# **Experiment**

# Preparation

# Introduction

- Welcome participants
- · Ask for consent to record
- Ask to think out loud
- Remind them that they aren't being evaluated, and that they can leave at any time
- Ask participant to think like the target audience

Prepare demographics questions (offer the option to refuse to answer any of the questions. Only include relevant questions for the target audience)

Prepare recording setup (audio, video and screen)

Prepare Script of the tasks to be read to participants:

- Script for intuitiveness (initial approach)
- Script for T1
- Script for T2
- Script for T3
- ...

## Prepare Post questionnaire Likert Scales

- How effective was the application for T1
- How intuitive/easy to use was the application for T1
- How effective was the application for T2
- How intuitive/easy to use was the application for T2
- How effective was the application for T3
- How intuitive/easy to use was the application for T3
- ..
- How effective was the application overall
- How intuitive/easy to use was the application overall
- Any final comments suggestions of improvement

## **UNSIGNED CONSENT FORM**

Northeastern University, Department of Khoury College of Computer Sciences

Name of Investigator(s): Chuanzhao Huang

Title of Project: FruitHub

### Request to Participate in Research

We would like to invite you to take part in a research project. The purpose of this research is to observe how users use the application for using FruitHub that we built in class.

## \* You must be at least 18 years old to be in this research project

The study will take place via Zoom Recording Session and will take about 30 Mins. you decide to take part in this study, we will ask you to answer a series of questions and discuss your opinions about apartment search.

There are no foreseeable risks or discomforts to you for taking part in this study.

There are no direct benefits to you for participating in the study. However, your answers may help us to learn more about Improving our app.

Your part in this study will be handled in a confidential manner. Only the researchers will know that you participated in this study. Any reports or publications based on this research will use only group data and will not identify you or any individual as being of this project.

Future Use of Data or Biospecimens – This section should be included in the consent form per 46.116 (9) (i)

Your de-identified information and/or biospecimens could be used for future research without additional informed consent.

The decision to participate in this research project is up to you. You do not have to participate and you can refuse to answer any question. Even if you begin the study, you may withdraw at any time.

You will not be paid for your participation in this study.

If you have any questions about this study, please feel free to contact Chuanzhao Huang (huang.chua@northeastern.edu) the person mainly responsible for the research. If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, Mail Stop: 560-177, 360 Huntington Avenue, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@northeastern.edu. You may call anonymously if you wish. You may keep this form for yourself.

Thank you. Chuanzhao Huang

## **UNSIGNED CONSENT FORM**

Northeastern University, Department of Khoury College of Computer Sciences

Name of Investigator(s): Zhehao Xu

Title of Project: FruitHub

## Request to Participate in Research

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## \* You must be at least 18 years old to be in this research project

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You will not be paid for your participation in this study.

If you have any questions about this study, please feel free to contact Zhehao XU (xu.zheh@northeastern.edu) the person mainly responsible for the research. If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, Mail Stop: 560-177, 360 Huntington Avenue, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@northeastern.edu. You may call anonymously if you wish. You may keep this form for yourself.

Thank you. Zhehao Xu

## **DEMOGRAPHIC QUESTIONS**

- 1. What is your name?
- 2. Where are you from?
- 3. What is your field of education?
- 4. What is your job title?
- 5. What is your age?
- 6. Where are you living now?

#### **INITIAL SCRIPT**

First of all, thank you for taking the time to talk to us today. My name is \_\_\_\_\_ and I am here to talk to you about your experience in using an application I built for my web development class.

Let me give you an outline of what's going to happen. I am going to ask you a series of questions. We want to understand things from your perspective so if possible please speak out whatever you are thinking. It's important to highlight that this isn't a test. There are no right or wrong answers to any of the questions.

I would like to ask you to be as honest as possible and answer as someone who might benefit from using this website. You can't offend me or anyone in any way so please speak freely. Do you have any questions or comments so far?

We treat this conversation as strictly confidential. We won't share any details with anyone outside the immediate people working on this project.

We can talk a lot quicker than we can type, would it be OK with you for us to record this session for our note-taking?

We have prepared a consent form for you to review.

If at any point you want to take a break or stop the interview please just let us know and we can work around it.

Any questions before we begin?

Let's get started!

#### **SCRIPT FOR THE TASKS**

- 1. From viewing this website, could you tell me what were your first thoughts on what the website is about?
- 2. Could you register an account and login?
- 3. Could you click one fruit that you are interested in?
- 4. Could you make a comment below the fruit detail?
- 5. Could you subscribe to the fruit?
- 6. Could you select the fruits you want and click the quantity button?
- 7. Could you go to Carts to check out?
- 8. Do you think the colors and fonts match the task? Would you like to see it any other way?

# LIKERT SCALE QUESTIONS (1 – 7, 1 is super hard and 7 is super easy)

1 is super hard,

2 is very hard,

3 is hard,

4 is neutral.

5 is slightly Easy,

6 is easy,

7 is super easy

- How effective was the application for register and login?
- How effective was the application for looking at the product detail?
- How effective was the application for making a comment?
- How effective was the application for making a subscription?
- How effective was the application for clicking the quantity button?
- How easy was it to use the application?
- Any final comments and suggestions of improvement?

# Participant 1 : Yankun Li

#### Link -

https://northeastern.zoom.us/rec/share/\_x4HbaRmOv5iiaMW1lrqaAfoz1o3g4BJ2Zil0yPBDbyi8TsC8Fb8Nnmdp4f8gKiK.JsKh6adNw1fsBXQp

Passcode: pau8+0KK

# **Demographics answers**

• From: China

Major: Information System

• Age: 26

• Live: Michigan

#### **Detailed notes**

• First thought: this website may be a fruit library or fruit sale website.

- Could immediately figure out how to register and login, super directly.
- Could immediately figure out how to see the product list
- Was able to figure out how to make a comment
- Was able to subscribe a fruit efficiently
- Could immediately figure out how to add quantity to the carts
- Was able to manage the carts efficiently
- Feedback: prefer to see the product list first can attract more attention, colors match.

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	7
T2 :view the product list	7
T3: Add comments	7
T4: Subscribe button	6
T5: Click quantity Button and Check Out	7
Overall Rating	6

Participant 2 : Junjie Weng

#### Link -

https://northeastern.zoom.us/rec/share/LFVizr0mkL0MbcX3TY0S9UwAQ5rd7uFsuxjDbh0jVrjmsriuPlxKVGA0OK0UAf96.D8g8F6XGf3bhKage?startTime=1702331023000

Passcode: NLz3V!jj

# **Demographics answers**

• From: China

• Major: Business Management

• Age: 23

• Live: Arkansas

## **Detailed notes**

• First thought: see the logo and picture, guess it's a website about fruit.

- Could immediately figure out how to register and login, super directly.
- Could immediately figure out how to see the product list
- Was able to figure out how to make a comment
- Was able to subscribe a fruit efficiently
- Could immediately figure out how to add quantity to the carts
- Was able to manage the carts efficiently
- Feedback: have a search bar on the product list, color does not match the fruit theme.

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	7
T2 :View the product list	6
T3: Add comments	6
T4: Subscribe button	6
T5: Click quantity Button and Check Out	6
Overall Rating	7

## Participant 3: Liza Chen

#### Link -

https://northeastern.zoom.us/rec/share/HgC7jFU26k7lkUJoLWucFcePbDDo6lVqQgtj0O6FFQoyloNw\_vEP6AUFe4JiCM5H.l9elmcmrPic8GGEO?startTime=1702342900000

Passcode: r#2D%U94

# **Demographics answers**

• From: California

• Major: Medical Student

Age: 27Live: Chicago

#### **Detailed notes**

• First thought: guess this might be a fruit ordering website.

- Could immediately figure out how to register and login, super directly.
- Could immediately figure out how to see the product list
- Was able to figure out how to make a comment
- Was able to subscribe a fruit efficiently
- Could immediately figure out how to add quantity to the carts
- Was able to manage the carts efficiently
- Feedback: the Carts on the right side would be better.

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	7
T2 :View the product list	7
T3: Add comments	7
T4: Subscribe button	6
T5: Click quantity Button and Check Out	7
Overall Rating	7

Participant 4: Tingyu Wang

### Link -

https://drive.google.com/file/d/17OgHmbGonxf34CuSYRGju1kL3mC ThDd/view?usp=sharing

# **Demographics answers**

From: China

• Major: Software Engineering

• Age: 23

Live: Australia

## **Detailed notes**

• UI doesn't show correctly in other browser

• First thought: Order fresh fruits online, clean and easy

Could do more checking on password

• Some picture didn't show up correctly due to network issue

• Could use a table for structuring detailed information

• A little confused about subscribe button

Adding to cart doesn't have a clear feedback

• Was able to figure out how to make a comment

Cart page is clear

• Quickly figured out how to write comments

• Feedback: the Carts on the right side would be better.

Fonts and color are good.

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	6
T2 :View the product list	6
T3: Add comments	7
T4: Subscribe button	6
T5: Click quantity Button and Check Out	5
Overall Rating	6

Participant 5 : Haiqiao Zhao

### Link -

https://drive.google.com/file/d/1BP3UED8WTxpR6csXonU5sodnoc t8i5Y/view?usp=sharing

# **Demographics answers**

• From: China

Major: quantitative finance

• Age: 23

• Live: Singapore

## **Detailed notes**

• First thought: buy fruits from this website

- Sign up and sign in fast and easy
- Quickly figured out how to open the detail page
- Detail page provides enough information
- Kind of mix add to cart and subscribe
- Didn't know what is subscribe for at first
- Subscribe doesn't associate with quantity
- Writing comments may not be easy for all people
- Check out page is good enough
- Fonts and color are comfortable.

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	7
T2 :View the product list	7
T3: Add comments	7
T4: Subscribe button	5
T5: Click quantity Button and Check Out	5
Overall Rating	7

Participant 6: Jialiang Yan

## Link -

https://drive.google.com/file/d/19uXFdwnU\_wVx8JWsoy7\_4chhSenSuP91/view?usp=sharing

# **Demographics answers**

• From: China

Major: Remote sensing

• Age: 22

• Live: Chengdu

## **Detailed notes**

• First thought: Order fresh fruits, very clear

• Sign up and sign in fast and easy

• Network issue, some pictures cannot show up

• Detail page provides enough information

• Didn't know what subscribe is for

• Easily figured out how to write comments

Easily go to the check out page

• Fonts and color are beautiful.

• Feedback: the subscribe can be more advanced

TASK	EFFICIENCY (1 is super hard and 7 is super easy)
T1 :Register and Login	5
T2 :View the product list	6
T3: Add comments	7
T4: Subscribe button	5
T5: Click quantity Button and Check Out	7
Overall Rating	6

# Prioritised list of issues and corresponding changes:

#### Issue 1:

When a user opens the website for the first time, the data call to the backend is expensive and takes a while, the user is unsure what the page is about due to this delay and hence an explanation is needed about what exactly is loading.

#### Issue 2:

When users log in, there are a lot of products showing up, the users are not able to find the product they want due to missing a search bar.

## Issue 3:

When users go to the product detail page, they can see the "Subscribe" button, but they do not know what it is for and how to connect with the quantity they want.