Heuristic Evaluation

Part I: My Name

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Part II: Project Description

PoliMensa is an application for students of Politecnico di Torino which aims to modernize and streamline the canteen experience.

Part III: Evaluation Execution

To perform the evaluation I used this material:

Examples
https://medium.com/@ericamenin/heuristic-evaluation-exercise-629c03c55ef2
Other material
https://elite.polito.it/teaching/current-courses/513-02jskov-hci
https://www.nngroup.com/articles/ten-usability-heuristics/
https://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/

I analyzed the following tasks (from the README file):

- Simple task - Choose a time slot in which you would like to go to mensa.
- Moderate task - Pay for the food, choose your food/meal.
- Complex task - Top-up your card.

I performed the evaluation on site, so that I could ask for some clarifications to the professor, especially on tasks in the readme, as they were a little bit redundant. I also talked to my peers to ask some questions about their project (especially on the Calendar) and that was useful to perform a better evaluation. I first skimmed through the app, then tried to do the specified tasks. For each issue I encountered, I tried to express it and then categorize it.

Part IV: List of Violations

1. H2 Match between system and the real world

Where: Navbar.

What: I'm not sure of what the second icon from the right means.

Why: the used icon doesn't match known conventions for that function.

Severity: 1

2. H2 Match between system and the real world

Where: Summary.

What: it's unclear what "estimation time" means. Is it because of potential waiting queues? Is that the time I'm supposed to come?

Why: the terminology is rather opaque, so the user may be left wondering what it means.

Severity: 2

3. H4 Consistency and standards

Where: Payment.

What: when I want to add money to my wallet, I have to "top-up" it. Then, when I proceed, it asks me to "pay".

Why: inconsistent terminology may lead to confusion.

Severity: 1

4. H1 Visibility of system status

Where: Navbar.

What: using the app, I don't have any idea of my order status, because icons always look the same and there's no additional information whatsoever. Is it pending? Is it confirmed? Which steps are complete?

Why: the user should always know what's going on.

Severity: 3

5. H1 Visibility of system status

Where: Navbar.

What: using the app, I don't know where I am, because icons always look the same, regardless of my actions.

Why: the users should always know where they are.

Severity: 3

6. H1 Visibility of system status

Where: Summary.

What: why can I select courses? What can I do? I cannot modify them or the ingredients within them.

Why: the user doesn't know why something happens and if it's having any effect whatsoever.

Severity: 2

7. H7 Flexibility and efficiency of use

Where: Course selection.

What: when I select my meal, there's no way of jumping between courses, and that's a waste of time.

Why: the user may want to edit a single course without doing extra steps.

Severity: 2

8. H1 Visibility of system status

Where: Course selection.

What: when I select courses, I don't ever know where I am, what's coming up next and how many steps are left.

Why: the user should always know how long is the procedure they're doing and at which point they're in.

Severity: 3

9. NH Non-heuristic issue

Where: All over the app.

What: I can order something even if I just jump to the time slot selection. At that point it will propose me some default courses. Why is that?

Why: the user should be compelled to do all the necessary steps to achieve a goal, otherwise the results may be unexpected.

Severity: 3

10. H5 Error prevention

Where: Top-up.

What: the system doesn't ask me if I'm sure of what I'm about to do, and there's money at stake.

Why: the user should be prevented from doing errors.

Severity: 3

11. H2 Match between system and the real world

Where: Navbar.

What: the app doesn't tell me what any icon means.

Why: the user may not understand what icons mean, and that could slow down their learning curve.

Severity: 2

12. H8 Aesthetic and minimalist design

Where: Systemwide.

What: all sections kind of look alike, so the app didn't leave a dent in my mind. The resulting experience was dull, it's not an app I'd look forward to use.

Why: the app doesn't have a good visual impact, leading to a poor, unremarkable user experience.

Severity: 3

13. H4 Consistency and standards

Where: Calendar.

What: under the courses, I can see that I can "only choose one item", so I thought that was an alternative procedure to choose my meal. Apparently, it's not, as it just serves as a calendar.

Why: if something is repeated, it should serve the same function everytime.

Severity: 2

Part V: Summary and Recommendations

Heuristic	**# violations**

H1: Visibility of system status	4
H2: Match between system and the real world	3
H3: User control and freedom	
H4: Consistency and standards	2
H5: Error prevention	1
H6: Recognition rather than recall	
H7: Flexibility and efficiency of use	1
H8: Aesthetic and minimalist design	1
H9: Help users recognize, diagnose, and recover from errors	
H10: Help and documentation	
HN: Non-heuristic issue	1

I appreciated the concept of the app: everything ideally flows from left to right and there's no room to lose yourself in between. Navigation is rather poor though, in term of control, flexibility and visibility of the system's status: for starters, icons shouldn't always look the same, they should react to the user's actions. On that regard, I think that the icon corresponding to the current section could be highlighted, or circled, or colored differently. To help navigating in the courses selection, a crumb menu could help, or making the dots on top clickable could also suffice. Some lables under the main navigation icons could also help mitigate a lot of issues: sometimes redundancy is good to enhance user's control and confidence while using the app.

The system should "speak" to the user a little more: I would add a summary to the payment section, to ensure that I'm not paying for something if I have a change of mind. Some alerts should also tell me if I'm missing some steps, so that I don't end up ordering something unexpected. On that regard, I appreciated indications such as "only choose one item" and "you can cancel your order only before a certain time".

Finally, speaking about design, the app could use some more flavor, to improve its visual impact and the user's emotional response. First, I would add some more icons: an interface that's consistently only text can be tiring and unhelpful for the user to memorize the interface. Speaking of which, I appreciated the little pasta image at the end of the top-up sequence. Also, I would experiment more with fonts, to better prioritize information on screen: bold text could be used, and also of different sizes.