Assignment M1

Jeremy Martinez jmartinez91@gatech.edu

Abstract — I will be focusing on a websites navigation bar. The nav bar is usually the main call to action when visiting a homepage of a web application, and provides context for what actions are available. I will compare navigability between desktop/mobile versions of a website as well.

1 PROBLEM SPACE

To define the problem space, we must enumerate details associated with what this means. Listing these out and explaining one-by-one each of these details helps fully capture the scope of the space we're looking at. The problem at hand is finding information on a local business. The medium for solving this problem is a website for the local business (hair salon). We will narrow our focus of this entire application to the navigation bar, and attempt to optimize the user experience of this one aspect.

- Where is the task ocurring? At home, on the bus, in a restaurant, anywhere we have access to a browser, desktop or mobile
- What else is going on? The user may be switching between multiple tabs in their browser, using their smartphone while performing some other task, etc.
- What are the users explicit and implicit needs? We will need to conduct research to determine what users are visiting the website for and provide webpages to satisfy this. Additionally, we can ask the user for input when their intended function is not present.

Our problem space can be analyzed at the level of the user's finger tapping the mobile device and interacting with the mobile browser. Stepping back and picturing our user at a local restaurant on their lunch break, they may be searching google for hair salons so that they can schedule an appointment for their lunch break the following day. We can also tweak this scenario so that our user is accessing this website in a similar setting, but on their laptop (desktop browser). All of these degrees of focus on the application are relevant, and we'll keep these, along with many others, in mind when conducting needfinding.

2 USER TYPES

The intended user for this application are adults in general. However, the current customer base will be the heavy focus of whom this experience will be designed for, which includes men and women ages 30-60. We anticipate the majority of the target audience to be older than millennials.

When evaluating the intended audience, the following is taken into account

- **Demographic of our audience** fits (for the most part) men and women aged 30-60. We are choosing this because, for the specific salon owner I am working with, their client-base has matched this for the last 20 years.
- Their level of expertise will be assumed to be not very technical. This audience will be in the grey area between a millennial and geriatric. We will assume for this reason that the user does not have a strong grasp on the differences between types of browsers, versions of browsers, or experiences between mobile vs desktop browsers. The UI should be styled in such a way that the look and feel is familiar, yet clearly geared to be optimized on the platform at hand.
- Their motivation for engaging in the task will not be singular. The number of reasons one might visit a hair salons website could be for general salon information, hours of operation, salon team members, products/services they offer, schedule an appointment, contact information. We can try to anticpate our users needs, however, we must assume they have any one of these intentions. Therefore, having an intuitive navigation inside the application is crucial to naturally enabling the user to accomplish the task they came to do without any friction.

3 NEEDFINDING BIAS PITFALLS

In approaching needfinding, a heavy emphasis on avoiding common pitfalls that lead to inconsistent or bias data.

• Confirmation bias involves confirming preconcieved notions in your

hypothesis. This can be avoided by looking for signs the original hypothesis is incorrect, testing data empirically, and involving multiple people in the needfinding process.

- Observer bias can create bias around what we want the user to do or assist them in accomplishing a task. This can also occur in phrasing survey questions in a bias manner. This can be avoided by separating motives and experiments, scripting interactions with users, and using a third party to reviewing interview scripts and surveys.
- Social desirability bias occurs when a participant feels obligated to give positive feedback. An easy way to avoid this is to hide the true motive of a question in the survey and recording objective data
- Voluntary response bias addresses the fact that strongly opinionated users tend to give voluntary feedback. To avoid this, do not expose the user to survey content prematurely.
- Recall bias highlights the fact the users are not great at recalling exactly
 what they did, why they did, or how they felt while doing something.
 This can be reduced by having users think out loud during activities or
 recording interview/survey data during the experiment itself.

4 NEEDFINDING 1

Lay out a clear plan for that needfinding exercise. Answer the questions above in the body of your assignment

Connect the needfinding exercise to items from the data inventory

Specifically outline the potential biases you might encounter during this needfinding exercise. What concrete steps will you take to limit their impact? Reference the task list above in **Needfinding bias pitfalls**

5 NEEDFINDING 2

Lay out a clear plan for that needfinding exercise. Answer the questions above in the body of your assignment

Connect the needfinding exercise to items from the data inventory

Specifically outline the potential biases you might encounter during this needfinding exercise. What concrete steps will you take to limit their impact? Reference the task list above in **Needfinding bias pitfalls**

6 NEEDFINDING 3

Lay out a clear plan for that needfinding exercise. Answer the questions above in the body of your assignment

Connect the needfinding exercise to items from the data inventory

Specifically outline the potential biases you might encounter during this needfinding exercise. What concrete steps will you take to limit their impact? Reference the task list above in **Needfinding bias pitfalls**