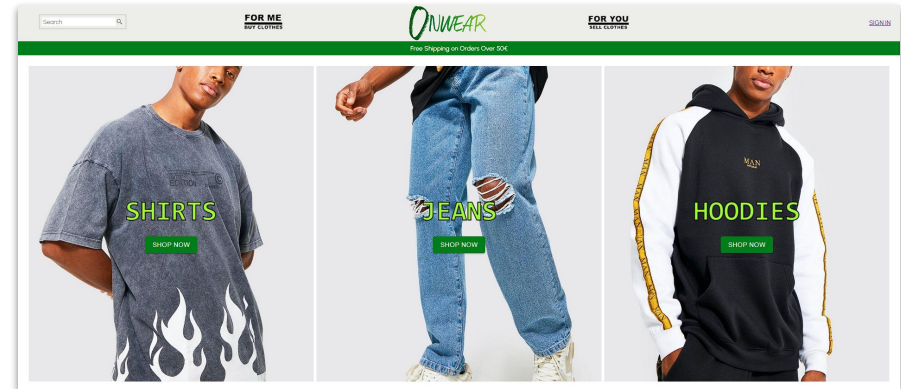# HCI - Assignment n.2

Design and prototyping of an application using a human-centered approach

Final presentation and demo

Project Title: ONwear
Group: Diogo Aguiar 81020 & Rafael Dias 95284
Lab Class: P2

Introduction
ONwear

We choosed this project because we wanted to:

- facilitate the renovation of a wardrobe for people with low

  money.

The solution:

- create a user friendly app to make it easy.

Project Objectives
ONwear

High-level goals:
- Provide a wide range of clothing for sale to users
- The user have the option to make a proposal to sell their own clothing

Benefits:
- Anyone will be able to order clothes without having to drive to the store physically
- The user will have the advantage of selling clothes that he no longer uses or that no longer fits.

Persona 1
ONwear

Name: Luis Correia
Gender: M
Age: 19
Profession: Student
Background: He entered the university and lives in a residence with colleagues.
Goals: Selling clothes that no longer uses.
Needs: An application that makes it possible to sell clothes, in a easy and fast way, without going to a store.

Persona 2
ONwear

Name: Marta Campos
Gender: F
Age: 55
Profession: Administrative assistant
Background: Married, with kids between the ages of ten and eighteen.
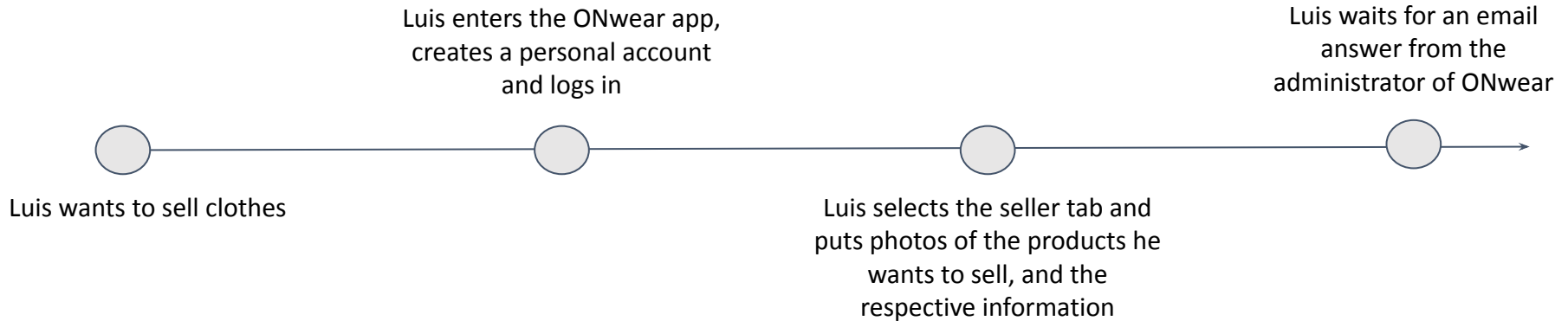**Goals**: Buy new or used clothes, to her and her children's
Needs: An application that makes it possible to buy clothes, in a easy and fast way, without going to a store.
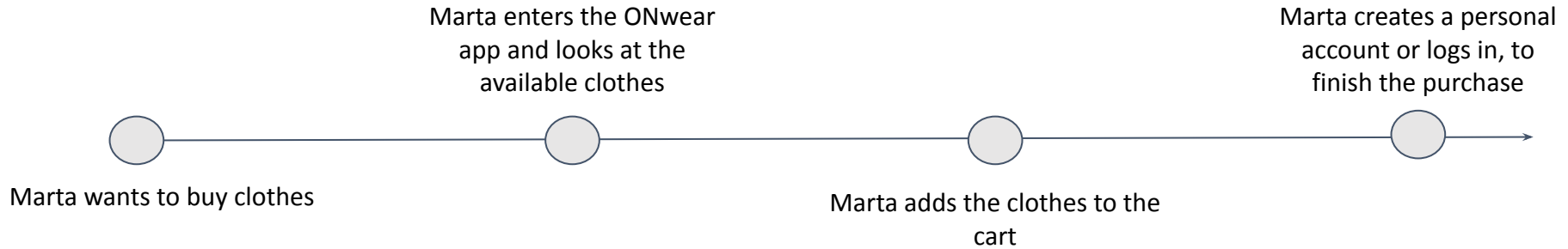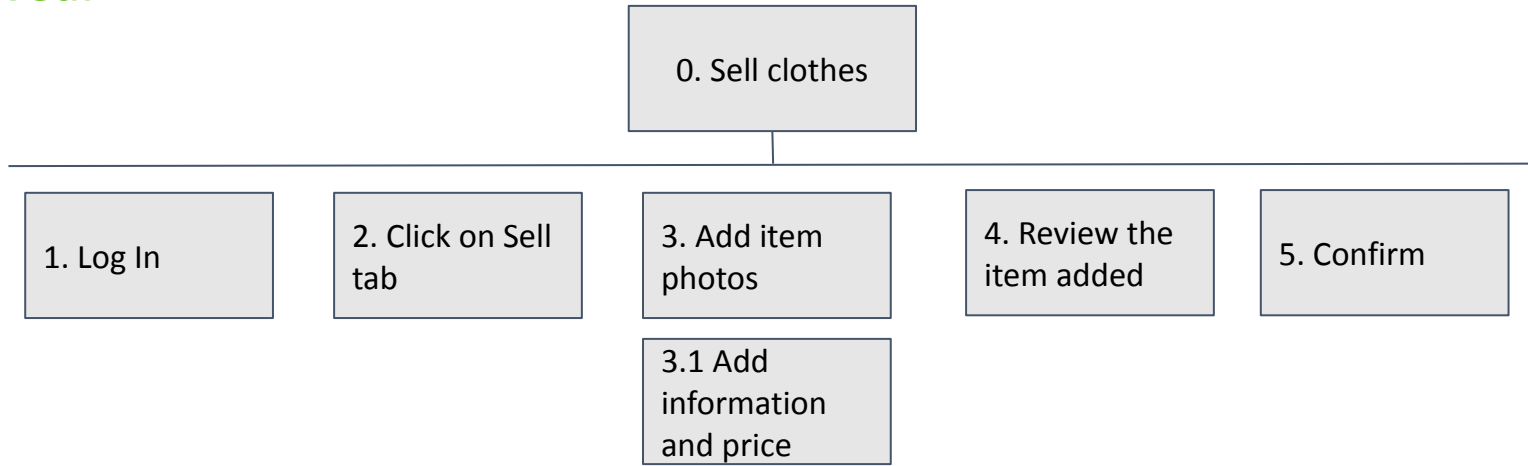
Scenario 1
ONwear

Sell clothes

Luis enters the ONwear app, creates a personal account and logs in

Luis waits for an email answer from the administrator of ONwear

Luis wants to sell clothes

Luis selects the seller tab and puts photos of the products he wants to sell, and the respective information

Scenario 2
ONwear

Buy clothes

Marta enters the ONwear app and looks at the available clothes

Marta creates a personal account or logs in, to finish the purchase

Marta wants to buy clothes

Marta adds the clothes to the cart

Task - Scenario 1
ONwear


```
                        ┌─────────────────┐
                        │  0. Sell clothes │
                        └─────────────────┘
                                 │
    ┌───────────┬────────────────┼────────────────┬───────────┐
┌─────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
│1. Log In│ │2. Click on│ │3. Add item│ │4. Review  │ │5. Confirm │
│         │ │   Sell tab│ │   photos  │ │  the item │ │           │
│         │ │           │ │           │ │   added   │ │           │
└─────────┘ └───────────┘ └───────────┘ └───────────┘ └───────────┘
                          ┌───────────┐
                          │3.1 Add    │
                          │information│
                          │and price  │
                          └───────────┘
```

Task - Scenario 2

ONwear

```
                          ┌─────────────────┐
                          │  0. Buy clothes │
                          └────────┬────────┘
```

| 1. Click on buy tab | 2. Apply the filters | 3. Select the item to buy | 4. Verify the basket | 5. Login or create account | 6. Buy |

3.1 Select the size

3.2 Add to the basket

Requirements
ONwear

Non-Functional

Usability

- Easy to use
- Focus on the item
- Appealing design

Availability, Reliability and Security

- Responsive
- Error free
- Reliable
- Secure

Performance

- Fast response time
- Fluid

Requirements
ONwear

Functional

Buy Clothes

- Easy to filter items
- Easy to select item characteristics
- Easy to complete purchase

Sell clothes

- Easy to list a item
- Easy to edit a listed item
- Several item photos possible

Low Fidelity Prototype (LFP)

ONwear

- Paper prototype

- Main features
    - Design of the webapp
    - Buy option
    - Sell option
    - Login & Register
    - Account profile
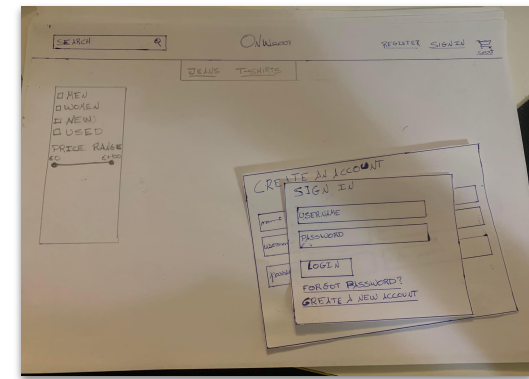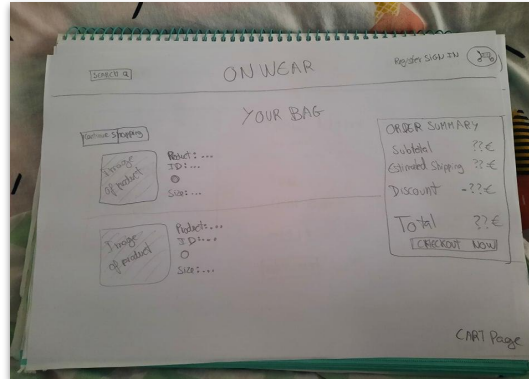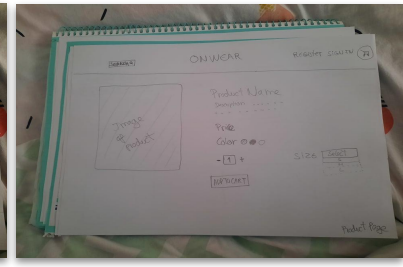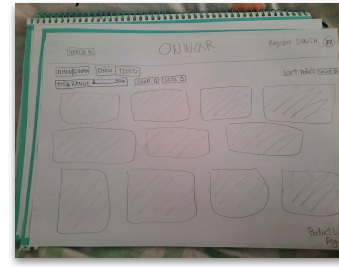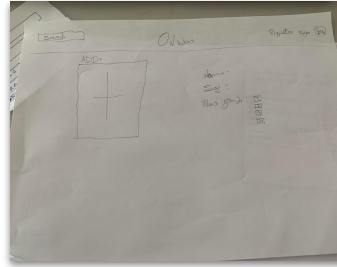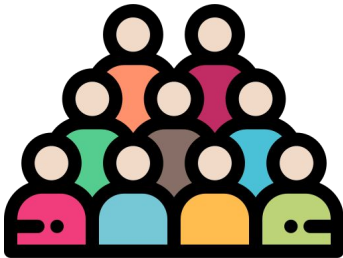
LFP User Evaluation
ONwear

- Usability testing
  - We wanted to evaluate the flow of the app
  - Find some details that escaped to the user
  - 2 tasks evaluated
  - 7 participants

- Some suggestions from the users:
  - Add more fields to sell clothes
  - Add more filters to buy clothes
  - Page to see the products we are selling

Platform Used for the functional prototype
ONwear

- React

- JavaScript

- MUI

- React Bootstrap

- Visual Studio Code

- We wanted to use these tools because we found them interesting and we had the teacher's help to guide us.
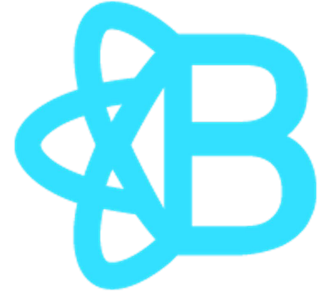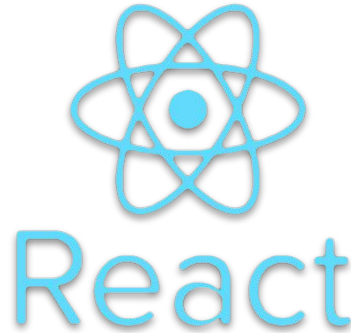
User Evaluation of the functional prototype
ONwear

- Method used.
  - Evaluate easy of use (goal) and what to improve
  - The users where playing the role of a persona
  - 2 main tasks were used
    - Buy a product on the webapp (task 1)
    - Sell clothes on the webapp (task 2)
  - 7 participants - 1 female and 6 male
  - Empirical method
    - Post task opinion on the app => totally agree(1) to totally disagree(5)

User Evaluation Questions
ONwear

- Q1 - I think that I would like to use this system frequently.

- Q2 - I found the system unnecessarily complex.

- Q3 - I thought the system was easy to use.

- Q4 - I think that I would need the support of a technical person to be able to use this system.

- Q5 - I found the various functions in this system were well integrated.

- Q6 - I thought there was too much inconsistency in this system.

- Q7 - I would imagine that most people would learn to use this system very quickly.

- Q8 - I found the system very cumbersome to use.

- Q9 - I felt very confident using the system.

- Q10 - I needed to learn a lot of things before I could get going with this system.
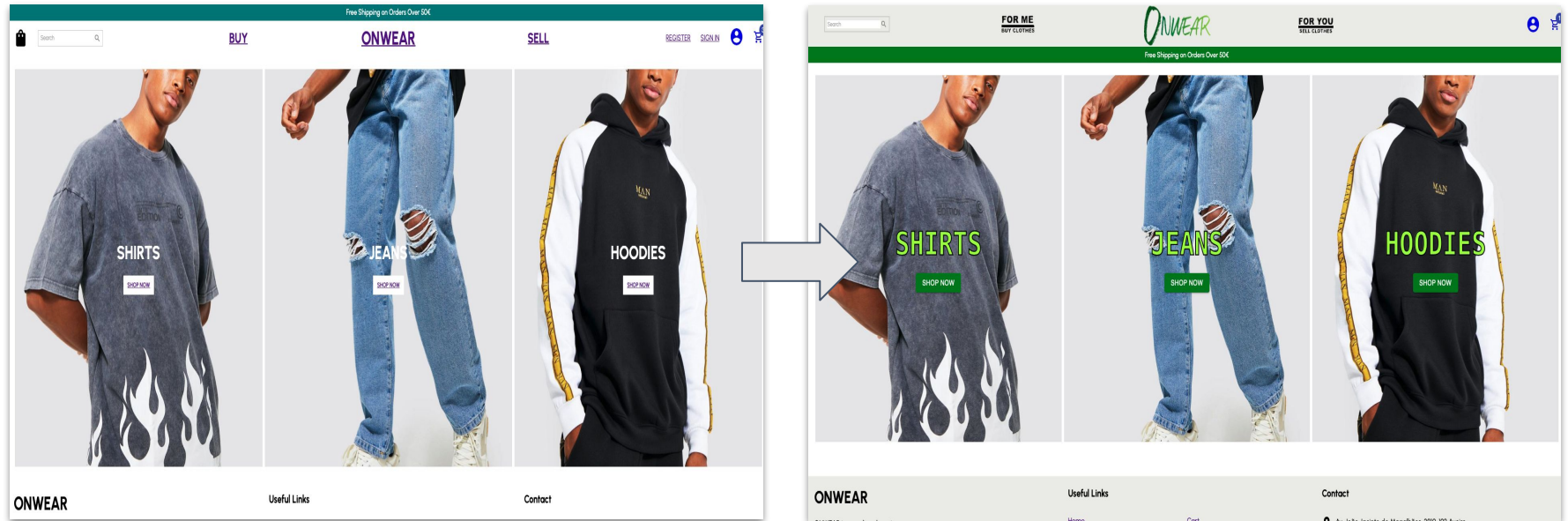
User evaluation results

ONwear

Questions/ Particpants	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	SUS
1	5	1	4	1	4	1	5	2	4	1	90
2	3	2	4	2	3	3	3	2	4	1	67.5
3	5	3	5	2	4	3	3	3	3	2	67.5
4	4	2	4	2	5	2	5	2	4	1	82.5
5	5	1	3	1	4	1	4	3	3	2	77.5
6	4	1	5	1	5	1	4	1	5	1	95
7	5	2	4	2	5	3	4	3	4	1	77.5
Median	**4**	**2**	**4**	**2**	**4**	**2**	**4**	**2**	**4**	**1**	**79.6**

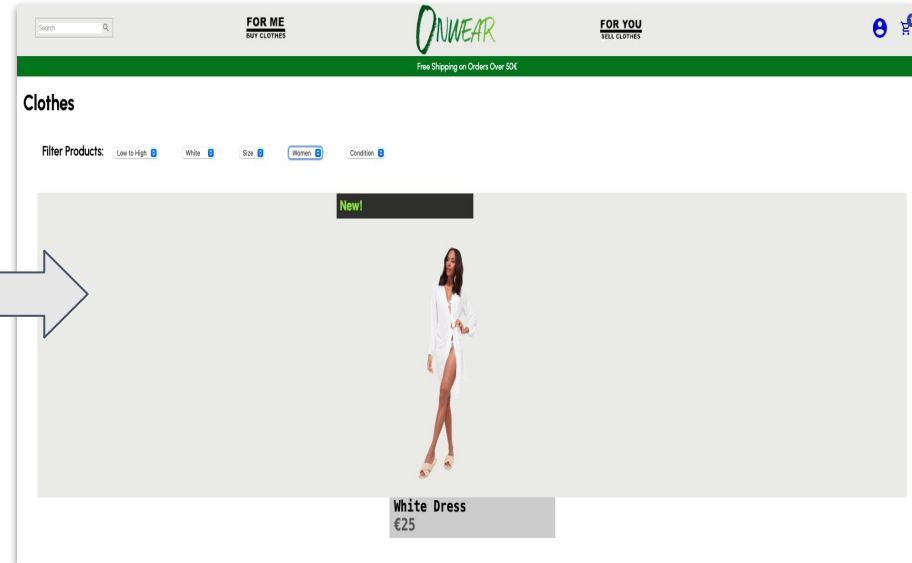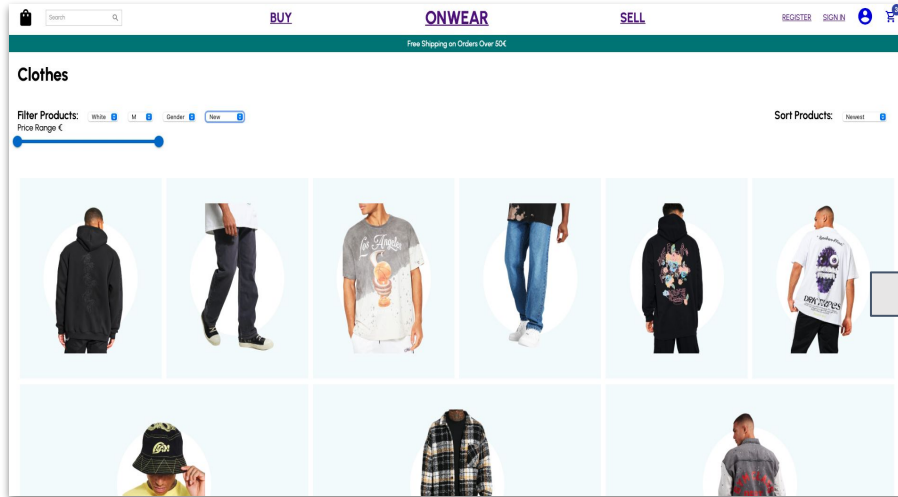# User Evaluation of the functional prototype
ONwear

- Changes: Improve the appearance of the home page

User Evaluation of the functional prototype
ONwear

- Changes: Filtering working

User Evaluation of the functional prototype
ONwear

- Changes: Add checkboxes to the fields on sell page

Demo
ONwear

- Main features

Future work

- Have more diversity of products available
- Implement a database
- Make the app more dynamic
- Implement payment methods
- Create a page for all products and not be something static
- Search button working
- More filtering for different categories

Effort of each group member

- Everyone contributed equally to the project

Acknowledgments

- To everyone involved in the testing the app through usability tests
- To the professors that gave us feedback on what to improve

Bibliography

- https://www.youtube.com/watch?v=c1xTDSIXit8&t=7115s - React E-Commerce App Design Tutorial
- https://mui.com/pt/ - Library of UI components that can be used to build React applications
- https://riptutorial.com/Download/react.pdf - Free eBook on Learning react