

# Hotmail Usability Test Plan

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# Usability Test Plan

## Evaluation of Hotmail Internet EMail Service

### Purpose of the Hotmail Usability Test

The purpose of the Hotmail usability test is to collect information about how users are using this web-based email product and whether they experience difficulties performing simple and more complex tasks using the product.

Microsoft management is interested in learning about how users use and perceive Hotmail and whether they experience any difficulties with the site, so that improvements in usability can be made.

This test plan describes:

- the problems to be tested and our strategies for addressing them
- the participants we will select for our test groups
- our test methods
- the tasks to be tested
- the test environment
- the roles of our team members
- the evaluation measures we will use
- the materials and other deliverables we plan to provide with the final report describing the usability test results.

### Problem Statement and Test Objectives

This usability test of Hotmail hopes to gain quantifiable data addressing Hotmail developers' specific concerns about Hotmail's usability. We will assess the ease or difficulty of the following Hotmail tasks:

- registering for Hotmail
- logging in and logging out of Hotmail
- composing an email
- sending and retrieving email (to include sending attachments)
- using the Hotmail member directory to look up member email addresses

- sorting messages in the Hotmail InBox
- creating an address book that contains frequently used addresses
- setting up folders to store messages by category.

Other items in which developers expressed an interest are more general in nature. Developers want to collect information about Hotmail user perceptions. These include:

- how users currently use email
- the level of effort required to use Hotmail
- satisfaction with Hotmail (determining whether users continue using it, recommend it to others, etc.)
- perceived reliability of Hotmail
- perceived speed of Hotmail.

The focus of the research will be task oriented and directed toward how the user subjectively responds to the issues listed above. The test planning activities will include several meetings of the test team to decide the best ways to test the issues and to narrow down the list of characteristics we will look for in potential test participants.

The test will be designed to allow us to extract mostly quantifiable, verifiable data. Participants will be given a pre-test questionnaire, scenarios that direct them to perform specific tasks, post-task questionnaires designed to extract detailed and specific feedback about Hotmail features, and post-test surveys to rate the usability of the product overall.

The test will be conducted in a full-scale usability lab. Novice users will be given 40 minutes to complete three of the four test scenarios we designed. Advanced or expert users will be given 1 hour and five minutes to complete all four of the test scenarios.

**The test team has decided to exclude five issues** based on a consensus that these would be best addressed by a focus group.

1. **What users think of Hotmail's performance.** Because of the wide variety of equipment choices, modem speeds, and other factors affecting this issue, it is difficult to compare these factors. It might be preferable to use a post-test questionnaire to assess the participants' impressions about system performance.
2. **The Password retrieval process.** We omitted a study of the password retrieval process because it requires setting up password "prompts" that would require time to elapse for users to forget their passwords or password clues.
3. **Reminders.** We excluded a study of "reminders" because they would be used by only a small subset of advanced users.

4. **Accessing other email through a POP account.** We will not test POP account access because this issue is too difficult to test given the proprietary nature of other email accounts.

Our objectives are to test two user groups in the following task areas.

**Table 1. Participants and Tasks to Be Tested**

Tasks to be tested	Advanced User Task	Novice User Task
Registration	X	X
Logging In to Hotmail	X	X
Logging Out to Hotmail	X	X
Reading Messages	X	X
Composing (Writing) a Message	X	X
Sending and Receiving Messages	X	X
Sending Attachments	X	
Creating and Using Folders	X	
Creating and Using Address Books	X	

## User Profile

According to the information received from Hotmail contacts, the product's current users consist of anyone who wants a personal, free email account that can be accessed from any Web browser from any location. This means current Hotmail users are people who have access to the Web from home, work, or even from a remote location in another country.

**Business people**, even those who have access to company-owned and managed email systems, are one of the main groups currently using Hotmail. Hotmail allows these users to avoid potential conflicts with employers who discourage employees from using company email accounts for personal mail. Because Hotmail is Web-based, employees are better able to preserve their privacy when sending personal mail, as most employers do not track traffic on Web-based email accounts. Business people who travel are especially likely to use products such as Hotmail,

because it allows them to access Hotmail from any remote site with a Web browser.

**Students** who may or may not own personal computers are common users of Hotmail, because it is free and can be accessed from any campus Web site.

**International travelers** may use Hotmail while on the road, accessing it from hotel rooms or commercial Internet kiosks.

**Users within households and small businesses** may use Hotmail, as it is available at low cost and allows multiple persons using a single computer to hold separate private accounts.

## Required Level of Computer Expertise

The level of computer expertise Hotmail requires of its users is that they know how to turn on a computer, connect to the Internet, and launch a Web browser. Hotmail also expects its customers to be familiar with basic Web navigation techniques, including how to move forward and backward through pages, how to click links in a Web page, and how to enter URLs. However, using Hotmail does not require extensive Internet and browser experience. Hotmail has suggested that the minimal skill required to use products like Hotmail may be one factor explaining why its customers choose to use Web-based email systems in the first place.

Because the spectrum of Hotmail users is very broad, we decided to test two groups of users: novices and “advanced” users. In this way, we hope to capture the broadest range of feedback concerning Hotmail’s usability. Both user profiles are described below.

### Novice Users

We assumed that even novice users would have to have basic computer experience, including keyboarding skills, Windows experience, and basic abilities in accessing and navigating a Web browser. To keep the delineation between novice and advanced users as “clean” as possible, we decided to select only people for this group who have NO email experience. (It will be challenging to recruit a test user base of people who have experience with the Internet but no previous email experience, but we believe our pre-test questionnaire will assist in this matter.)

### Advanced Users

Advanced users will have all of the capabilities of the novice users, and many more. In addition to having computer experience, keyboarding skills, and experience using the World Wide Web, these users will have

previous experience using other email programs (except for Hotmail). We will select a group of participants who have extensive web experience (6 mos +), and who use email frequently.

To screen participants' skill levels, we will ask questions such as "How often do you access email?", "Where and when do you use email?", and "Do you attach messages routinely to your email?"

Potential questions for focus groups related to this matter might be questions addressing preferences around advanced user functions, such as "Do you want anonymous email capabilities?"

## Method (Test Design) & Task List

The test scenarios for each participant will be centered on several users' specified tasks. We will provide the participant with descriptions of each task. However, we will not provide specific, step-by-step instructions on how to accomplish the designated task.

## Novice Test Design

Hotmail asked for testing of the following features and tasks, which we divided into simple and more complex tasks. Of the four scenarios we created in total, we allocated three scenarios to novice users. The scenario list for novice users omits Scenario 3, which covers tasks that advanced users typically perform. Although Scenario 3 is optional, we may ask select novice users to complete it if testing time allows. For information about Scenario 3, see the section "Advanced User Test Design."

### **Scenario 1:**

Register for Hotmail.

### **Scenario 2:**

- a. Read messages in the mailbox.
- b. Write a new message (Compose).
- c. Reply to a sender's message.

### **Scenario 4:**

- a. Delete some messages.
- b. Leave Hotmail.

We will ground the novice test participants in user-based task scenarios that make use of neutral language when providing instruction. The use of

neutral language will limit any biases or cues that could aid or deter the test participant. The novice task list will be outlined as follows:

## Novice Scenario / Task List

### **Scenario 1: Allocated time, 15 minutes**

You have recently decided to sign up for email using a service called Hotmail. Using your Web browser, go to the following address:

[www.hotmail.com](http://www.hotmail.com)

Once you are at the Hotmail Web site, go ahead and sign up for a free email account. If you need any assistance, feel free to use the online help provided by Hotmail.

When you finish signing up to Hotmail, take some time to look around the site and explore its features—but for now, don't try to look at or send any email.

### **Scenario 2: Total allocated time, 25 minutes**

*Scenario 2, Task A:*

Check for any email messages that you may have received in Hotmail. Open one of them, and close it when you finish reading it.

*Scenario 2, Task B:*

Send a message to the following email address:

[bill.smith@i-solutions.com](mailto:bill.smith@i-solutions.com)

Be sure to tell the recipient that you are sending out this message to test your new Hotmail account.

*Scenario 2, Task C:*

Check to see if you have received any new email messages while you've been working in Hotmail. Look for a message with the subject line "Usability," and respond to it with a message telling the sender that you got the email.

### **Scenario 4: Total allocated time, 15 minutes**

*Scenario 4, Task A:*

Erase all of the messages in your mailbox.

*Scenario 4, Task B:*

Sign off from Hotmail.

## **Advanced User Test Design**

The advanced user test includes all of the novice scenarios described previously and an additional scenario (Scenario 3) that requires the users to perform more sophisticated file management and organizational tasks. All of the scenarios that will be performed by advanced users are listed below.

### **Scenario 1:**

Register for Hotmail.

**Scenario 2:**

- a. Read messages in the mailbox.
- b. Write a new message (Compose).
- c. Reply to a sender's message.

**Scenario 3:**

- a. Search Hotmail to find a sender who has a Hotmail account.
- b. Send a message to this person, and attach a file to the message.
- c. Create a place to store messages.
- d. Create an address book to store the email addresses of people who write to you.

**Scenario 4:**

- c. Delete some messages.
- d. Leave Hotmail.

## Advanced User Task List

As explained above, the advanced tasks are the same as the tasks performed by novice users, with one exception: After they complete Scenario 2 and before going on to Scenario 4, advanced users will perform a scenario in which they perform more sophisticated email tasks, as explained below:

**Scenario 3: Total allocated time, 25 minutes***Scenario 3, Task A:*

You just realized you want tell a friend you have a new Hotmail account. You know your friend also has a Hotmail account, but you don't know his email address. Using Hotmail, look up your friend using his first and last name:

- First: Freddy
- Last: Kruger
- City: Smyrna
- State: Georgia

*Scenario 3, Task B:*

You decide that you want to send Freddy a message to tell him about your new Hotmail account. You also decide to send Freddy a file he's been asking for along with your message. Go ahead and write Freddy an email telling him you have a Hotmail account, and attach the file to it. The file you are sending is located on the A drive and is titled "Test.doc."

*Scenario 3, Task C:*

Check to see if you have any new email messages. Go ahead and place one of the emails you received in a holding area called "My Stuff." If this holding area isn't there create it.

*Scenario 3, Task D:*

You just realized that you would like to keep Freddy's email address accessible for future correspondences. Create a place in Hotmail to store his address for other mailings.

## **Novice & Advanced Participants—Pre-Test Questionnaire**

- Does anyone in your family use the Internet? For what?
- What do you think of the Internet?
- What is your impression of the speediness of Hotmail?

## **Novice & Advanced Participants—Post-Test Questionnaire**

- What is your impression of the speediness of Hotmail?
- What task did you find the most difficult to do? What other tasks were difficult?
- What tasks were easy to complete?
- Would you recommend Hotmail to a friend?
- Would you recommend Hotmail since it is for free?
- Did you click on any of the advertisement banners at Hotmail? Why or why not?

## **Test Environment / Equipment**

The usability evaluation room (where participants will work) is furnished with the following equipment:

- three wall-mounted video cameras, allowing filming of participants from various perspectives and angles.
- a desk on which computer equipment can be set up to simulate a work environment

- a Pentium computer running Windows 95 with Netscape Communicator and Internet Explorer software
- an Ethernet connection to a T-1 Internet connection.

The test room is separated from the observation room by a one-way mirror.

The observation room contains the following equipment:

- an audio/visual console
- an audio channel mixer
- a VHS recorder
- a VHS recorder equipped for editing
- a special effects generator
- a microphone
- a speaker (with a pickup to the usability test room)
- a computer running Windows 95 and U-Loggit software (to log and categorize test observations)
- a printer
- a screen video pickup

## Roles of the Team

Our team consists of six members. Five of the members will perform specific tasks and one member will be a “floater,” performing varied duties as required.

**Briefer:** We have assigned a briefer who will explain the usability test activities to the participants and who will administer the pre-test and post-test questionnaires.

**Camera Operator:** One team member will operate all of the cameras.

**Logger** (data recorder): One team member will be responsible for typing in observations and logging data using U Loggit.

**Narrator:** One member will serve as a narrator. The narrator’s role is to make verbal observations about test events. This process gives the logger an opportunity to capture information about events that he or she may miss while entering and logging data.

**Test Administrator:** One team member will be responsible for overall coordination and troubleshooting duties.

## Evaluation Measures (Data Collection)

The evaluation measures will be a combination of quantitative measurements and subjective observations. The quantitative and qualitative data measures are listed below:

### Quantitative Data

The following data will be recorded when carrying out the Hotmail usability test:

- time to completion of each task
- number of participants completing tasks within allocated time
- number of participants completing tasks with extra time
- number of problems encountered
- number of errors (unsuccessful tries)
  - more than three errors per task indicates a potential usability problem
- number of local problems
- number of times each participant uses "Help" menu
- number of times each participant accesses advertising sites
- length of time each participant spends on browsing advertisements

### Qualitative Data

- facial expressions
- verbal comments when they think out loud
- spontaneous verbal expressions (comments)
- interviews before the test
- interviews after the test
- miscellaneous activities (stretching, wanting breaks, etc.)

## Report Contents and Preparation

The report will be presented in a **formal report format** with the following sections:

- cover letter
- title page
- executive summary
- contents

- discussion on the background of the project
- user profile
- description of the planning phase with estimated and actual work hours
- description of the test (methods and tasks)
- collected data (both quantitative and qualitative)
- analysis of the collected data
- recommendations on the basis of analyzed data
- appendices (questionnaires etc.)
- The formal report will be presented with the following supports:
  - a formal oral presentation on the results of the report
  - a video-highlights tape showing the important aspects of the test conducted

Finally, we feel that the previously mentioned format will provide a detailed and comprehensive summary of our usability findings and test methodologies.