



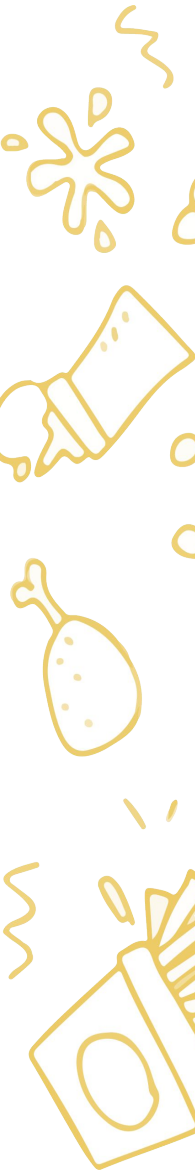
TUtasty - Iteration 4

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Agenda

- 1. Reflection + Design Changes**
- 2. HiFi Web App**
- 3. Quantitative Evaluation**

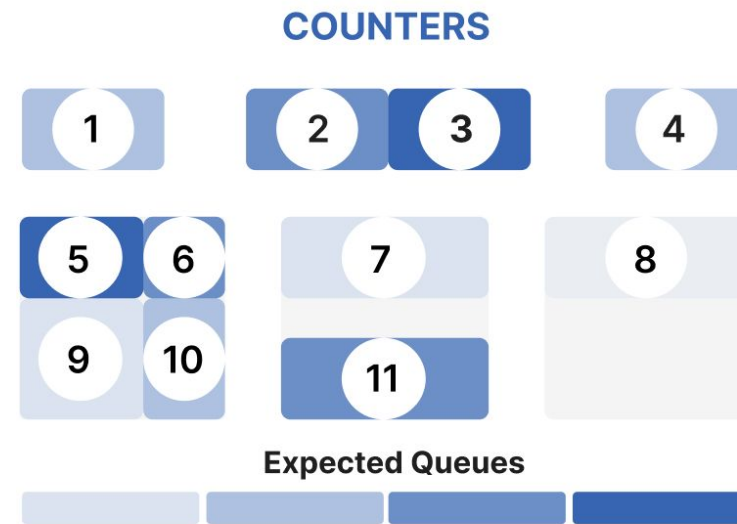
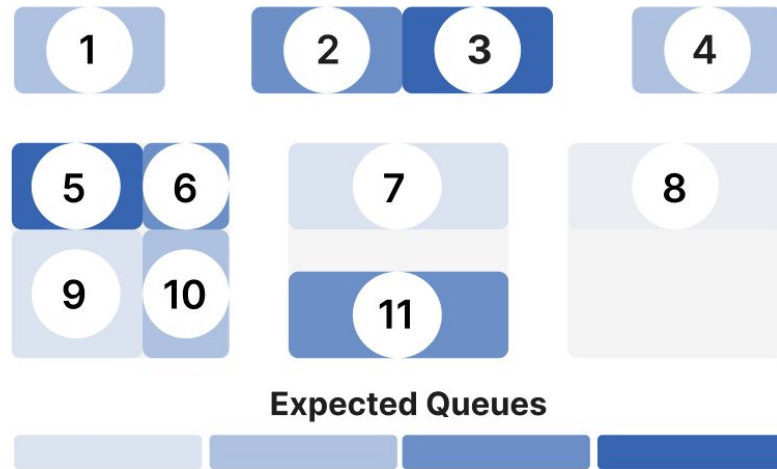


Reflection - 😊 N=2, Female:1 Male:1, both students

- | |
|--|
| 1. The color scheme of the interface is simple and beautiful,
and matches well with TUM |
| 2. User flow is smooth |
| 3. The details page about the dishes is clear |
| 4. The tips in the dish rating page are helpful |
| 5. It is helpful to know where the dishes are located |
| 6. There are pictures of the dishes which are very visual and attractive |

Reflection - 🤨

1. Confused about the counter map



Add Title

Reflection - 😐

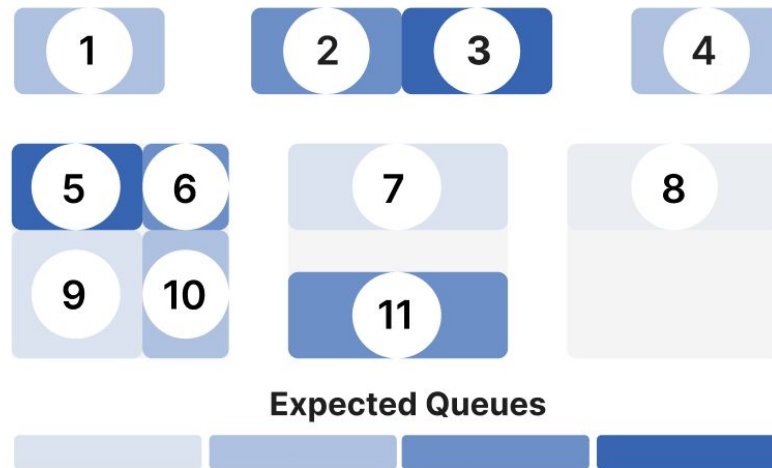
2. Checkbox is not well correlated with the viewing location



New icon, New color

Reflection - 😐

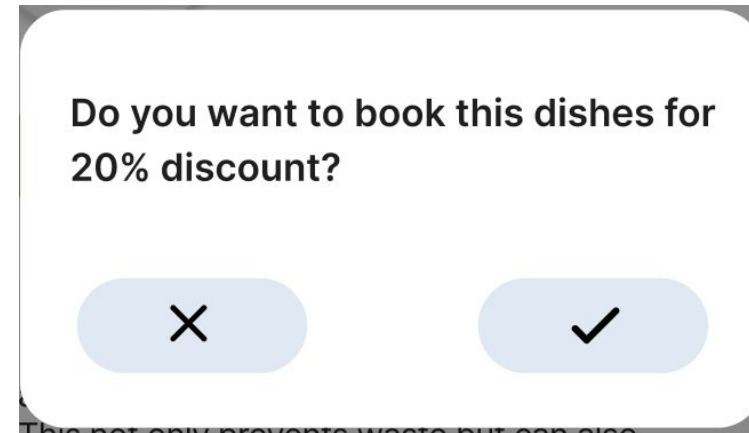
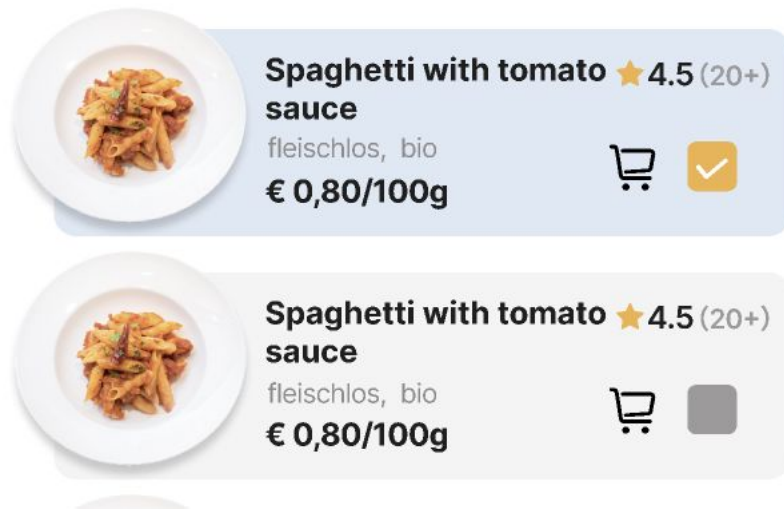
3. “ Four levels of "queues" are not necessary,
three levels are recommended for better differentiation.



This will be modified later

Reflection - 😐

3. “ When ordering directly by clicking on the shopping box,
i do not receive timely feedback on whether the reservation was successful”



Add Pop-up

Reflection - 😐

4. “ It is not possible to distinguish if the current reservation is already non-cancellable.”

TODAY



Spaghetti with tomato sauce ★ 4.5 (20+)
fleischlos, bio
€ 0,80/100g



TOMORROW



Spaghetti with tomato sauce ★ 4.5 (20+)
fleischlos, bio
€ 0,80/100g



TODAY



Spaghetti with tomato sauce ★ 4.5 (20+)
fleischlos, bio
€ 0,80/100g



TOMORROW



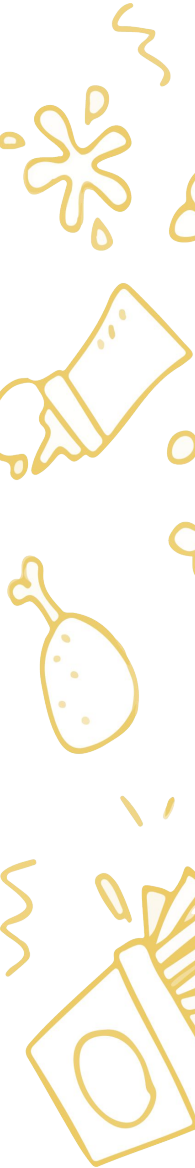
Spaghetti with tomato sauce ★ 4.5 (20+)
fleischlos, bio
€ 0,80/100g



Reflection - 😐

5. “I want to like or favorite some dishes instead of booking them directly, which the app should enable. Or the dishes I like could be displayed at the top position.”

This will be modified later

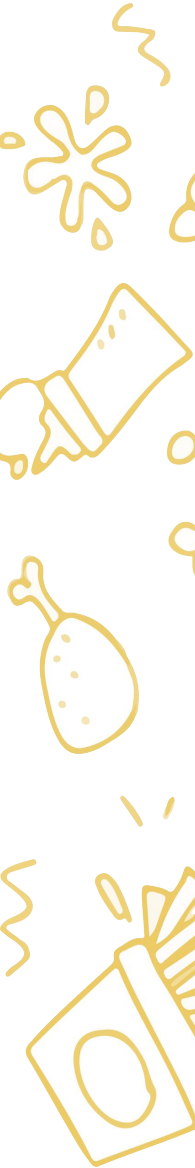


Web Hifi



Experimental Design - Set up

1. **Location/Tools:** Online via Zoom, Chrome Browser.
2. **Test persons:** A total of 10 people, including tum students and faculty members, with a balanced gender ratio.
3. 30 minutes per session.
4. **Data Acquisition:**
Data recording with Computer Microphone and Camera (screen and voice recording), Timer, and Counting events (e.g. errors) by hand.



Experimental Design - Test cases(total 14)

Task	Instruction
1	Please follow the link and start the app.
2	Please view the canteen occupancy.
3	Please view the cafeteria occupancy for the next day.
4	Please view today's meal schedule.
5	Please check the location of the counter where the dish "Spaghetti with tomato sauce" is located and find out the queue at this counter.
6	Please view more information of "Spaghetti with tomato sauce".
7	Please view the most recent review of this dish.
...

Experimental Design - Hypothesis

Goals	Hypothesis
1. Learnability	1.1 More than one way is used to book or cancel dishes.
2. Effectiveness	2.1 Average completion rate of >70% for all tasks completely performed by users
	2.2 At least 80% of the test persons complete the task of book dishes.
	2.3 At least 80% of the test persons complete the task of checking the location of the counter where the dish is located and finding out the queue at this counter.
3. Efficiency	3.1 The average time for a user to book a dish for the first time is less than 20s.
	3.2 The average time to cancel a scheduled dish is at most the 20s.
4. Memorability	4.1 At least 70% of users can remember the three first-level navigation of the product after testing.
5. Errors	5.1 The average number of errors is at most 6 in fulfilling all tasks.
	5.2 At most 40% of the test persons will be confused or make mistakes with the counter map.
6. Subjective satisfaction	6.1 The prototype achieves at least a rating of 6.5 out of 10 on average.
	6.2 SUS-Score exceeds a value of 70.
	6.3 The average Task Level Satisfaction does exceed a value of 5.

Experimental Design - Metrics **objective**

2. Effectiveness	2.1 Average completion rate of >70% for all tasks completely performed by users	$\frac{\text{number of people who completed the task}}{\text{number of people who did not complete}} \times 100\%$
3. Efficiency	3.1 The average time for a user to book a dish for the first time is less than 20s.	The time users take to complete task 9.
	3.2 The average time to cancel a scheduled dish does not exceed 20s.	The time users take to complete task 11.
4. Memorability	4.1 At least 70% of users can remember the three first-level navigation of the product after testing.	$\frac{\text{number of people who remembered the three nav-bar}}{\text{total number of test persons}} \times 100\%$

Experimental Design - Metrics subjective

6. Subjective satisfaction	6.1 The prototype achieves at least a rating of 6.5 out of 10 on average.	Rating number
	6.2 SUS-Score exceeds a value of 70.	SUS-Score
	6.3 The average Task Level Satisfaction does exceed a value of 5.	SEQ-Score

Experimental Design - Metrics subjective

1. Task-level satisfaction : SEQ Questionnaire

Overall, this task was?

Very
Difficult

Very
Easy

☐ ☐ ☐ ☐ ☐ ☒ ☐

The Single Ease Question (SEQ).

Experimental Design - Metrics subjective

2. Test-level satisfaction : SUS Questionnaire

*Indicate to what extent you agree with the following statements.

	1 - Strongly disagree	2	3	4	5 - Strongly agree
I think that I would like to use this system frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the system unnecessarily complex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought the system was easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that I would need the support of a technical person to be able to use this system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the various functions in this system were well integrated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought there was too much inconsistency in this system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would imagine that most people would learn to use this system very quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the system very cumbersome to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt very confident using the system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I needed to learn a lot of things before I could get going with this system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Thank you for your attention!

