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GO DOWN FOR PART 2 OF P6 ASSIGNMENT (pp. 6-7)

P6 Part 1:

CONSENT FORM

You will be taking part in a small study testing out our web application. By signing this, you agree to the terms below. We take no responsibility in what may happen. You may not sue us based on participation of this study. There should be no consequences to note of the study. You will be asked a couple of questions, and also measured during the procedure. If you feel uncomfortable at any point in the study, you may choose to not continue. There will be no compensation; the work will be voluntary. You will not be waiving any rights you hold as stated by legal law. This study follows the law of the nation, the laws of the state, and the laws of the county we are in when conducting this study. If, at any point, you feel your rights are being suppressed, you may ask us to change what we said so we can accommodate for you.

This study requires the use of a computer (provided for you) as well as navigation of a webpage using a mouse. If you require accommodation, please ask in the beginning of the study, and we will happily provide the service needed for you to complete the study within reason. At any point in the study, you may feel free to clarify something about the study. If we find the question reasonable, we will answer it. At times, we may choose not to answer questions; this is merely for study data, not to ignore you. Please try to complete the study as best as possible. If you feel like you cannot accomplish the task, then please notify us that you were unable to.

The data you provide will only be focused on going through the procedure and accomplishing the core task, recording the steps necessary for you to do so. All data is anonymous and we will not record any names. By signing, you are consenting that your data be used in our procedure.

We hope you will enjoy the study. Please sign at the bottom and proceed to the next page for the study.

→

Core User Task:

In this study, you will be interacting with our web application in order to learn about a new topic. Recently California experienced devastating wildfires, and we want you to try and learn new information about this. You will be expected to navigate from the home page of our website to the page containing information on the recent wildfires. We also expect you to be able to navigate through any additional pages along the way. You will have completed this task when you are able to answer three questions on this wildfire topic correctly, with references to back up your claims.

Study Measures/Raw Data:

G1 = Group 1
G2 = Group 2

Procedures:
1. Take a few seconds to observe the landing page.
2. Scan through possible topics.
3. Find the topic: 'Forest Fires in California' and click on it.
4. Look through the quiz and answer the questions.
5. Look through the results.
6. Click on the link related to the first incorrect answer (skip Steps 7-9 if no links appear).
7. Read the relevant fact about the California fires.
8. Head back to the quiz results page.
9. Navigate to the next incorrect link.

Measurements:
- Time to complete Core User Task:
  G1: 1m 21s
  G2: 2m
- Number of times group asked for help:
  G1: 0
  G2: 1
- Successfully completed Core User Task:
  G1: Yes
  G2: Yes

Post-Task Questions:
1. Did you feel like the core task was easy to accomplish?
   G1: Yes the core task was straightforward, the quiz questions were difficult.
   G2: Yes, core task was easy to accomplish.

2. Did you understand what you were being asked to accomplish?
   G1: Yes
   G2: Yes
3. Did you learn anything new about the topic at hand?
   G1: Yes I learned something new.
   G2: Yes, learned a lot about wildfires.
4. How intuitive was the UI for you?
   G1: The UI made sense, the mouse hover revealing the links was cool.
   G2: Liked the UI, but would've also liked for the topic titles to always be present.
5. Did the UI help guide you to each subsequent step in the procedure?
   G1: Yes, but the pictures became a little confusing and misleading. The pictures alone require background knowledge on the topic, which users may not always have. May not have the time to hover over every image to reveal titles.
   G2: The UI does help guide the user to the next page. Especially the blue colored hyperlinks. Also liked the UI of the quiz.
6. What was your favorite part?
   G1: The UI in general just looked nice.
   G2: Liked the feel of the quiz and learning about the topic in a different way.
7. What step in the procedure felt the hardest to accomplish?
   G1: Doing the quiz and selecting the correct topic.
   G2: Nothing felt challenging.
8. Would you take the time to use this application?
   G1: Would be willing if the topics were interesting enough.
   G2: Yes, I would take the time.
9. Would you tell your friends about this?
   G1: Only if you pay me.
   G2: Yes!
10. Do you have any improvements you can think of off the top of your head?
    G1: UI on landing page is not intuitive, thought that the columns on the top of the page were clickable categories.
    G2: Can't think of any improvements at this time.

<u>Reflection:</u>

Our study results were very interesting. Many of the design choices that we had made to help the user navigate through our web application were misinterpreted and actually added to the user's confusion while using the app. For example, the header we had of the column titles was misconstrued multiple times at clickable category links. We either need to reimplement this as the new design or better label them as distinctive columns. We also need a better way to help the user identify our topics on the home screen. As of right now, they are all clickable pictures that display text when the user hovers over with their mouse. Our core task presented a design flaw when we saw one user unable to quickly browse through topic titles, as they were

forced to take the time to hover over each picture to view the text. We clearly need to add a way for users to come to the home page and quickly view all the titles of our topics.

We also talked about a way to make our topics more engaging to each user visiting the website. One way we could do this would be to add a navigational bar to the top of the page with labels such as ‘Hot’, ‘Trending’, ‘New’, and ‘Most Views’. These are all typical pages the user might what to visit, and they would be more likely to view the topics associated with them. Finally, we decided that we need to add more interactivity into our quizzes. We have talked about adding graphic models that the user could play around with, and feel that this would make our content much more engaging.

P6 Part 2:

Revised study:

For each step, please speak out loud what action you are going to do to complete it
I will read each step out loud when you get to it
Procedure:
1. Take a few seconds to observe the landing page.
2. Scan through possible topics.
3. Find the topic: 'Forest Fires in California' and click on it.
4. Look through the quiz and answer the questions.
5. Look through the results.
6. Click on the link related to the first incorrect answer (skip Steps 7-9 if no links appear).
7. Read the relevant fact about the California fires.
8. Head back to the quiz results page.
9. Navigate to the next incorrect link.

Measurements to record:
- Time to complete Core User Task
- Accomplished Core User Task? Y/N
- Answered the Post-Task Questions? Y/N

Link to post-study procedure questions: https://goo.gl/forms/9DVvR5Lu2Pzg5FEr1

Link to each participant's responses to form:
https://docs.google.com/a/berkeley.edu/spreadsheets/d/10uhBOSFVazSt3avcahI85VukiSjUpsMF4OmiTJAuIP4/edit?usp=sharing

Aggregation of all data in charts:
https://docs.google.com/a/berkeley.edu/document/d/1QhwlNGAgQ49gmG3Bf4aRMse-jY3HIyl8-AR7DH-bSAw/edit?usp=sharing

Participant Data and Info:
https://docs.google.com/a/berkeley.edu/document/d/15ZlHmnbfJ0WMSOyu01SWKistVuFTEBnmbghJqKOQoDs/edit?usp=sharing

Paragraph on the revisions after pilot study:

Most of the feedback we received from our pilot study was centered around improving the web application prototype we made. The participants thought the study procedure was clear, reasonable, and easy to follow. Some of the questions that we asked our first round of participants were worded poorly, so we decided to remove those and add some pertaining to explicit pages. Overall the pilot study gave us great feedback that we could use to enhance and

improve our prototype. We decided to leave our core user task and study procedure pretty much the same because they are both very concise, leaving little room for error. In addition to this, both the core user task and study procedure continue to give us solid insight into how users first react when using the application. One thing we did think would be best to change for these subsequent interviews was the method by which we asked our participants questions. We decided to use a google form and had our participants scroll through it and answer the questions after completing the study procedure. This was beneficial because it allowed us to consolidate and organize all of the data we collected on the participants. It also removed the distraction that came with waiting for one of us to write down a participant's answers, and allowed them to focus on completing the questions and providing us with their feedback.

Study conclusions and design implications:

While the pilot study procedure proved to be strong and helpful, there were a couple of missing points we wanted to add. We wanted the ability to figure out what the user was thinking throughout the study procedure, because it is important to see how the user communicates their thought process. With this in mind, we had our participants say aloud how they they were tackling each step in the procedure as well as what their thoughts were along the way. Also, we did not allow them to ask for help because in the real world use case the user would not be able to ask for any. Finally, we added diversity to our list of post-task questions by having them rate several parts of the experience and prototype through sliders, and focusing on specific areas of the UI. This was all grouped in a google form, where we could have them easily answer questions and then collect the data and aggregate it to analyze our results.

The conclusions we were able to make after conducting this study were very insightful. First off our results told us that all participants were able to complete the core user task, confirming that it was never 'too difficult' for someone to finish without the ability to ask questions. The longest a participant took to complete the study was around 3m, with the mode time around 1m 30s. Many of our participants were with frustrated or confused by the landing page layout, and some were annoyed about the nature of the quiz appearing before the actual article. We also had some participants who were confused about having to use the back button to return to the quiz results page.

From these results we were able to conclude that the design of the landing page needs a complete makeover. We also may want to reconsider how we present the quiz to the user, and have started to consider whether or not the quiz is appropriate before giving users the ability to seek out information on their own. We think there may be a better way to organize the flow of our web application so that more users aren't startled when they click on a topic and immediately see a quiz pop up. We also want to create more intuitive paths between pages, so that the user isn't left feeling stuck anywhere in our application.

Link to slide deck:
https://docs.google.com/a/berkeley.edu/presentation/d/1ze7qoFJmS2NZ1jUZwJgBNAcE-t8aFJvi9_HWf5-Dp84/edit?usp=sharing