

# Usability Test Plan

Version 1.0

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[Research Laboratory]

## ABSTRACT

This document involves the procedures and processes to run a usability test for the note-taking module in the learning management system. The aim of this study is to establish whether the interface for note-taking is feasible in the current setting, and whether the users can use each function correctly.

### Document Control:

Version	Description	Author
1.0	Initial version	Rush Team
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## 1. Purpose

The primary purpose of performing this usability test session is to evaluate the usability of the library website. The usability test aims to identify any barriers or difficulties users may be experiencing when interacting with the website. This may subsequently prevent users from using the management system properly.

**The library website can be located at the following URL:**

**<https://www.rushnote.com>**

## 2. Product Description

As part of these user evaluation sessions, we will be evaluating the learning management system website: **<https://www.rushnote.com>**

This website is an online learning management system, which make a lot of improvements to the user's note-taking needs. In note-taking module, this page is optimized for the following features, such as share, download, edit online; It also introduce some exciting functions to help improve the efficiency of users taking notes: import professional vocabulary dictionary, voice input, and various built-in modules. For the disabled, the page also adds accessibility features to help them improve the user experience

The product is still in the early stages of development and the version that will be tested is a prototype, which displays enough functionality to test the various aspects of the system outlined in section 3.

### 3. Problem Statement/Test Objectives

This plan mainly tests users for the following questions:

General:

- Can the user understand each interface icon?
- Does the user know how to return to the previous interface?
- Does the page layout confuse users?
- Is the user looking for the desired function in the wrong interface?

Note-Taking part:

- Can the user understand the meaning of each function in the note-taking system?
- Did the user spend a lot of time trying a certain note-taking feature?
- Did the user accurately use the note-taking functions?
- How do users rate the note-taking function?

Experience level:

- Did users often use other note-taking software before?
- Do some user habits affect the user experience of the webpage?

## 4. participant profile

We are expecting to test a total of 20 users, split evenly into two groups. These users will be split evenly into expert/novice characteristics. Participants will be selected randomly, and their major will be determined from a pre-test questionnaire, sent to them by email prior to the evaluation (Table 2).

Group	Number
Expert	10
Novice	10

The characteristics of the groups are shown in Table 3.

Characteristic	Range	Frequency distribution
General note-taking experience	Never-often	-never used before -seldom -often
Purpose of using note-taking application	-	-study -diary
Major	-	-IT -notn-IT
Input professional vocabulary	Never-often	-never -seldom -often

## 5. Method (test design)

### 1) Participant Choosing

Four days before the usability evaluation session, each person who attended the questionnaire would be considered to be one participant. This will consider their major, age, gender and using habits. According to these, choose several participants.

### 2) Participant Inviting

Three days before the usability evaluation session, send emails to candidate to invite them take part in the testing. The email contains the time, location and content of the test. Moreover, this email should tell that they will be recorded with video/audio recording (although, not their faces), and by eye-tracking software (again, need to explicitly state that only gazes will be recorded, not their face or actual eyes). If they are pleased to join, they need to send a confirmation email. They can cancel the confirmation at any time before the test.

### 3) Pre-test questionnaire

Two days before the usability evaluation session, each participant will be sent a brief pre-test questionnaire. This questionnaire will be used to establish the participant's expertise, so can get suitable position for them.

### 4) Participant Greeting and Introduction

Each participant will be personally greeted by the test staff in order to make them feel relaxed. The staff will take them to the corresponding location.

### 5) Orientation and Consent

Before testing, participants will each receive a paper, verbal introduction and orientation, which will explain the purpose and goals of the test. They will also be assured that what is being tested is the website, not themselves. Participants will then be introduced to the equipment and told that they will be recorded with video/audio recording. It is the same with email content. Two copies of a consent form will be given to each participant to sign, participant is free to keep one copy of this form, and the second copy will be filed away by the evaluation team. The participant is free to leave the test at any time.

### 6) Usability Evaluation

The usability evaluation session consists of a series of tasks that the participants will carry out while being observed. These tasks will be conducted in the following manner: a. A script will be read out loud to the participant by the test monitor (facilitator), detailing the task to be accomplished. The participant will then be asked to attempt the task.

During the usability evaluation, the observer will make notes on the participants interaction with the test artefact. Any errors or issues that the participant encounters will be noted. Where applicable the facilitator will encourage the participant to verbalise his/her thoughts, and ask relevant questions. The observer will also make note of any unusual circumstances that may not

be picked up by the recording devices.

7) Participant Debriefing

The entire test was videotaped. Each participant will be questioned individually by the monitor.

The topics of the questions will be:

- A. Overall satisfaction with the website
- B. Any particular comments
- C. Satisfaction with the website of the specific task



## 6. Task List

Task 1	Description
Task:	Register and Sign in
Starting State:	Home page
Successful Completion Criteria	A notification inform sign in is success
Benchmark	3 minutes
Script (Task Scenario)	You have just started a new online course called Human-Computer, with a course code COMP9511. This course needs you to take some notes online. But you never use online note-taking system. You need to Register and Sign-on a note-taking website so that you can manage your note and share these notes with your tutors without face-to-face in COVID-19.

Task 2	Description
Task:	Change your password and email address
Starting State:	Personal information modification page
Successful Completion Criteria	A Successfully page will pop up
Benchmark	2 minutes
Script (Task Scenario)	You need to change your email and password so that you can log in not only with your Moodle account but also with your own email.

Task 3	Description
Task:	Back to main page, then add four community notes in your collection
Starting State:	Personal information modification page
Successful Completion Criteria	These notes can be found in your Collection
Benchmark	3 minutes
Script (Task Scenario)	Before you start taking notes, you need to browse and collect the notes in the community so that you can design your notes better

Task 4	Description
Task:	Back to main page and add a reminder in a day.
Starting State:	Personal information modification page
Successful Completion Criteria	The selected date on the calendar is colored
Benchmark	5 minutes
Script (Task Scenario)	You need to add an assignment due reminder to the calendar so that you can submit the assignment on time

Task 5	Description
Task:	Found note file called Comp9511
Starting State:	On My Note page
Successful Completion Criteria	Required textbook found
Benchmark	3 minutes

Script (Task Scenario)	You need to find a note file for COMP9511 so that you can view the note you have written before
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Task 6	Description
Task:	add a note in your recording material and save it with "6714note" name
Starting State:	recording page
Successful Completion Criteria	Can be found in MY NOTE page
Benchmark	3 minutes
Script (Task Scenario)	To ensure the integrity of the notes, you need to take notes while watching the 6714 recording with subtitles.

Task 7	Description
Task:	Back to the main page and Re-Open the recent file "6714 note"
Starting State:	On Recently page
Successful Completion Criteria	Required textbook opened
Benchmark	3 minutes
Script (Task Scenario)	You need to find the latest file as soon as possible, so that you can start your note immediately

Task 8	Description
Task:	Choose IT in Vocabulary, Mind-map in module and tap "AI"

Starting State:	Note page
Successful Completion Criteria	A word "Algorithm" can be hear and a structure of mind-map
Benchmark	3 minutes
Script (Task Scenario)	You are an IT major. You need to import IT vocabulary and use Mind-map to record the key points of this class so that you can type and absorb the knowledge of this class faster

Task 9	Description
Task:	Use the voice conversion function in note
Starting State:	Note page
Successful Completion Criteria	Text appears in real time
Benchmark	2 minutes
Script (Task Scenario)	The speaker speaks too fast and you can't record it. You need to turn on the voice conversion function to let the system automatically output text for you

Task 10	Description
Task:	Recover a file named "6714note draft" in Recycle bin
Starting State:	Recycle bin page
Successful Completion Criteria	"6714note draft" will disappear in the trash

Benchmark	2 minutes
Script (Task Scenario)	To retrieve the deleting notes, you need to recover the target file in the recycle bin

## 7. Test Environment/Equipment

**Due to the epidemic, we were unable to complete face-to-face interactions in the lab.**

**So, the sessions will be conducted online via Zoom. Therefore, the following equipment requirements will be particularly important.**

The following equipment will be used across the range of participants:

1. Quiet surrounding: Participants should be accommodated in a quiet and undisturbed space to ensure that usability evaluation testing run smoothly.
2. Cameras: Participant need to turn on the camera and share their computer screen, which the participant is using to interact with the learning management system, and the keyboard/hands of the participant.
3. Microphones: Test the microphone ahead of time to make sure it works properly. These will be used to record participants and the think-aloud protocol data, which can later be reviewed and transcripts created to ensure that all information is available for the analysis stage.
4. Headphones: Make sure the headset can receive the audio properly, so that if there are any problems during the testing phase, a reply can be heard.
5. Computer with an internet connection: First, participants will need to have a good network environment to support smooth access to the zoom online sessions. Secondly, participants will be able to interact with the learning management system by sharing screens.

## 8. Test Monitor Role

In this usability test of the learning management system, a total of four test monitors, who were in the same video conference group as the participants, acted as facilitators for the evaluation.

The following table describes the roles of the responsible testers

Name	Role
	Facilitator
	Observers
	Observers
	Observers

The facilitator needs to give a short introduction before the usability evaluation test to define usability and the purpose of the usability test for the participants and to introduce all participants. Inform the participants of the specific considerations and have them fill out a consent form.

Observers from the group will need to take notes based on the participant's commentary and other behaviour aspects such as facial expressions and gestures.

All persons involved with the usability test are required following rules:

1. The test monitor will participate in active listening and encourage an easy-going atmosphere throughout the evaluation session.
2. The test monitor will not lead the participant to the answer or the correct series of steps and will not volunteer help unless the participant is in serious risk of not completing the task successfully. A basic time frame for offering any serious help is approximately 5 minutes.
3. The test monitor will only respond to questions that enquire what to do and how to do if their answer will not threaten to skew the test results.
4. The test monitor will be on hand in case of equipment failure or other problems.

## 9. Evaluation Measures

**The following evaluation data will be collected and later analyzed:**

<b>Performance Measures</b>	<b>Behavioural Measures</b>
Number of tasks completed correctly with assistance	Participant comments
Number of tasks completed correctly without assistance	Participant comments
Number and percentage of tasks completed correctly with and without assistance	
Number of errors encountered during each of the tasks	Participant mannerism
Number of errors encountered during the whole of the evaluation	Participant perception of site
Number of times participant asked for help	
Negative comments count	Relevant quotes
Positive comments count	Relevant quotes
Count of incorrect icon selection	Participant mannerism
Time to complete individual tasks	
Time to complete tasks overall	



## 10. Report Contents

A formal report will be produced summarizing all the results and making design recommendations to the learning management system. All the information making up this report will be kept internally for research and educational purposes.