

Usability Report

Title: Usability Report: Student Behavior Analysis Project

Introduction

- The purpose of this usability report is to evaluate the usability of the "Student Behavior Analysis during lectures" project. The project aims to analyze student behavior using both quantitative and qualitative data. The quantitative data includes success rates, task time, error rates, and satisfaction, while the qualitative data focuses on participant behavior, pathways, and system usage. The report is divided into two parts, with each part addressing the respective data type.

Methodology

- Ten participants were selected for the study. Their demographics were recorded, including age, gender, educational background, and familiarity with similar systems. Each participant was asked to complete a series of tasks using the system, and their interactions were observed and recorded. Quantitative data, such as success rates, task time, error rates, and satisfaction, were collected during the study. Additionally, qualitative data was gathered by analyzing participant behavior and pathways while using the system. Summarize the findings and create a usability specification for the software.

Demographic Information

The following demographic information was collected for the 10 participants:

Participant	Age	Gender	Educational	Background Familiarity
1	27	Male	CS	Experienced
2	45	Female	Business	Novice
3	18	Male	Student	Neutral
4	22	Male	CS	Neutral
5	15	Male	Student	Neutral
6	50	Male	Engineer	Experienced
7	20	Female	Biotechnology	Neutral
8	16	Male	Student	Neutral
9	23	Female	Business	Experienced
10	37	Male	Business	Experienced

Quantitative Data Analysis

3.1 Success Rates:

Success rates were measured by the number of tasks completed successfully out of the total assigned tasks.

The success rates for the 10 participants are as follows:

Participant Success Rate (%)

Participant	Rate
1	90
2	80
3	75
4	95
5	85
6	70
7	90
8	55
9	90
10	85

3.2 Task Time:

Task time refers to the time taken by participants to complete each task. The average task time for the 10 participants is as follows:

Participant	Time (Min)
1	8.5
2	9.2
3	5
4	7.8
5	10
6	5
7	12
8	10
9	10
10	6

3.3 Error Rates:

Error rates indicate the number of errors made by participants during the tasks. The average error rate for the 10 participants is as follows:

Participant	Error
1	1.2
2	1.5
3	1.8
4	0.9
5	1.3
6	4.0
7	2.5
8	3
9	1.8
10	0

3.4 Satisfaction:

Satisfaction levels were measured using a Likert scale ranging from 1 (not satisfied) to 5 (very satisfied). The average satisfaction level for the 10 participants is as follows:

Participant	Satisfaction/5
1	4.3
2	4.1
3	3
4	4.5
5	2.5
6	5
7	4.4
8	4.0
9	5
10	1

Qualitative Data Analysis

4.1 Participant Behavior:

During the study, participants demonstrated varying behaviors while using the system. Some participants exhibited a high level of focus and engagement, completing tasks efficiently. Others displayed occasional confusion or hesitation when navigating through the system. Overall, participants appeared to adapt to the system's interface and functionalities.

4.2 Participant Pathways:

The pathways followed by participants when using the system varied. Most participants took a sequential approach, following the prescribed order of tasks. However, a few participants deviated from the suggested path, exploring different features out of curiosity. These explorations sometimes led to better understanding and more efficient completion of tasks.

4.3 System Usage:

Participants generally found the system intuitive and easy to use. They appreciated the clear organization of features and the availability of help documentation. However, a few participants suggested minor improvements, such as clearer instructions for certain tasks or additional visual cues to enhance navigation.

Conclusion

- The usability evaluation of the "Student Behavior Analysis during lecture" project indicates positive results overall. The quantitative data demonstrates high success rates, reasonable task times, low error rates, and satisfactory levels of participant satisfaction. The qualitative analysis reveals that participants exhibited varying behaviors and pathways while using the system, indicating adaptability and exploration. Participants found the system intuitive and easy to use, with minor suggestions for improvement.