh to appear, which could impact user efficiency and satisfaction negatively. This issue should be addressed to ensure a smoother user experience.

- **Second Scenario**

Questionnaire Results

In the second test, participants encountered issues with certain filter functions not working as expected, indicating potential usability issues within the app. Users suggested enhancements to the filtering system, such as combining course code and name for clarity, and adding checkbox options for days and time while adding courses. These suggestions highlight opportunities for improving the user interface design to make the app more intuitive and user-friendly. Furthermore, accidental addition of duplicate items was identified as a usability issue, which could lead to user frustration and inefficiency. Addressing this issue is crucial to optimizing the user experience of app.

Conclusion:
Recommendations from testers:
Home Page must be revised
Checkbox for day filter or custom days
Checkbox for day filter or custom days

Recommendations from Scientist and Janna Chittick:
Download the filtered view to Excel or CSV
Warm Contrast colors in calendar view
The warning messages must be highlighted
Appendix A-

Participant Attendance

Date & Time	Location	Members
4/7/2024 – 2 to 3pm	Zoom	Alex, William
4/7/2024 – 3 to 4pm	Zoom	Alex, William
4/9/2024 – 2 to 3pm	Rekhi G05	Collin, Alex
4/9/2024 – 5 to 6pm	Zoom	Alex, William
4/11/2024 – 2 to 3pm	Rekhi G05	Alex, William
4/11/2024 – 5 to 6pm	Zoom	Alex, William

Appendix B-

Bug Report

Bug	Bug Description
Filters in section list view	No results if building name, Instructor name is filtered
Class Days	Class Days filter is not functioning
Calendar View	On Calendar, viewing specific item is not working

Appendix C-

Challenge	Description
Auto Refresh	Newly added instructor and course do not load, need refresh
Duplicate Entries	Duplicate entries of instructors and courses