



To: Matthew Harmon
From: Cathy Hu & Sydnei Mayers
Subject: Coronavirus.gov Test Plan
Date: May 15, 2020

Purpose

The purpose of this test plan is to provide our team with detailed information regarding our strategy, objectives, resources required, schedule, and deliverables involved with this usability study. It will serve as a point of reference throughout the entire process of our testing of the Coronavirus.gov website and help keep our team on track.

Our team will be communicating with Matthew Harmon, the Director of Web Communications at the U.S. Department of Homeland Security, throughout this project.

This test plan includes:

- Problem Statement and Test Objectives
- Methodology
 - Test Procedure
 - User Profiles
 - Screener
 - Interview Questions
- Evaluation Methods
- Test Environment and Equipment
- Deliverables
- Appendices
 - Appendix A: Team Checklists
 - Appendix B: Screener
 - Appendix C: Moderator's Script
 - Appendix D: Consent Form
 - Appendix E: Pre-Test Questionnaire
 - Appendix F: SUS Evaluation
 - Appendix G: Reaction Cards

Problem Statement and Test Objectives

The DHS would like to evaluate whether the Coronavirus.gov site is usable for general public consumers. The objectives of this study are to:

- Examine if the purpose and author of the website are clear
- Assess whether the content of the website meets user needs and expectations
- Identify any missing components of the website
- Highlight any additional usability strengths and weaknesses present

Methodology

This section outlines how the test will be performed for each test participant. By following this prescribed methodology, we ensure that we can obtain accurate and consistent usability findings. We will use a consistent procedure, schedule, and participant profile between each test.

Test Procedure

Each test session will begin with the moderator sending a Zoom link to the participant. Once the participant joins the Zoom meeting, the note-taker will be muted with her webcam off and the moderator will begin the test session. The moderator will begin recording the Zoom meeting and the participant will sign a consent form (*see Appendix D*) through Google Forms.

After the participant has given their consent, the pre-test questionnaire (*see Appendix E*) will be administered. Once the pre-test questionnaire has been completed, the interactive interview will commence.

The participant will be asked to find a government site related to coronavirus through any search engine they prefer. The note-taker will record the time taken to find a website, as well as, whether the participant chose Coronavirus.gov. If the participant does not select Coronavirus.gov, the participant will be redirected to the site. From there, the moderator will ask the participant four questions relating to the functions of the website. The note-taker will record any notable behaviors, quotes, and metrics.

After completing the interactive interview, the participant will be asked to complete a System Usability Scale evaluation (*see Appendix F*) and a reaction cards evaluation (*see Appendix G*) through Google Forms. Finally the participant will be thanked for their time and the test session will conclude.

Number of Participants

We plan to test a total of nine participants and will recruit twelve participants, three of whom will be backup participants for each age range. The first participant will participate in the pilot test—the results of which may not be included in the final results of the study.

Length of Test Session

Welcome and consent form signing: 5 minutes

Interactive interview: 25 minutes (5 minutes per question)

SUS evaluation and reaction cards evaluation: 10 minutes

Total time: 40 minutes maximum

User Profiles

Our testing will focus on members of the general population. We plan on testing three participants from each of the three age ranges (18-30, 31-50, and 51+) for a total of nine participants. Testing three demographics will allow us to understand the needs and expectations of young adults through middle-aged adults for a government site related to coronavirus.

Screener (see Appendix B)

As we recruit participants, the potential participants will be asked their name, age, contact method(s), available times, and access to a webcam/microphone/quiet place. In order to not reveal the website prematurely, potential participants will not be asked if they have previously viewed a government site related to coronavirus.

Three participants will be selected from each age range in order of screener submission to participate in the test. An additional participant from each age range will be informed that they will be backup participants and all other potential participants will be thanked for their time.

Interview Questions

Given Coronavirus.gov's status as a hub for coronavirus resources, we opted for an interactive interview over a traditional usability test to ensure that we are testing the usability of Coronavirus.gov and not the usability of the external links within the website.

Each test will include the following questions:

1. If you were looking for a government site related to coronavirus, where would you go?
(Redirect to coronavirus.gov if the participant does not find the correct site)
2. As you look at the site, what do you think the purpose is? Who is the author of this page?

3. If you were going to do a search on coronavirus, what would you look for? Find the answer to this question using this site. Does this answer meet your expectations?
4. The site serves as a hub for coronavirus resources. Based on this understanding, do you think there is anything missing?
5. Overall, does this site meet your expectations? How would you improve this site?

Evaluation Methods

In order to record both qualitative and quantitative data, the following evaluation methods will be used:

- Pre-test questionnaire (Google Form)
- Remote interactive interview
 - Time spent finding government site related to coronavirus
 - Error or no error when finding a government site related to coronavirus
- System Usability Scale evaluation (Google Form)
- Reaction cards evaluation (Google Form)

Test Environment and Equipment

Each test will be conducted through remote testing with the moderator and note-taker in a Zoom conference with the participant. The Zoom conference will be recorded by the moderator, who will also prompt the participants to think out loud and guide them through each question.

To conduct the tests, we will need the following equipment and materials:

- A copy of the moderator script
- A copy of the test plan
- Google Forms
- Zoom

Deliverables

Upon completion of testing, our results will be compiled onto a PowerPoint deck and formally compiled into a written report. We will then present our PowerPoint to Matthew Harmon and turn our written report in to him. Results may include areas in which the product excels, areas in which users struggled, or bugs that were found within the product. Our team will suggest ways to improve the product, but the primary aim of the project is to simply observe and take note of how end-users use the product.

Appendix A - Team Checklists

Moderator Checklist

Before participant arrives

- Make sure links to the consent form, pre-test questionnaire, SUS evaluation, and reaction cards evaluation, and the moderator's script are readily accessible

Consent form

- Explain test purpose
- Go over digital consent form, allow time to read and sign
- Ask for questions and concerns

Testing

- Testing process
- Review how think aloud process works

SUS Evaluation and reaction cards

- Administer SUS evaluation and reaction cards exercise
- Ask participant if they have any further questions or concerns
- Thank participant for their time

Note-Taker Checklist

Before each interview

- Turn on logging computer
- Connect to Zoom in testing room
- Prepare note taking materials
- Record the starting time of the test, date, participant name, and scenario

After each interview

- Record the ending time of the test
- Record participant responses to post-test evaluation methods
- Place all material into shared Google Drive

Appendix B - Screener

The screener will be delivered via the following link:

<https://forms.gle/TZoXWKfPtn1LBjbn9>

1. Please state your name.
2. How old are you?
3. What ways can we reach you? Please provide your email, phone number, etc. We will only be using this info to contact you about testing, no other contact will be made outside of this context.
4. Please list dates and times (9am-9pm) from Monday, May 18th to Sunday, May 24th that you would be available to test.
5. Do you have a webcam/microphone that you are able to use to participate in the test?
6. Do you have access to a quiet place for approximately 30 minutes to an hour to assist us with testing?

Appendix C - Moderator's Script

This script was adapted from (Barnum, 2011, pp. 193-195).

(Start Zoom recording.)

Introduction

Hello! Thank you for being here with us today.

My name is Cathy Hu and I am here to evaluate the usability of a government site related to coronavirus. For your information, I am reading from a script to ensure I say the exact same thing to each participant and to ensure that nothing is skipped or missed.

Your participation will help us understand what changes should be made to develop an informative, usable website.

Video Recording Permission (Appendix D)

This session will be recorded. The reason for recording the session is so that we can collect additional data after the test. Here is a link to a consent form (*see Appendix D*) giving me permission to record your use of the site. If you are comfortable with signing this form, please do so. If you have any questions, please feel free to ask.

<https://forms.gle/DffhuBoYGzFbg6x37>

Introduction to Testing

Before we begin, I will explain how this test will work.

I will ask you to view a government site related to coronavirus and ask you questions about the website. I really appreciate your feedback about your experience, so I would like you to think aloud as you navigate the site. You may want to say things like, "I'm clicking this because..." or "I don't like this because..."

Additionally, this test is meant to evaluate the website, not your abilities. You do not need to know anything about the website beforehand.

Pre-Test Questionnaire (Appendix E)

Do you have any questions before we begin?

In the center of the Zoom toolbar, there is a large green button that says share screen. Please click that. Now there will be an option asking which screen you would like to share; please share whichever display you will be using (ie. desktop/screen 1).

<https://forms.gle/k5mqLdLy3xPJr45T6>

To begin, I would like you to fill out this questionnaire to help me understand your expectations for a government site related to coronavirus. As you complete it, please tell me what you are typing and why you are writing these answers.

[After the questionnaire is completed:] Thank you for your feedback.

Testing

I have several questions to ask you. Remember, this is not a test of you; it is a test of the website, and I'm very interested in your reactions about it. Please remember to think out loud.

1. If you were looking for a government site related to coronavirus, where would you go?
2. As you look at the site, what do you think the purpose is? Who is the author of this page?
3. If you were going to do a search on coronavirus, what would you look for? Find the answer to this question using this site. Does this answer meet your expectations?
4. The site serves as a hub for coronavirus resources. Based on this understanding, do you think there is anything missing?
5. Overall, does this site meet your expectations? How would you improve this site?

Thank you for your feedback. We have a few extra forms for you to fill out in order to help us gather some more data.

SUS Questionnaire (Appendix F)

Please complete this SUS questionnaire. This will help me understand your experience with this website. Additionally, please explain why you are choosing each answer.

<https://forms.gle/MLM3LTvriUHFci16>

Reaction Cards (Appendix G)

This form contains sixteen different words that may be used to describe Coronavirus.gov. Please choose up to four words from the list that you would use to describe your experience on the microsite and please elaborate on why you chose those words.

<https://forms.gle/1pQS5mi71ArE2Szb6>

After Testing

Thank you for participating in this test! I hope you have a great day.

Appendix D - Consent Form

The consent form will be delivered via the following link:

<https://forms.gle/DffhuBoYGzFbg6x37>

The following consent form is adapted from (Barnum, 2011, p. 171).

I hereby give my permission to be videotaped as part of my participation in the coronavirus website usability study at Mercer University.

I understand and consent to the use and release of the video. I further understand that the video recording and any highlights extracted from it may be used for review. Representative video excerpts may also be used within presentations to the client, at professional meetings, and as part of research.

I give up any rights to the video recording and understand that the recording may be used for purposes described in this release form without further permission.

I understand that if for any reason I do not want to continue I can leave at any time during this recording session. I can also deny consent at any time.

If you agree with these terms, please indicate your acceptance by signing below:

Signature (initials)	
Printed Name	
Date	

Appendix E - Pre-Test Questionnaire

The pre-test questionnaire will be delivered via the following link:

<https://forms.gle/k5mqLdLy3xPJr45T6>

1. What is your name?
2. What kind of pages or information would you expect to see in a government site about coronavirus?
3. What would be your top 3 reasons for visiting a government site about coronavirus?
 - a.
 - b.
 - c.

Appendix F - SUS Evaluation

The SUS evaluation will be delivered via the following link:

<https://forms.gle/MLM3LTvriUhHFCi16>

System Usability Scale

Instructions: For each of the following statements, mark one box that best describes your reactions to the website *today*.

		Strongly Disagree				Strongly Agree
1.	I think that I would like to use this website frequently.	<input type="checkbox"/>				
2.	I found this website unnecessarily complex.	<input type="checkbox"/>				
3.	I thought this website was easy to use.	<input type="checkbox"/>				
4.	I think that I would need assistance to be able to use this website.	<input type="checkbox"/>				
5.	I found the various functions in this website were well integrated.	<input type="checkbox"/>				
6.	I thought there was too much inconsistency in this website.	<input type="checkbox"/>				
7.	I would imagine that most people would learn to use this website very quickly.	<input type="checkbox"/>				
8.	I found this website very cumbersome/awkward to use.	<input type="checkbox"/>				
9.	I felt very confident using this website.	<input type="checkbox"/>				
10.	I needed to learn a lot of things before I could get going with this website.	<input type="checkbox"/>				

Appendix G - Reaction Cards

The Reaction Cards exercise will be delivered via the following link:

<https://forms.gle/1pQS5mi71ArE2Szb6>

Participants will have following positive words to choose from:

- Easy to use
- Clear
- Valuable
- Engaging
- Responsive
- Organized
- Convenient
- Professional

These positive words describe an excellent DHS site that allows users to quickly find what they are looking for and navigate through the website with ease.

Participants will have the following negative words to choose from:

- Confusing
- Incomprehensible
- Overwhelming
- Frustrating
- Distracting
- Hard to use
- Intimidating
- Irrelevant

These negative words describe a subpar DHS site that may cause its users to stop accessing the site.