Watt are you doing
IPC Project - Part 3

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Overview of the Platform

All-in-one web platform for energy profiling of all devices in a household. The solution will display graphically real-time data and records of the energy spent by each appliance. It will also be able to pinpoint the least energy-efficient devices and, if applicable, provide suggestions, to reduce their power consumption/cost.

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Main Takeaways Of Last Steps

- Phase I - User and Task Analysis
  - High necessity for monitoring home energy consumption
  - Focus on energy analysis and device search and control

- Phase II - Lo-fi prototype and heuristic evaluation
  - Wireframes well received in the evaluation phase
  - Highlight of improvements for the final prototype:
    - Presentation of a clearer graph
    - Better device registration/removal
    - Destructive action confirmation
    - …

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Wireflow (1 → 2)

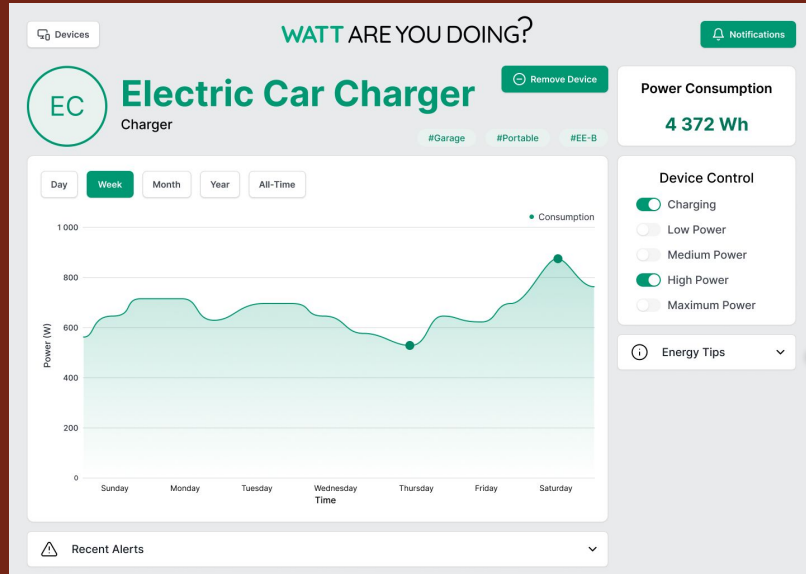1: Locate the device with the highest energy consumption
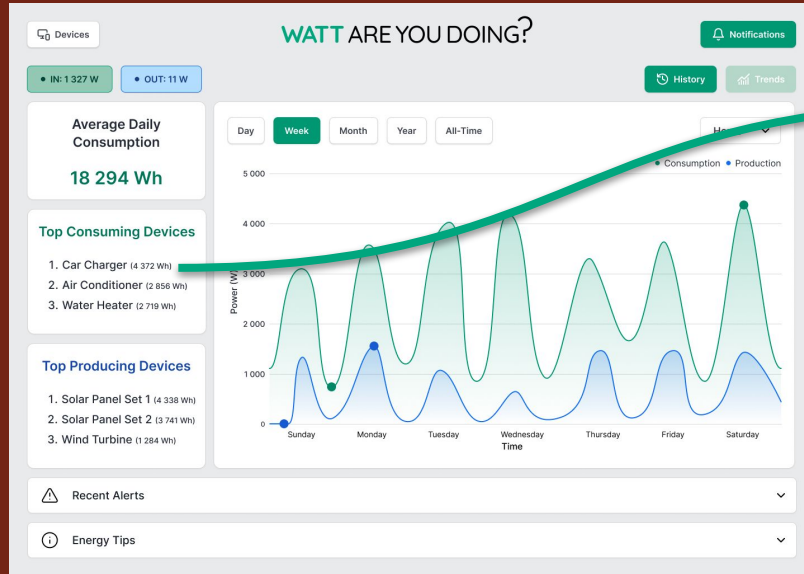
2: Find details about that device
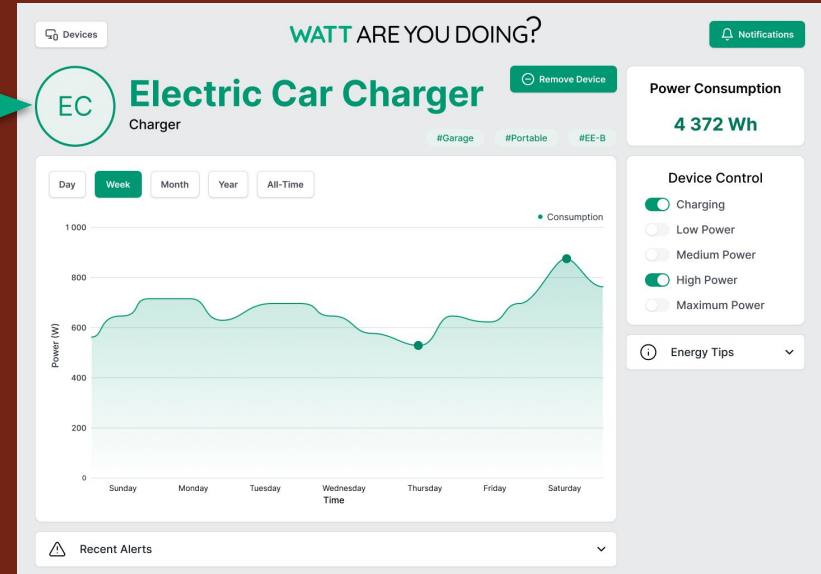
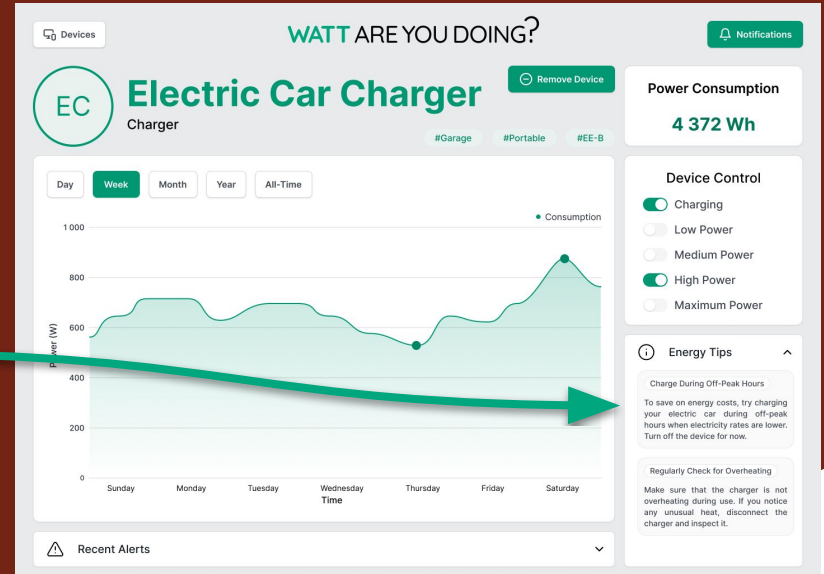# Wireflow (2 → 3)

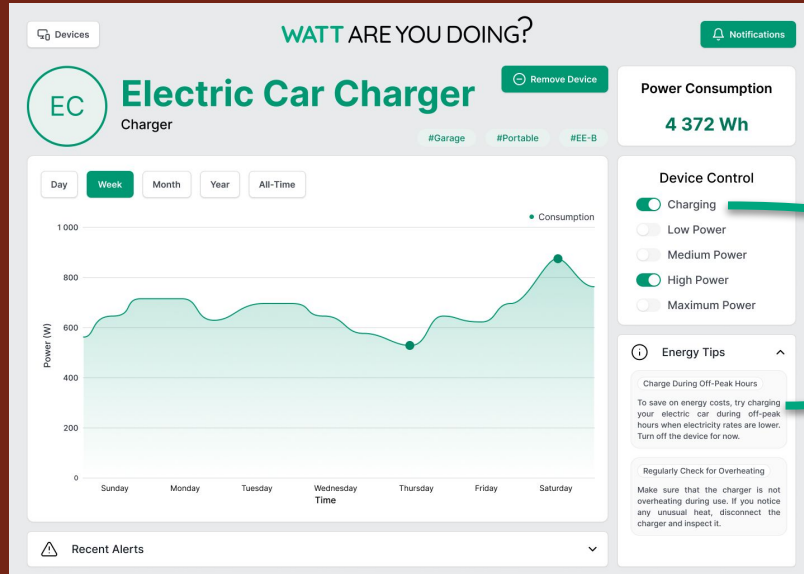2: Find details about that device

3: Read the suggestions on how to solve its problematic energy usage

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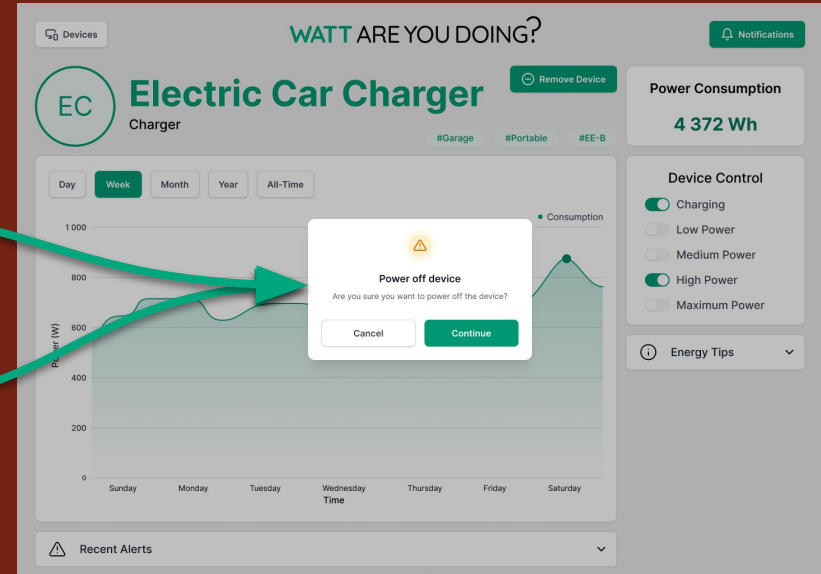FEUP FACULDADE DE ENGENHARIA
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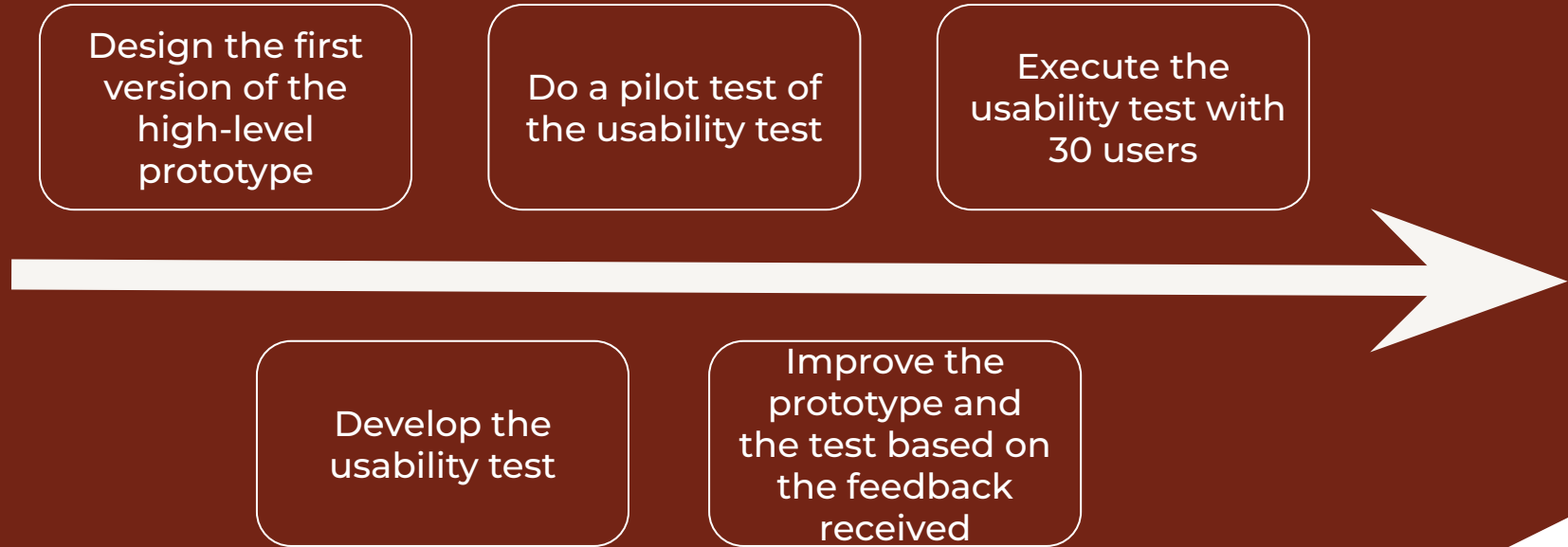
Wireflow (3 → 4)

3: Read the suggestions on how to solve its problematic energy usage
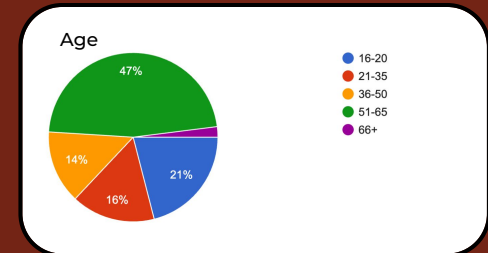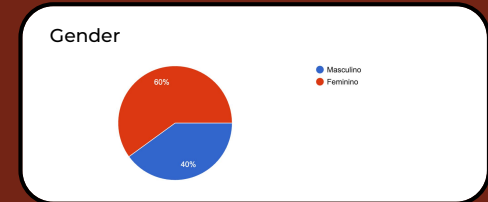
4: Perform the first suggestion inside the application

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Timeline

Design the first version of the high-level prototype

Do a pilot test of the usability test

Execute the usability test with 30 users

Develop the usability test

Improve the prototype and the test based on the feedback received

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Sample Characterization

In comparison to Part 1's questionnaire

Gender

Age

Occupation

Gender

Age

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Overall Results
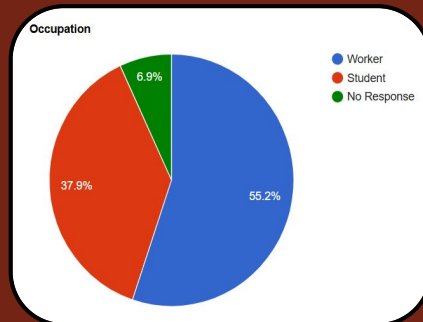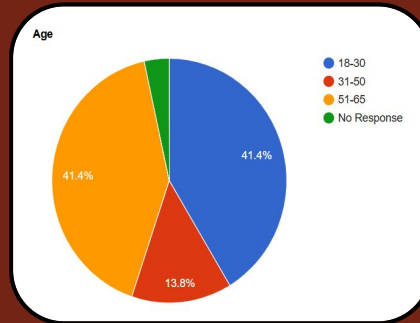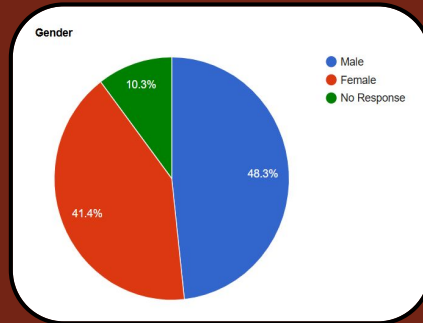
Task 2 - Navigation Overview

100%
Success Rate
on all usability
tests

51,2s
Time to
success (avg)
on 1st task
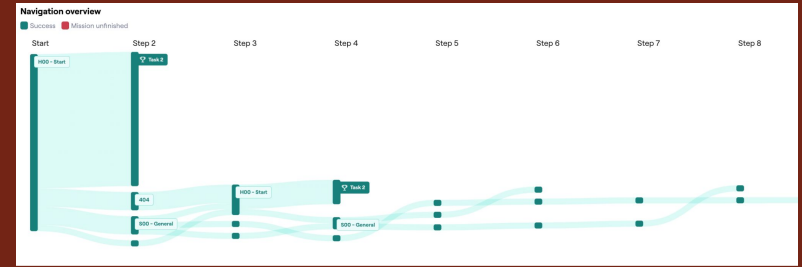
31,5s
Time to
success (avg)
on 2nd task

36,9s
Time to
success (avg)
on 3rd task
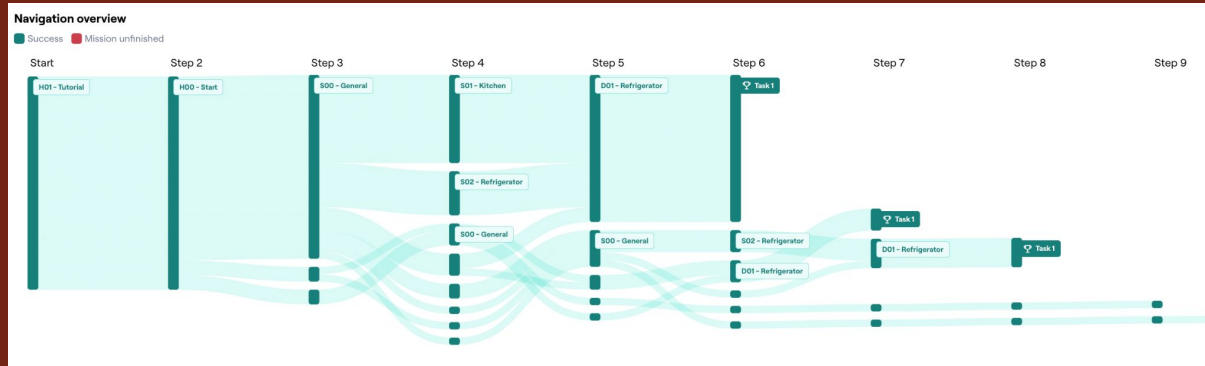
Task 1 - Navigation Overview

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Detailed Results for task 3

First-try clicks on dashboard
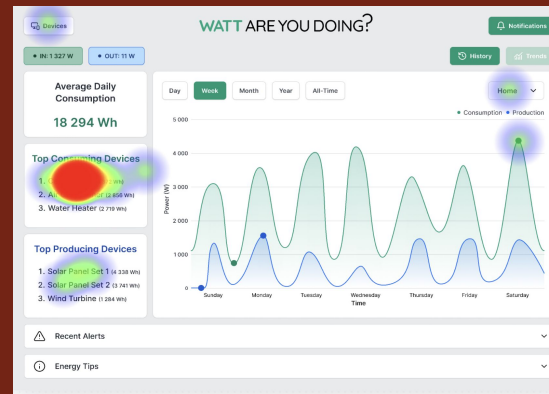

Efficacy:
AIM: 95% of users to head to the second page on first try.
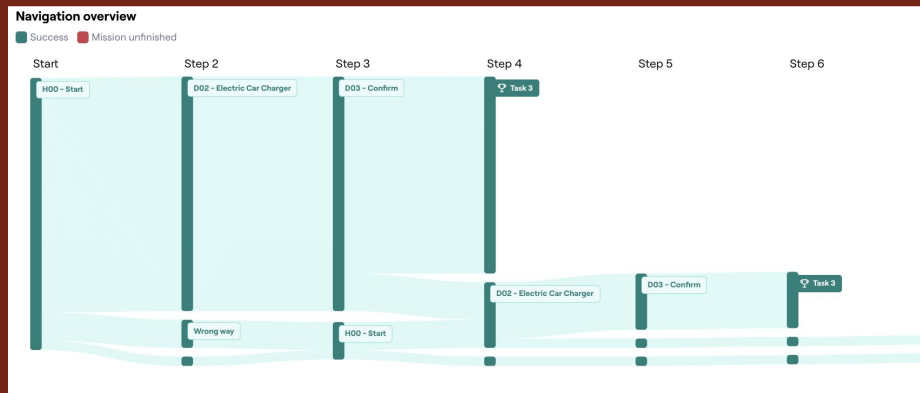REAL: 87% (With overall 5.6% of misclicks)

Efficiency:
AIM: Less 10s for each operation.
REAL: Average of 10,3 seconds *(per predefined operation)*

General Results

Satisfaction:
AIM: 90% satisfied with the flow of application.
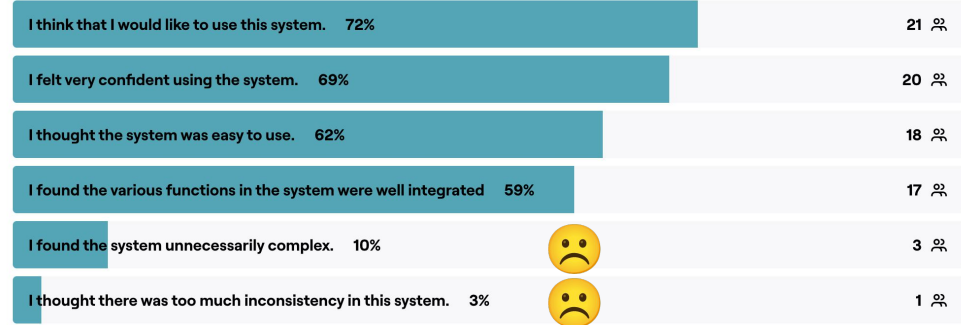REAL: 93% ranked satisfaction higher or equal than 5 out of 6

System Usability Scale
Multiple Choice

Lastly, we would like you to select all the sentences that apply to your experience on this website.

29
Responses

	%	
I think that I would like to use this system.	72%	21
I felt very confident using the system.	69%	20
I thought the system was easy to use.	62%	18
I found the various functions in the system were well integrated	59%	17
I found the system unnecessarily complex.	10%	3
I thought there was too much inconsistency in this system.	3%	1

Word cloud from "What is your opinion on the flow of the website in these tasks?"

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