DECO2500 - INDIVIDUAL REPORT
Feedback 1

Tean-louise Cunningham (42637460)

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Contents

1 Introduction

In the domain of discovering, deciding where to dine out is an important topic that impacts almost everyone's lives, and most of the time it is time-consuming and frustrating. At least once per week, everyone wants to try somewhere new from lots of different options to have a shared experience with others. However the problem arises with the gap between what users want and need, and how they are supported in fulfilling these.

From research and interviews, there are 8 factors that are important to almost every user when deciding where to dine out. A user wants to be able to choose what they are craving from a nearby location with easy access to basic information. These factors are all beautifully handled by existing applications, however they focus heavily on reviews when research shows that word-of-mouth recommendations have a greater influence. Additionally, those with dietary requirements (about 20%) and those with a budget (almost everyone) must search using niche apps or be directed to a menu that they must filter themselves. What results is an average of 15 minutes searching every single time, with budget, dietary requirements and friend recommendations ignored.

This report details the process and feedback of three iterations of the interaction decision process to design an application to support all of the factors that are important to a user when deciding where to dine out.

2 Low Fidelity Prototype

The initial research and conceptual design of the low-fidelity prototype were presented as a mind map and presentation. The purpose of these evaluations is to learn more about the users' needs, confirm that the conceptual model is appropriate for the users, and to provide feedback about design and flow. It is imperative that any misalignment of values or expectations are identified at this early stage before further time is spent on interaction design. Users must be to understand how the system works and it must align with their expectations to be a worthwhile project.

2.1 Choose Evaluation Method

The evaluation method chosen for the Low Fidelity Prototype is a combination of Design Walkthrough, Co-design and TAM.

A design walkthrough involves giving the user a task and, without guidance, ask them to complete the task. By observing and documenting how they interact with the system, feedback on how users expect the system to operate and what they they expect the system can be obtained. This feedback provides clearly whether the conceptual model chosen is appropriate to the users mental model. This method was chosen as the steps involved in using the application are almost the same for every instance, and so it is imperative that users are able to intuitively and easily complete these steps (i.e the task) at this early stage of design.

The co-design process generally involves explaining to the user how the system works and asking for their opinion how they would design the features of the application. For this

evaluation, at points during the design walkthrough when a user gets stuck, in addition to asking them what the issues are and what they are experiencing, additional co-design practices will be adopted. This includes asking the user what they think she be happening and how they would design this part to be more intuitive. This method was incorporated into the design walkthrough as an extension since the user is in control of instructing the system it is important that they are able to achieve their goal of choosing a place to dine out the way they want it to since it is a process that will be repeated on average twice a week for them.

TAM consists of a set of questions based on perceived usefulness, perceived ease of use, attitude and intention to use the system. These questions are scaled from 1 (strongly disagree) to 4 (strongly agree). For this evaluation, eight of the questions were selected (at least one from each category). These questions were identified as most relatable to the purpose of the application, without being repetitive. The questions provide quantitative analysis that can assist with identifying problem areas of user acceptance, however by themselves they don't provide the reasoning behind the response. So in addition to these questions, follow up questions will be asked when a response less than strongly agree is selected to gain further insight into the users experience to understand why there is a gap between mental models.

Together these evaluation methods provide a succinct overview of whether at this stage of design that application gives the user what they want, the gaps in the conceptual model and the overall acceptance of the design and flow of the prototype.

2.2 Evaluation Protocol

This protocol was created to provide structure and consistency amongst evaluation of participants. The protocol outlines the flow of the evaluation including scripts, instructions and details of notes to be taken. The protocol can be viewed as Appendix A.1

2.3 Undertake Evaluations

Due to current measures relating to COVID-19 all evaluations were taken online, unless part of the family unit. Users are invited to a Google Form where they are asked to sign in with their Google Account. From here they can navigate themselves through all aspects of the evaluation. The form can be viewed in Appendix A.2.

Firstly, the user is introduced to the evaluation process and asked to complete a consent form online. The consent form is then uploaded in the provided section on the form. Secondly, the user is given instructions for the Design Walkthrough and via a link directed to a Google Slides presentation. Here they are given the task and access to navigate through slides depicting different pages of the paper prototype. The presentation is designed so that when users select areas of the paper prototype that are 'clickable' they are directed to the appropriate slide with the corresponding page. The presentation can be viewed in Appendix A.3.

Thirdly, whilst completing the task any time they are stuck for a period of time they are asked to stop and follow up questions are asked, including contribution of design as part of the co-design process. Finally, once the user has completed the task they select a link on the presentation that takes them back to the Google Form where they will complete the TAM evaluation. On the form, users will select their answer between 1 and 4 (strongly agree)

which will be stored as quantitative results and follow up questions will be asked for further clarification. The results can be viewed in Appendix A.4.

Throughout all sections of this process notes were taken of observations and feedback. These notes can be seen in Appendix A.5.

2.4 Evaluation Analysis

From the process of this evaluation, there are a number of key factors that will influence the design of the medium prototype to ensure increased usability and acceptance of the application for the user.

- On the list page, users expected to be able to select the restaurant and be taken back to the restaurant information page. At this time the selection on the list page was to select that restaurant to move forward. A suggestion made by a participant during the co-design was to have 'left swipe' to remove from list, 'click' to go to the restaurant page and 'right swipe' to be given directions.
- On the interactive map, users expect the filter selection to take them back to the original place. At this time it was to bring up a more detailed version of the same list (with those previously chosen pre-selected). User suggestion was to remove the first screen entirely or have a more detailed list to being with and the filter selection goes back to this page each time.

Appendices

A Low Fidelity Prototype

A.1 Evaluation Protocol

EVALUATION PROTOCOL
Low-Fidelity Prototype

Tean-louise Cunningham

Complete a design walkthrough of low-fidelity prototype to identify gaps between conceptual and mental models.

PREPARATION

Since this is an individual evaluation only myself and the participant will be involved. Therefore, I will be fulfilling the role of facilitation, observation, recording and interaction flow. The following materials will be prepared for the user prior to the evaluation.

1. Electronic Consent form
2. Paper Prototype
3. Walkthrough Presentation Slides
4. Questionnaire
5. Google Forms
6. Zoom software

INTRODUCTION

Opening Statement

User has been sent a link with survey and instructions on Google Forms. User's screen is being shared over an online conference call.

Thank you for taking the time today to provide some feedback on the early stages of a mobile application. The purpose of this app is to assist you with deciding where to dine out using an interactive map, filtered preferences and comparison feature.

Today, I will be showing you the basic prototype to observe how you interact with it , to determine any functionality or design that is not intuitive, and whether it is achieving its purpose effectively for you as the user.

Consent

Before we get started, please read carefully through this consent form. It reiterates the purpose for today and how your data will be used. Your personal details will not be used directly in any way and all observations are of your interaction with the software only. If you like to proceed with contributing please fill out this form and upload with the given link.

User reads through and fills out consent electronically with provided link and uploads.

Thanks for filling that out, please save it on your computer for the time being. If it any time you don't wish to continue just let me know and we will stop, and none of your feedback will be used.

DESIGN WALKTHROUGH

Instructions

To get your feedback, I will be asking you to complete a specific task using the prototype. At any point you get stuck or are confused I may pause you for a moment to ask you some questions. I won't be explaining or showing you how to use the system. The point of this exercise is to see what you, as a first time user, expect of the system and how you think it should flow.

In a moment you will be able to view the paper prototype and move through the pages. Please interact with the application as if it was reactive. This means pressing everything that you normally would to complete the task. The more realistic your interaction with the prototype the better the feedback to know where to improve.

You will have 10 minutes to complete the following task. Any questions?

Please click on the link to the presentation. The task is to choose two places and decide between them where you would like to eat dinner tonight, takeaway of course. You can start.

The user confirmed they have no questions and is starting the task. Record, observe and take detailed notes of their process.

Task Notes

These are the steps that the user should be going through to complete the task, and observations relating to each one that need to be taken note of.

1. Filter preferences: This is the default page and so all users will start here.
    - Do they know how to filter?
    - Did they fill all of the filters out before proceeding?
    - Did they know how to get to the next page?
    - How long did it take to complete this page?
2. Interactive Map: This is the page that follows the preferences page.
    - Were they able to select a restaurant?
    - Did they know the map was interactive?
    - Did they try to press any other buttons on the page?
    - How long did it take them to select a restaurant?
3. Restaurant Information
    - After selecting a 'dot' on the interactive map they will be brought here.
    - How many of the cards did they select?
    - Did they understand the menu was filtered?
    - Did they know what all the icons meant?
    - Were they able to add a place to a list?
    - What information did they want to look at?
    - How long did it take them to move to another step?
4. List page: If a user selects the 'List' icon they will be brought here to compare.
    - Did they get to this page?
    - Do they know how to select a decision?
    - Do they understand what to do next?
    - How long did it take the user to find out their was a list page?
5. Repeat: Since the task is to select 2 places, users will need to repeat 2-5
    - Were they able to find out how to get back to previous steps?
    - Did they want to choose a second place?
    - How long did it take to figure out how to get back to the map?

6. Recommendation Page: After they have chosen a place and completed the task they will be nudged here.
    - Did they understand what was happening?
    - Did they know what they were suppose to do?

CO-DESIGN

Instructions

While completing the task the user encounters a problem and has taken more than 15 seconds to move to the next step, or they took an action expecting different functionality.

Please just pause for a moment:

- *Do you understand what the next step is?*
- *What are you having trouble finding or understanding?*
- *Where/what do you think you should be able to find?*
- *How would you design this part?*

Show them the next step to continue the evaluation of the whole task.

Problem Notes

1. Frequency
    - How many times did the user get stuck?
    - Were they able to move forward more times than they got stuck??
2. Reason
    - Did they get stuck because they didn't understand the task?
    - Did they get stuck because of the design?
    - Was the flow confusing?
    - Was the order they expected?
3. Next step
    - After you showed the next step were they still confused?
    - Was the next step intuitive for them?

TAM EVALUATION

Instructions

The user has completed the task.

Thank you for completing the task. Now select to go back to the form. Finally, I have some questions to rate your experience and your acceptance of this application. The purpose is to determine the perceived usefulness and ease of use, your attitude towards the app and intention to use.

For each question choose a number between 1 and 4, with 1 being strongly disagree and 4 being strongly agree. Please answer honestly. I may follow up with additional questions where necessary.

Questionnaire

1. I can accomplish deciding where to dine out more quickly using this application (PU1)
2. This application enables me to make better decisions about where to dine out. (PU5)
3. Overall I find this application useful (PU6)
4. It is easy to use this application to decide where to dine out (PEOU2)
5. Overall I believe this application is easy to use (PEOU3)
6. Overall my attitude towards this application I favourable (ATT3)
7. I will use this application on a regular basis in the future (ITO1)
8. I will strongly recommend others to use this application (ITO3)

Questionnaire notes

The quantitative answers from the users will be saved on Google Forms which automatically calculates and graphs collected data. Additionally, any score that is not 4 (strongly agree) will be followed up with the following questions.

- Why did you give this score?
- What stopped you from scoring higher?
-

Conclusion

All done. Thank you so much for your time today. Just a reminder that if you would like to withdraw at any time, let me know and your data will not be used. Thank you for your time, it is greatly appreciated and your data is very valuable.

A.2 Google Forms

Dining Out - Low Fidelity

Thank you for taking the time today to provide some feedback on the early stages of a mobile application. The purpose of this app is to assist you with deciding where to dine out using an interactive map, filtered preferences and comparison feature.

Today, I will be showing you the basic prototype to observe how you interact with it, to determine any functionality or design that is not intuitive, and whether it is achieving its purpose effectively for you as the user.
*Required

Consent

Before we get started, please read carefully through this consent form. It reiterates the purpose for today and how your data will be used. Your personal details will not be used directly in any way and all observations are of your interaction with the software only. If you like to proceed with contributing please fill out this form and then we will get started.

https://deco7250-wfixrepkka-uc.a.run.app/index.cfm

1. Please upload your consent form here.

   Files submitted:

Design Walkthrough

To get your feedback, I will be asking you to complete a specific task using the prototype. At any point you get stuck or are confused I may pause you for a moment to ask you some questions. I won't be explaining or showing you how to use the system. The point of this exercise is to see what you, as a first time user, expect of the system and how you think it should flow.

PAPER PROTOTYPE

https://docs.google.com/presentation/d/e/2PACX-1vRp-XVOiwPddbw5wp-Al2yqoQTJqQkY-D8aeRK1Gcven4r3RGuu5s3ovjfEP2nfOA/pub?start=true&loop=false&delayms=30000

TAM Evaluation

These questions are about your acceptance of this application. The purpose is to determine the perceived usefulness and ease of use, your attitude towards the app and intention to use.

Please answer honestly. I may follow up with additional questions where necessary.

2. I can accomplish deciding where to dine out more quickly using this application. *

   Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

3. This application enables me to make better decisions about where to dine out. *

   Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

4. Overall I find this application useful. *

   Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

5. It is easy to use this application to decide where to dine out. *

   Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

6. Overall I believe this application is easy to use. *

Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

7. Overall my attitude towards this application I favourable. *

Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

8. I will use this application on a regular basis in the future. *

Mark only one oval.

	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

9. I will strongly recommend others to use this application. *

Mark only one oval.

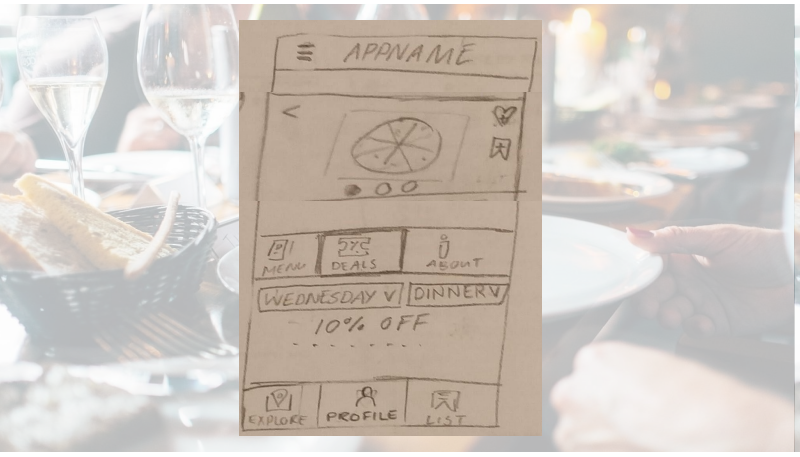
	1	2	3	4	
Strong Disagree	◯	◯	◯	◯	Strongly Agree

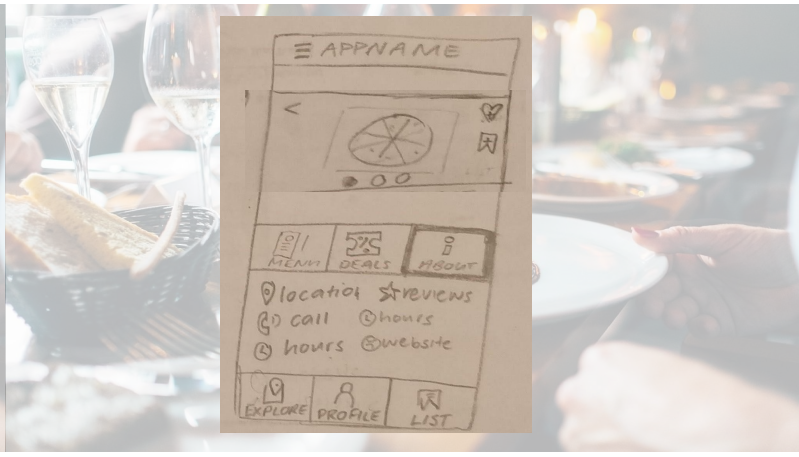
THANK YOU!!

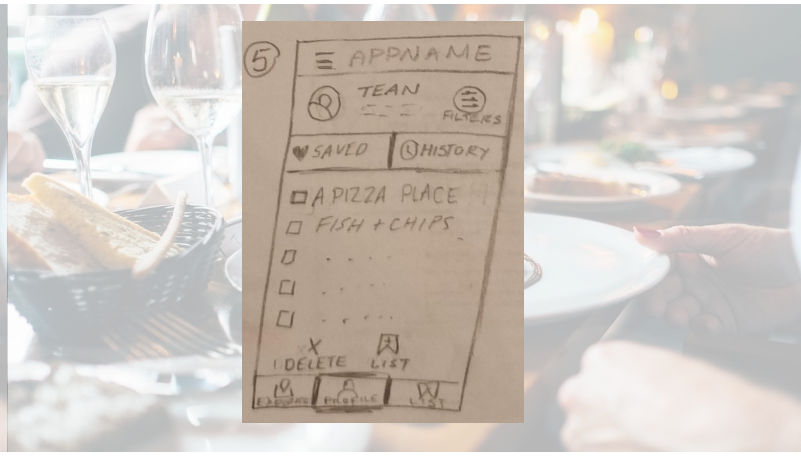
A reminder that you can withdraw your consent at any time and your data will not be used.

A.3 Presentation

CHOOSE FROM 2 PLACES WHERE YOU ARE GOING TO DINE OUT TONIGHT







YOU ARE GIVEN DIRECTIONS!

2 hours later

...you get a notification

DONE!

Back to Google Forms

A.4 Questionnaire Results

A.5 Interview Notes