

# Usability Test

## Introduction

Microsoft To Do is used to create a list for future events and send reminders for specific dates and times. The app also allows users to print the To Do list created within the app and import flagged emails to remind users of tasks.

This usability test addresses whether the Microsoft To Do app effectively enhances productivity for its users. While many individuals find that using a To Do list can boost productivity, it is important to assess whether Microsoft To Do's features genuinely support this outcome.

## Testing Goals

The goal of this testing is to verify the validity of the Microsoft To Do app and identify any technological issues with its user interface. Specifically, we will focus on the interface for setting a To Do list (Reminder) and the method for receiving notifications about an event.

## Method

1. Send all participants a forms link to record results
2. Assign tasks to log their answer in four different specific time
3. Set a reminder on To Do app for second and fourth test on a participant's mobile device
4. Ask participants to spend their daily life normally
5. Check difference of response rate between first and third test (no reminder) and second and fourth test (with reminder)
6. Analyze the collected data using the equations provided in the following section.

Testing goals that specifically describe what is to be investigated and what will be found are as follows.

- I. The first research question to address is whether new users of Microsoft To Do can create a To Do list and set a reminder for a future event without experiencing any technical confusion.
- II. The second research question is whether the Microsoft To Do app effectively reminds users of their tasks and improves their response rate compared to when they do not use the app.

## Test Plan

### Instructions for participants

1. Download Microsoft To Do
2. Open a [link](#) to a form
3. Select test record check box
4. Submit the response
5. Open the Microsoft To Do and set reminders for 9PM of 2 days later and 4 days later to send responses (Record task completion time)
6. (Ask participants to) Send responses at 9PM of a day later and 3 days later
7. Answer questions in screening questionnaire
8. (After fourth response) Answer post questionnaire

Following equations will be used to analyze efficiency and satisfaction.

$$\textbf{Task Completion Time}(TCT) = \textbf{End time} - \textbf{Start time}$$

$$\textbf{Average TCT} = \frac{\sum TCT_s}{N}$$

$$\textit{Efficiency} = \frac{\textit{Optimal time}}{\textit{Actual time}} \times 100\%$$

$$\textit{Error Rate} = \frac{\textit{Number of errors}}{\textit{Total tasks}} \times 100\%$$

# Consent Form

## Informed Consent Form

(For Research Participants, Informants, and Respondents)

### Response of Yutaro Kiyota

**Instructions:** Please read and sign the Informed Consent Form. This document specifies your voluntary participation in a research study conducted by Yutaro Kiyota.

**THIS IS TO CERTIFY THAT I AM VOLUNTARILY PARTICIPATING IN THE STUDY WHERE I AM ASKED TO ACT AS A RESEARCH PARTICIPANT, INFORMANT, OR RESPONDENT.**

1. I am joining of my own volition. I was not coerced or forced against my will, and I am participating to contribute to the advancement of research.
2. I am not receiving any monetary remuneration or incentives for my participation.
3. I understand that I can withdraw from participation at any time.
4. I agree to cooperate honestly and truthfully with any questions posed to me by the researcher, which may include observations or questionnaires.
5. The researcher has clearly explained the purpose of the study to me, and I understand that no physical or psychological harm will be inflicted on anyone involved in the research.

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

### Screening questionnaire

1. What is your Age?
2. What is your major?
3. Are you comfortable using cell phone apps?
4. Have you used Microsoft To Do app? (yes/no)

If you answered no for the previous question answer following questions

5. Have you used any To Do app or paper based To Do list? (yes/no)

5-1. If yes describe.

# Checklist for test administrator

## Pre-test

1. Ask participants to answer [pre-screening questions](#)
2. Be sure that the cell phone is turned on
3. Ask participants to read and sign a consent form
4. Ask participants to open an App store and download Microsoft To Do app
5. Ask participants to enable notifications

## During-test

1. Read instruction A.
2. Begin recording task completion time
3. If participants finish the task stop timer
4. Read instruction B

## Post-test

1. Ask participants to answer post-screening questions (4 days later)

## Instruction A

Thank you for coming in today. My name is \_\_\_\_\_. Your participation will help us learn a lot about Microsoft To Do app and how it can be improved. It's important that you understand that there are no wrong answers, decisions, or implementations. We are testing how easily and by what methods people can use this equipment, so if you feel you're not able to accomplish anything, that tells us that the equipment is difficult to use. So, feel free to make your own decisions and experiment with options. At first please open a URL you received via email and record your response by selecting test. After this Instruction you may begin setting two elements in a To Do list with reminders for 9PM on a day that is two days and four days after today. Name of the tasks should be Test1 and Test2. Procedure of the task is set task name and set date and time afterward. You are also required to add a URL link that sent to you via email on note section of a task.

## Instruction B

Now, you need to record your response on the day and at the time you set the reminders. Please record your response within twenty minutes of receiving the reminder. Additionally, you are required to record your response tomorrow at 9 PM and again the day after tomorrow at 9 PM. This concludes the session. I appreciate your participation.

## Task List

1. Download Microsoft To Do
2. Open setting and enable notification for the app
3. Open the app
4. Sign in with a school outlook email
5. Add a task
6. Change the name of the task to test1
7. Set date to two days later
8. Set time to 9PM
9. Paste the response record form link to a note section
10. Add a task
11. Change the name of the task to test2
12. Set date to four days later
13. Set time to 9PM
14. Paste the response record form link to a note section

# Post-test questionnaire

Questionnaire after in-person test

1. What was the most difficult step?
2. What is a point you feel that can be improved?
3. What was the most frustrating thing about using Microsoft To Do?

## Log form

Task	Completion time	Error	Moderator Comment / Error description
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			



# Conclusion

## Result of a Pre-test Questionnaire

	Participant 1	Participant 2	Participant 3	Participant 4
Question 1	19	19	19	19
Question 2	Biological Science	Physics	Mechanical Engineering	Mechanical Engineering
Question 3	Yes	Yes	Yes	Yes
Question 4	No	No	No	No
Question 5	No	No	Yes	Yes
Question 5-1			Wrote out tasks and crossed them off when complete.	List of responsibilities of the day

Figure1

All participants are 19 years old, are accustomed to using mobile apps, and have never used Microsoft To Do. Some participants have previously used a to-do list for organizing daily tasks. Their majors vary, spanning from engineering to science disciplines (Figure1).

## Result of Task Completion time test

The completion time for each task was measured using a stopwatch (Figure 2). The results are shown below. The tasks with the longest completion times were tasks 8 and 13 (Figure 4), while the tasks with the shortest times were tasks 5 and 11 (Figure 4). All participants struggled to distinguish between a task's due date and its reminder date. Some participants noted that the time-setting process was somewhat complicated (Figure 6). The average task completion time (TCT) was 170.35 seconds, calculated using the equation provided in the Test Plan section. With the optimal time set at 150 seconds, the overall efficiency is 88.11%.

Task/Time	5	6	7	8	9	10	11	12	13	14
Participant 1	2	14.31	3.89	42.89	21.62	1.9	9.75	19.65	38.75	1.11
Participant 2	18.17	17.41	41.21	78.45	13.13	5.57	8.6	10.23	19.37	1.96
Participant 3	3.36	15.67	22.22	26.81	39.12	15.48	3.16	3.16	30.08	15.7
Participant 4	9.42	1.3	21.99	13.32	33.77	14.55	3.23	7.77	13.44	17.42

Figure2

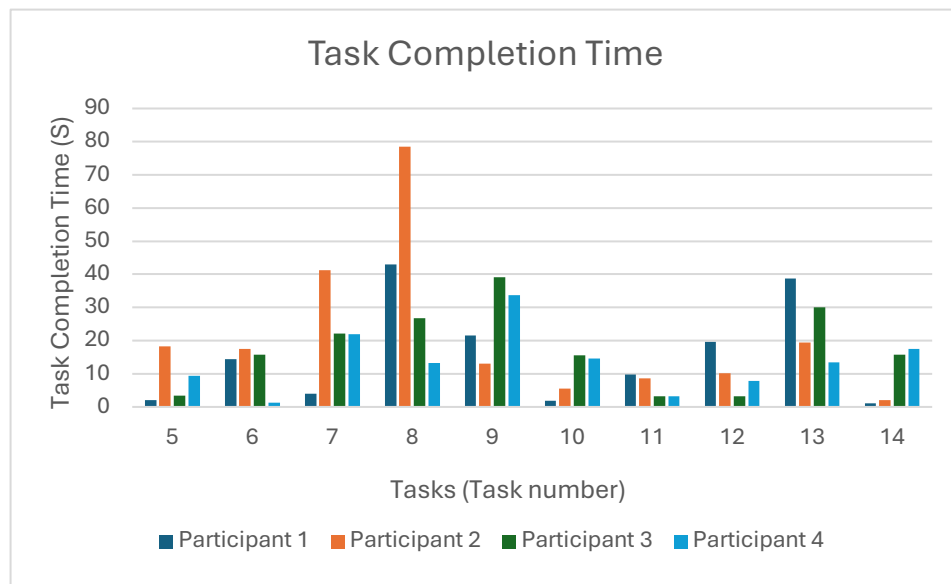


Figure3

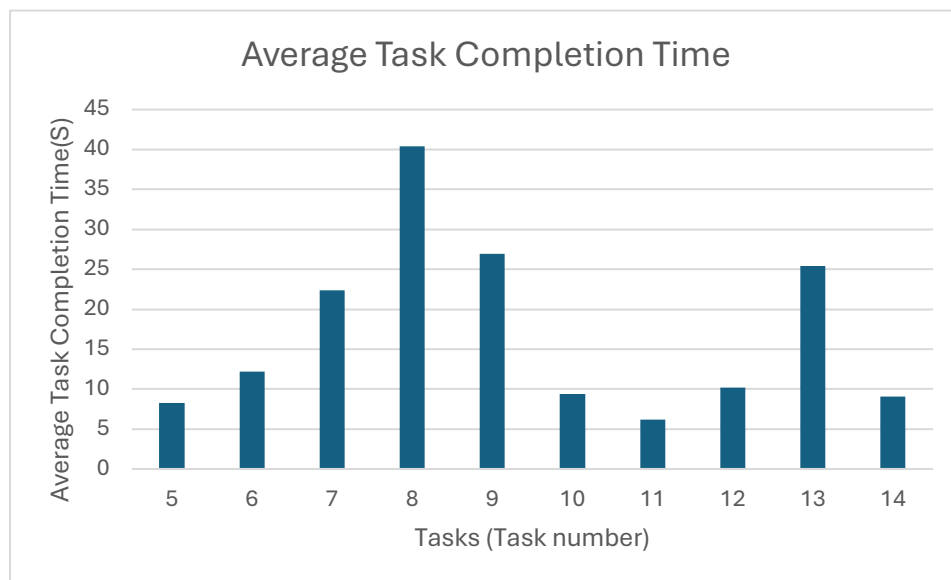


Figure4

### Completion Rate for Each Task

The error rates for Task 1 (without Microsoft To Do), Task 2 (with Microsoft To Do), Task 3 (without Microsoft To Do), and Task 4 (without Microsoft To Do) are compared below. When participants used Microsoft To Do, the error rate was 25%, while the error rate without using Microsoft To Do was 75% (Figure 5).

	Participant1	Participant2	Participant3	Participant4	Average
Task1	TRUE	FALSE	FALSE	FALSE	25
Task2	TRUE	TRUE	TRUE	FALSE	75
Task3	FALSE	FALSE	TRUE	FALSE	25
Task4	TRUE	TRUE	TRUE	FALSE	75

Figure5

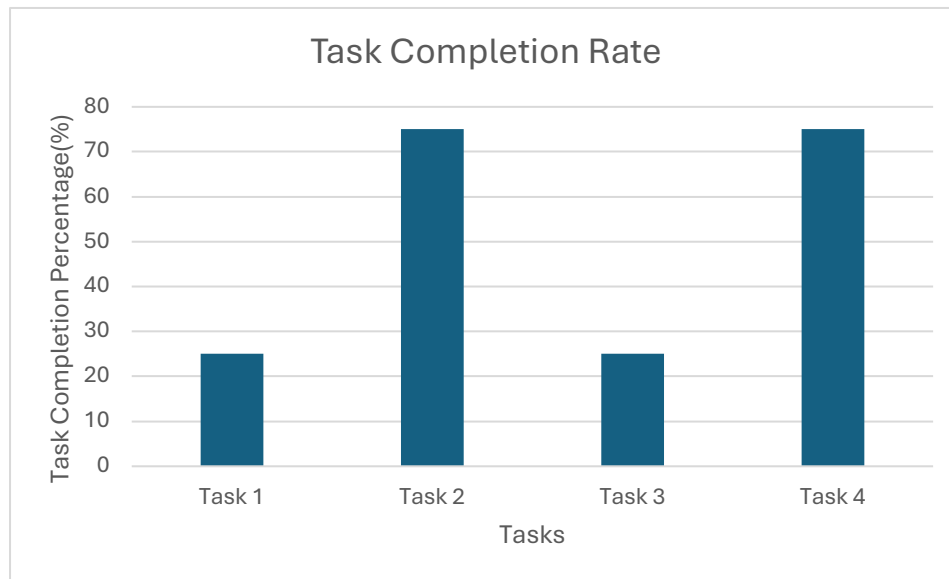


Figure6

### Result of Post-test Questionnair

All participants answered three post-test questionnair following is the result (Figure7). Most of the participants struggled with pasting a link to the note section.

	Participant 1	Participant 2	Participant 3	Participant 4
Question 1	Setting the time accurately for the reminder notification	Putting in the links	Pasting the link was the most difficult because it was not easyto get the paste option to come up.	Setting the time
Question 2	Usability guiding	Allow url links to be pasted straight into notes	The user experience was fine	Creating a list where different elements of the list can crossed off at different times.

Question 3	Navigating things the first time as they didn't have easily understood symbols and labels	Putting in the links. It wasn't that bad, but slightly inconvenient.	Again, the paste option, This may have had to do with the method I used.	Logging in.
---------------	---	--	--	-------------

Figure7