# Part 3: Food Waste in the Foodservice Industry

Team Eco-Eaters

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CS 3750

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# **Project Description**

Our problem space involves the issue of food waste in restaurants stemming from the customers, employees, and owners. Through the research we conducted for Part 1, we discovered that our users encompass a wide range of demographics. As our user base is formed by people in a restaurant, the users could be anywhere from 7 to 70-years-old. Keeping this in mind, we must design interfaces that are simplistic and intuitive. While the employees and managers could be trained in how to use the prototype, the customers would not have this benefit. Therefore the prototype targeted towards the customer needs to be easily understandable. Our qualitative and quantitative research demonstrates that the main ways that food is wasted in restaurants are through customers wasting food and inventory inconsistencies. By addressing these problems we can both help the restaurants save money and achieve more environmentally sustainable habits. We plan on solving these issues through a prototype that can inform our users to do their best to help mitigate food waste while also incentivizing users through rewards. To this end, we decided to use a placemat menu that held information about food waste, the restaurant's portion sizes, and a reward for those who decide to follow food waste reduction measures. More specific details about our prototype can be found in the prototype section of this report.

## **Requirements Summary**

Through the research that we conducted in part 1, we further refined our problem space and determined our usability goals. The requirements that our group chose to fulfill the expected goals and values of the service are meant to make sure that the solution that we discover is one that is ideal.

### Functional

Our functional goals are to inform the users on how to manage food waste and to incentivize users to participate in food waste reduction measures. The major issues we determined from P1 include customer's lack of knowledge pertaining to food waste,

customer's lack of incentive to mitigate food waste and employee side misuse of ingredients. In our prototypes, we attempt to find solutions to each of these issues. By isolating sections of the problem space to a single solution each, we are able to discover more specific and applicable solutions.

## **Non-Functional**

The non-functional requirements of our solutions are the usability goals that we had outlined in part 1. These goals were accessibility, speed, flexibility, transparency, and effectiveness.

- Accessibility is related to the ease with which users could access and use the implemented solution. Users would want to experience virtually no issues transferring over to our new method for the smoothest possible transition.
- **Speed** relates to the efficiency of the solution and how quickly the users can utilize the solution. We want the users to be able to use our solutions quickly so that they can be as efficient as possible with their time.
- **Flexibility** would be the way that any of our potential solutions would be able to respond to change. The solutions would need to be able to quickly adapt to any changes to a menu or inventory in a way that would not bother users.
- Transparency relates to the notion that the solution will clearly present the information and the motives behind its characteristics to the user. The users should not only be aware of the information but they should also understand why this information is important.
- Effectiveness is directly related to how well our system performs with real users. Is the system effective at doing its job? It is also important to consider this usability goal in terms of the solution's overall cost.

# **Design Summary**

As our scope has narrowed in what parts of the foodservice industry we plan to change, we have decided to shift our solution to a single high-fidelity prototype. We decided to shift to this prototype as we felt that it most clearly fits our requirements and usability goals. The prototype that we chose was a placemat menu prototype as it is a necessary item at all restaurants and is likely to be the best at catching the attention of our users and informing them of food waste management methods. The placemat menu is extremely effective at solving our usability goals because it is easily accessible and understandable to people of all ages. The menu is fast to implement into new restaurants and can be used quickly by customers. It is also flexible as it can be customized for each restaurant and adapted through the time that is used. The menu is transparent and effective as the information is plain for users to see and the menu will be cheap to make.

The main goals of the prototype are to inform the user on ways to prevent and mitigate food waste, motivate users to do so by offering a reward or incentive, and allow them to understand the relative size of the meal prior to placing their order. The tasks that the prototype will help facilitate are:

- 1. Successfully locate the incentive for being an Eco-Eater.
- 2. Answer the question: How much of all food produced globally goes to waste?
- 3. Name a small, medium, and large portion item.

# **Prototype: Eco-Eater Placemat**

### Prototype Figma Link (for Demo)

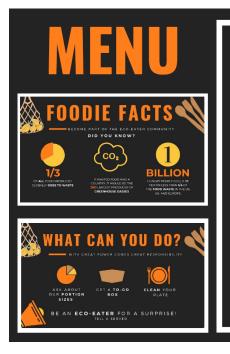
### **Solution Space**

Throughout our project iterations, our solution space has narrowed. Utilizing feedback from our poster sessions, our solution space has transitioned into reducing food waste in the front end of the foodservice industry. The front end of the foodservice industry encompasses both the servers and customers. We came to the conclusion that the best prototype to create would be a mixture of our napkin holder plan with something more common in restaurants such as a menu. The reason that a menu would be beneficial is that it is still capable of holding all the information that we were originally placed on the napkin holder. The solution that we are implementing will inform customers of ways to mitigate and reduce food waste along with some facts and motivation as to why they should do so. The menu includes interesting, eye-catching facts about food waste and also offers a plethora of solutions to reducing food waste. We suggested that customers ask for a to-go box, support the clean plate initiative, or ask about the restaurant's portion sizes. The portion sizes are meant to provide more options for customers and are part of the process that we wanted to implement alongside the menu. By giving the customer more options, we create more transparency and allow the customers to understand the food waste reduction process more.

### Description

Our final prototype is going to be a reusable table placemat containing an infographic about food waste and food waste prevention measures. They will be placed on restaurant tables and will be given out one per customer. The restaurant owners will be given the option to be able to customize their table placemats with the aesthetics that go with their restaurant and even add their own menus. The menu will have indications of the serving sizes, vegetarian, or gluten-free food options with a key to help customers understand and order the correct amount of food. The table placemat will include a section at the bottom reading, "Be an Eco-Eater today! Tell the server that you want to be an Eco-Eater for a surprise". The customers will be provided with a small incentive (such as a coupon or free menu item) for reading through the infographic which can act as a reward for going through the infographic and increasing their awareness of food waste in the food industry. The goal of this prototype is to inform users about the dangers of food waste in addition to the portion sizes of menu items, to incentivize users to digest this information in return for a reward, and call the user to action by ordering a to-go box.

## Sketch



| Entree 1 🔵       | \$10.90 |
|------------------|---------|
| Description here |         |
| Entree 2 🔵 块     | \$10.90 |
| Description here |         |
| Entree 3 👝       | \$10.90 |
| Description here | 310.90  |
| Entree 4 💽 🔪 🖖   |         |
| Description here | \$11.90 |
| Entree 5 💽 🔪     |         |
| Description here | S11.10  |
| Entree 6 🛑       |         |
| Description here | S12.10  |



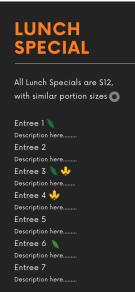
| APPETIZER        | S      |
|------------------|--------|
|                  |        |
| Appetizer 1      | \$7.90 |
| Description here |        |
| Appetizer 2      | \$7.90 |
| Description here |        |
| Appetizer 3 🔿 🖖  | \$7.90 |
| Description here |        |
| Appetizer 4 💽    | \$8.90 |
| Description here |        |
| Appetizer 5 🔿 🔪  | S8.10  |
| Description here |        |
| Appetizer 6 🔵 🖖  | \$9.10 |
| Description here |        |
| MENU KEY         |        |
|                  |        |
| Small Portion    |        |
| Regular Portion  |        |
| arge Portion     |        |
| ° –              |        |
| /egetarian 🔪     |        |
| Əluten-Free 🖖    |        |

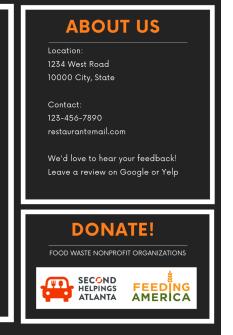
## DRINKS

| \$3.90 |
|--------|
| \$4.9C |
| \$3.90 |
| \$2.90 |
| \$3.10 |
| \$5.10 |
| \$5.10 |
| \$5.10 |
|        |

## DESSERTS

| Dessert 1 | \$5.90 |
|-----------|--------|
| Dessert 2 | \$5.90 |
| Dessert 3 | \$6.90 |
| Dessert 4 | \$8.90 |
|           |        |





### Rationale

Our final prototype is based on our original Napkin Holder prototype. During our poster session, we received a large amount of positive feedback on the idea and purpose of this prototype but, there was relevant negative feedback. The negative feedback encompasses potential accessibility, transparency, and effectiveness issues. How would a restaurant implement this prototype if they did not use traditional napkin holders? What about helping customers understand the portion sizes of menu items? Is there potential for the restaurant to lose business by incentivizing customers to be mindful about the amount they order? Using this feedback, we revised our prototype to be a reusable placemat that will be given to each customer. In addition to this, we altered the phrasing on our infographic and written components to promote taking food home in a to-go box and placed less emphasis on ordering less food. In addition, we added sections to inform the customer about the serving size of each menu item. With these changes, we hope to make our prototype more accessible, transparent, and effective for the restaurant business. In addition, our prototype still meets our core functional requirements to inform the user on how to manage food waste and incentivize them to participate in food waste reduction measures.

Based on our Research in P1, we determined that a large portion of food waste is derived from the consumer. In our interview with Herban Fix, It was mentioned that a significant portion of their food waste came from customers leaving food behind on plates. Annie, the interviewee, mentioned that less than 10% of customers leave food behind on their plates. The same sentiment was demonstrated in our interview with Your Pie as well, with estimates of up to 30% of total restaurant food waste coming from consumers. In addition, our survey results illustrate that a majority of restaurant food waste is derived from consumers alongside errors in the kitchen. (P1) With this information in mind, our goal was to create a prototype that not only informs customers of the dangers of excessive food waste but also incentivizes them to partake in food waste reductions strategies. Taking home leftover food is our primary food waste reduction strategy for this prototype. This prototype also follows our non-functional requirements as well. Our placemat prototype is accessible to the customers, has a high rate of delivering information, is flexible in its ability to be customized, is transparent in its description of the portion sizes, and cost-effective.

### **User Scenario 1**

This user scenario deals with customers preparing to order a meal. Before placing their order, the customers read through the menu and notice the interesting information about food waste on the menu. They decide to follow the advice given and proceed to consult their server about the easiest ways they can help.

Mariah and her friends are out for lunch for a girl's day and have found a restaurant in the area to eat at. They eat at a local restaurant called Jeni's Place. When they arrive, the hostess seats them and Mariah notices the placemats for each seat on their table. The server for their table refers them to their placemats for their menu, and Mariah and the rest of the girls look through to make their order. Mariah immediately notices the food waste facts section of the placemat. It is aesthetically pleasing and eye-catching. She finds the fact interesting and points out the one that stands out to her to the rest of the group. The rest of the group look to the food facts section, having piqued their interest. They also notice that the food facts mention asking the server about the restaurant's portion sizes. The server comes to take their order, and the girls ask about portion sizes. The server explains the menu key for different portion sizes based on how hungry they are feeling and points out that they are also free to ask for to-go boxes if they cannot finish their food at the time.

Mariah and the rest of the group keep that in mind and start ordering their food given the recommended portion sizes. As they wait for their order, the group continues to look through the rest of the menu and the food waste facts section, enlightening them about the effects of food waste. The server then comes with their food, and they enjoy their girl's day out, enjoying good food while learning and participating in efforts to reduce food waste. After they eat, Mariah and one of the girls still have some food leftover, and they decide, with the food waste fact in mind, to ask the server for a to-go box to bring home. Then the group pays for their meal, then leaves the restaurant.

### **Storyboard 1**



- 1) Mariah and her friend are looking at the dine-in menu.
- 2) Mariah is indecisive about how much food to order.
- 3) Mariah and her friend notice the "Food Waste Facts" section on the front of the menu that suggests taking a look at the back menu key for recommended portion sizes.
- 4) Mariah takes a look at the menu key and decides the small portion would be ideal for her.
- 5) Mariah chooses the salad entree because it has the "Small Portion" label on it.
- 6) Mariah orders the salad entree when the server comes around.

### **User Scenario 2**

This user scenario takes place in a casual dining-type restaurant on a weekday. The restaurant has recently deployed a new placemat menu that also includes food waste facts, descriptions of portion sizes, and food waste reduction strategies. The stakeholders involved are secondary and tertiary users.

It is almost noon. Josh stops by Sam's station to let her know he sat a family of 4 on table 12. Sam thanks Josh with a smile, and proceeds to grab her notepad and pen. She walks straight up to table 12 and introduces herself before receiving beverage requests. She invites people to see their new placemat menus while she gets them started with drinks. Sarah, a 10-year-old girl sitting at the table, amazed at the facts on food waste in the menu, engages a conversation with their family and shows the family the food waste reduction strategies on their menus. She recalls there have been times his little brother Jack, an 8-year-old boy, has wasted appetizers that he could not finish. Robin, Sarah's mom, agrees and discusses the family's order in detail before giving out the complete order to Sam. After noticing a special message on the menu, she also mentions to Sam that they are all eco-eaters. Minutes later, Sam arrives with the beverages and prompts the family for the order. She also informs the family that they will receive one free dessert for being part of the Eco-Eaters Initiative. Robin releases the order to Sam clarifying order sizes and ingredient replacements. Sam sends the order to the kitchen and moments later delivers the plates. At the time of checking out, Robin asks Sam for a couple of to-go boxes and proceeds to pay.

### Storyboard 2



- 1) Mariah is finished dining, she is full but has some leftover salad.
- 2) She remembers that while looking through the menu earlier, she saw that if she asked for a to-go box, she could get a reward.
- 3) When the server comes around, Mariah asks her if she can become an Eco-Eater and asks for a to-go box.
- 4) Mariah puts her leftovers in the to-go box.
- 5) The server gives Mariah a reward, a free ice cream cone.
- 6) Mariah leaves the restaurant satisfied, with leftovers that she can eat for dinner and a free dessert.

# **Evaluation Plan**

In order to evaluate our prototype, we must gain feedback from real users. For our Placemat Menu, we plan to work with foodservice customers. Due to the current societal pandemic, we have developed two forms of our prototype for evaluation: A digital and paper version (Appendix B) of the menu. These two versions will allow us to seamlessly perform user evaluations either remotely or in person. The digital version of our prototype was created using Figma, a prototyping tool. Users will be able to view both sides of the menu in addition to zooming in on each of the menu sections. This will allow for the digital menu to function the same as a paper copy. Through these two versions, we will be evaluating our prototype based on our functional requirements as well as our usability goals. The functional requirements of this prototype are to **inform** the users on how to manage food waste, **inform** users about restaurant portion sizes, and **incentivize** users to participate in food waste reduction measures. Our usability goals are **Accessibility, Speed, Flexibility, Transparency**, and **Effectiveness**.

Our evaluation plan follows the "Think Aloud" protocol. The evaluation will consist of 6 major sections (Appendix A):

- 1. Introduction, Questions, and Informed Consent
  - a. The goal of this section is to give the participants an overview of the goals of this session. We will also ask for consent to auditorily record the session in addition to taking relevant notes.
- 2. A Pre-Task Practice
  - a. We will give the participants a practice task involving a basic math question to familiarize them with the nature of a "Think Aloud" protocol. We will also use this time to ensure that the participant will correctly perform this protocol during the main task session.

- 3. Pre-Questionnaire
  - a. We will distribute a questionnaire before the main task session to gauge our participant's opinions and knowledge about food waste within the foodservice industry. We will then compare these results to a Post-Questionnaire survey given after the main task session. This will help us determine the effectiveness of our prototype's ability to inform.
- 4. Main Task Session
  - a. We will ask the participant to complete three tasks pertaining to the menu. For each task, the users will be given a scenario, starting point, and probing questions. These probing questions will be optional. We will utilize these questions to extract more information from the participant if needed. We included subtasks to help evaluate how efficient the user is in completing the main task.
- 5. Post-Questionnaire
  - We will distribute a similar questionnaire to the Pre-Questionnaire after the Main Task Session. This questionnaire serves to inform us about the effectiveness of our prototype's ability to inform.
- 6. Debrief
  - a. This section will conclude the evaluation session. We will allow time for additional questions from the participant.

As a team, we developed three overarching tasks that we will have users complete to evaluate the requirements and usability goals of our prototype. These tasks are:

- 1. Successfully locate the incentive for being an Eco-Eater.
- 2. Answer the question: How much of all food produced globally goes to waste?
- 3. Name a small, medium, and large portion item.

Each task highlights a separate portion of our functional requirements. Task 1 highlights the user's incentive, Task 2 highlights the prototype's ability to inform about the

risks of food waste, and Task 3 highlights the prototype's ability to inform about portion sizes.

During the evaluation session, we will take detailed notes and auditorily record the session. Through our audio recording, we will be able to time how long it takes participants to complete each task. This will help us evaluate our usability goal of **speed**. In addition, we plan to transcribe the audio recording and perform thematic analysis. Through this analysis, we hope to recognize trends in how participants infer and process the information within the prototype. We also plan on distributing pre- and post-questionnaires with the goal of understanding whether participant's opinions surrounding food waste were changed after using our prototype. Through this analysis and our pre and post-questionnaires, we hope to evaluate our usability goals of accessibility, effectiveness, and transparency. Accessibility will be evaluated in the context of whether the participants were able to understand and digest the information presented. Effectiveness will be evaluated based on the degree of change measured between the pre and post-questionnaires. Transparency will be evaluated based on the user's understanding of the incentivization process and why the restaurant promotes the notion of using a to-go box. This can be quantified based on the details obtained from participants completing the first task.

During this session, we will not be able to evaluate our usability goal of **flexibility**. This usability goal pertains to the primary stakeholders of our system, the restaurant owners. This usability goal focuses on the ability to flexibly alter the prototype before its full implementation into the restaurant.

# Summary / Reflection

### Summary

In this iteration of the project, we went more in-depth with the accessibility aspect in our usability goals. With our final prototype, we expanded its accessibility by making it into a menu format, a necessary feature that every restaurant needs. This iteration also shifted the problem space to focus more on our tertiary users and the information they should gain by interacting with our reusable table placemat prototype. In addition, we intend to maximize the information the users can gain as they interact with our prototype by including food waste facts, portion sizes for certain menu items, and an incentive by becoming an Eco-Eater.

### Reflection

In this iteration of the project, we localized our problem space to reduce food waste during any dine-in experience, with our focus on the tertiary stakeholders, customers. According to the survey results in P1, we found that the primary reason for food being wasted was customers throwing out leftovers. Based on this survey and feedback during the poster session, we shifted our focus to customer experience.

We chose to modify our first prototype, the napkin infographic, into a placemat menu. During the poster feedback session, we presented our prototypes in pairs and took notes of feedback we received. We then compiled the feedback in a document and found that we received mostly positive feedback on the infographic idea with the main critique of having the infographic on a more flexible medium. We agreed that a napkin holder was not the most optimal medium in terms of flexibility because not all restaurants have napkin holders and grabbing a napkin as a task was common in the dining experience, but not fully reliable. We decided on a reusable, front-and-back placemat menu to replace the napkin holder infographic. Based on the survey results from P1, we also decided to focus on the issue of portion sizes for this prototype. The menu features an infographic with food waste facts, alternatives for food waste, and non-profit organizations to donate to. The menu also includes a key that indicates portion sizes of entrees, to help customers order meals that are fit to their hunger needs. We designed the infographic and menu key to stand out in the menu, while at the same time blending in with the aesthetic of the menu to create a non-intrusive dining experience.

Modifying our first prototype also led to our decision to re-scope a few of our usability goals, mainly transparency and cost-effectiveness. Transparency needed to change as the prototype specified that instead of the customer being able to easily see the happening around the restaurant, they needed to now understand why the restaurant would be willing to give them a discount or free food in order to reduce food waste. After changing this to match, we also decided to change cost-effectiveness to merely effectiveness as we did not believe that we would be able to effectively quantify cost-effectiveness through our evaluation plan.

After designing a high-fidelity sketch for our prototype, we proceeded to create an evaluation plan. We decided on a think-aloud protocol to evaluate our prototype. We broke down the evaluation into six steps, which would help us to be consistent when conducting the protocol. The steps include an introduction, pre-questionnaire, pre-task, main task, post-questionnaire, and debriefing.

# **Appendix A**

# Script

### Introduction

Hello! We are a team of students from the Georgia Institute of Technology working on User Interface Design. We are tackling the problem of excessive food waste within the foodservice industry, specifically dealing with foodservice customers. Our group is working with smaller-scale, local restaurants to develop a prototype to mitigate food waste from a customer's perspective. We have developed a new, placemat-style menu and would greatly appreciate your help with evaluating its functionality. Our goal is to learn how a typical customer understands and interacts with this menu. We will ask you to perform three tasks involving the menu. Throughout this process, we ask you to please "think aloud". This entails verbalizing your thought process and highlighting any striking details. Keep in mind that all types of thoughts are beneficial to us, especially the negative ones. We will conduct a brief pre-task to familiarize you with the "think aloud" protocol. The session will begin with a pre-questionnaire and the session will end with a post-questionnaire and debrief.

## **Informed Consent**

In addition, this session's audio will be recorded. We will also be taking detailed notes that may include setting description, time, and your physical behavior while completing the tasks. These artifacts will only be available to Eco-Eater team members and course instructors. No identifiable information will be recorded. Let us know if you have any questions! (Pause for Questions)

(After Questions) Do we have your consent to proceed with this session?

### Goals

(If consent is given) Okay! As stated previously the purpose of this interaction is for you to "think aloud" each step that you take when attempting to solve the tasks that we have for you. The goals of the prototype that will be shown to you are to inform its users on food waste in the foodservice industry, to motivate its users to help solve this issue any way they can, and to inform them about the portion sizes of the restaurant. Are you ready? (Wait for affirmative response)

Okay, let's get started.

### Pre-Task

We will begin with a "pre-task" to familiarize you with the "Think Aloud" methodology. In front of you, there is a basic mathematical question. Please solve this question and verbalize your thought process. Remember, you will not be graded on the accuracy of your answer, we are interested in the process.

### **Pre-Task Question**

Sally is 18 years old. She is double the age of Josh. How old will Josh be when Sally is 35 years old?

(After Pre-Task is completed) Okay! Thank you for your response, we will move forward with the pre-questionnaire survey. Please answer these questions to the best of your ability and let me know when you are finished.

### **Pre-Questionnaire**

- 1. On a scale of 1-5, how serious of an issue do you think food waste is in the restaurant industry?
- 2. On a scale of 1-5, how important is menu design to your dining experience?

(After Pre-Questionnaire is Completed) Okay! We will move forward with the main part of the session. I have displayed our menu prototype before you. Feel free to familiarize yourself with it. Remember to "think aloud" throughout this process. When you are ready, we can begin with your first task.

### (When they are ready)

## Tasks

Task 1: Successfully locate the incentive for being an Eco-Eater

**Scenario:** You are a customer eating at a casual restaurant. You've heard about the Eco-Eater program, but are curious about why you should be an Eco-Eater. Please navigate through the menu and locate the incentive for being an Eco-Eater.

Starting Page: Page 1, The front of the menu

## **Probing Questions:**

- Mandatory (once task is completed): Did you find the navigation to locate the incentive for being an Eco-Eater confusing?
- Mandatory (once task is completed): Did you find the location of the incentive for being an Eco-Eater hard to miss?

### Notes:

Task 1 Subtasks:

- 1. Locate the front of the menu
- 2. Locate section containing incentive for becoming an Eco-Eater
- 3. Readout loud information concerning the task (i.e the incentive)

| Participant ID                          |  |
|---|--|
| Time to complete task                   |  |
| Comments about the placemat menu design |  |

**Task 2:** Answer the question: How much of all food produced globally goes to waste? **Scenario:** You are a customer eating at a casual restaurant. You are familiar with the 'food waste' concept, but not to an extent you can recall facts, nor it guides your menu choices when ordering. Please take a look at the placemat menu and find information about how much food produced globally goes to waste.

**Starting Page:** Front Menu (Side including entrees, appetizers, and menu key sections) **Probing Questions:** 

- Mandatory (once task is completed): Did you find the content in the facts section quick and easy to understand?
- Mandatory (once task is completed): Did you find the font size and location of the 'foodie facts' section, convenient and easily accessible?
- Optional: (once task is completed): What information would you have liked to see in the food facts section?

### Notes:

Task 2 Subtasks:

- 1. Locate the front of the menu
- 2. Locate section containing information on food waste
- 3. Readout loud information concerning the task (i.e. answer the question)

| Participant ID                          |  |
|---|--|
| Time to complete task                   |  |
| Comments about the placemat menu design |  |

**Task 3:** Order small, medium, or large portion menu items based on their level of hunger. **Scenario:** You are a customer visiting a local casual restaurant to grab some lunch. You are not too hungry, but it is lunchtime and you need to eat something. You would like to order something just the right size for your hunger level. Please look through the menu and order an appropriate amount of food fit for your level of hunger.

**Starting Page:** Front Menu (Side including entrees, appetizers and menu key sections) **Probing Questions:** 

- Mandatory (once task is completed): Was the menu key confusing when referencing for ordering?
- Optional: (once task is completed): Do you think this type of menu helped you find an item fit for your level of hunger?

### Notes:

Task 3 Subtasks:

- 1. Determine the desired entree, appetizer or lunch special
- 2. Locate the Menu key size reference of symbols next to items listed
- 3. Determine if the advertised size for the plate fits your needs
  - a. Ask for a smaller or bigger portion for the selected item (if applicable)
- 4. Communicate order to the server

| Participant ID                          |  |
|---|--|
| Time to complete task                   |  |
| Comments about the placemat menu design |  |

## **Post-Questionnaire**

(After the Tasks are Completed) Thank you for your participation! The information you have provided us with will be utilized to further improve the user experience. I have given you another brief questionnaire, please answer these questions to the best of your ability.

## **Post-Questionnaire Questions**

- 1. Demographic information: name, age, gender, customer/employee/restaurant manager
- 2. On a scale of 1-5, how serious of an issue do you think food waste is in the restaurant industry? Did the Eco-Eaters menu change your opinion on food waste?
- 3. On a scale of 1-5, how well did the menu inform you of the issue of food waste?
- 4. Did the menu encourage you to make conscious decisions during your dining experience? What were some of these decisions you made?
- 5. How did the Eco-Eaters menu add to your dining experience? (Open-ended)
- 6. How did the Eco-Eaters menu subtract from your dining experience? (Open-ended)

## Debrief

(After Post-Questionnaire) Once again, I would like to thank you for your participation. Your help will move us further to achieving our goal of informing the general public on the ways to reduce and mitigate food waste in restaurants. Together we can move forward to a healthier, more eco-friendly world. Thank you for being an Eco-Eater!

# Appendix **B**

### i. The Front of the Physical Menu



ii. The Back of the Physical Menu

| DRINKS             |        | LUNCH                        | ABOUT US                           |
|--------------------|--------|------------------------------|------------------------------------|
| Drink 1            |        | SPECIAL                      | Location:                          |
| Drink 1<br>Drink 2 | \$3.90 |                              | 1234 West Road                     |
| Drink 2<br>Drink 3 | \$4.90 | All Lunch Specials are S12,  | 10000 City, State                  |
|                    | \$3.90 |                              |                                    |
| Drink 4            | \$2.90 | with similar portion sizes 💿 | Contact:                           |
| Drink 5            | \$3.10 |                              | 123-456-7890                       |
| Drink 6            | \$5.10 | Entree 1<br>Description here | restaurant@mail.com                |
| Drink 7            | \$5.10 | Entree 2                     |                                    |
| Drink 8            | \$5.10 | Description here             | We'd love to hear your feedback!   |
|                    |        | Entree 3                     | Leave a review on Google or Yelp   |
|                    |        | Description here             |                                    |
| DESSERTS           |        | Entree 4 🥠                   |                                    |
|                    |        | Description here             |                                    |
|                    |        | Entree 5                     | DOMATEL                            |
| Dessert 1          | \$5.90 | Description here             | DONATE!                            |
| Dessert 2          | \$5.90 | Entree 6 🔪                   | FOOD WASTE NONPROFIT ORGANIZATIONS |
| Dessert 3          | \$6.90 | Description here             | TOOD WASTE NONE KOTT OKGANIZATIONS |
| Dessert 4          | S8.90  | Entree 7                     | SECOND \$                          |
|                    |        | Description here             |                                    |
|                    |        |                              | ATLANTA AMERICA                    |