

SW 2 : Methodology for User-Centered Design

Part 1 – General Questions

1. What are the main techniques for collecting user requirements studied in class?
2. What are the methods used to analyze collected data?
3. What is the role of the mockup stage in interface design?
4. What is the role of the prototyping stage in interface design?
5. What are the different stages of prototyping? Describe the characteristics of each (fidelity, interactivity, evolution).

Part 2 – Exercises

Exercise 1

You are asked to design a **mobile application** for consulting and participating in the activities of a *youth center*.

In groups of **4–5 students**, answer the following questions :

1. Who are the **target users**?
2. What do they **expect** from the system being developed?
3. In what **context** will the system be used?
4. What are their **problems** and **needs**?
5. What are their **skills** and **knowledge levels**?
6. Define **two personas** (imaginary characters representing types of users). Each in **two lines maximum**.
7. Write a **short scenario** including the personas described above.
8. Provide **mockups** of three main functions of the system (one interface can lead to another).

Exercise 2 Card Sorting

1. What is the **purpose and principle** of the *card-sorting* method?
2. The figure below shows a list of menu items from an e-commerce website for home goods.
Using the **card-sorting method**, organize the items into appropriate **categories**, then name these categories.

NESPRESSO

MIROIR

Cafetière

BOUGIE ET DIFFUSEUR

VEILLEUSES ET LAMPADAIRE

Batterie de Cuisine

Assiettes, Bol

Ciseaux (5)

ASPIRATEURS BALAIS

Couscoussiers

MACHINE À JUS

PORT BOUGIE ET LANTERNE

Moulin A Café

MACHINE EXPRESSO BROYEUR

Passoire

USTENSILES DE CUISSON

PLATEAUX DÉCORATIF

Couteaux (38)

Louche ,Écumoire, Spatule...

Extracteur de jus

ASPIRATEURS A MAIN ,ROBOT

TABLEAUX

Casseroles

ASPIRATEURS TRAÎNEAUX

MACHINE À CAFÉ

Centrifugeuse

ASPIRATEURS

USTENSILES DE CUISINE

CAFETIÈRE A BRAS

Presse-Agrumes

Autocuiseurs/cocottes minutes

Exercise 3 Menu Structure Design

You are designing a **text and image editing software** that allows the following functions:

Save, Save As, New Document, Delete Selection, Send as Email, Quit / Exit, Undo, Redo, Insert Table, Preferences / Settings, Character Style, Paragraph Formatting, Normal Case, Italic Case, Bold Case, Underlined Case, Open File, Close File, Open as Copy, Increase Font Size, Decrease Font Size, Change Font Insert Footnote, Copy, Paste, Insert Page Break, Repaginate, Insert Image, Print, Print Preview, Page Setup / Layout, Page Display / View Page, Find Word / Search Word, ce Word, Next Page, Previous Page, Spell Check, Create Table of Contents, Word Count, Help

Group these functions into **different submenus**.

1. Define the organization of your functions within each submenu (you may also create submenus inside other submenus).
2. Explain your design logic briefly.

Exercise 4 Library Book Borrowing App

Design a small application for **borrowing books in a library**. Specify:

- Short description of the application
- Target audience
- Technical platform (mobile, web, desktop, etc.)
- List of main functionalities
- Design process used
- Screen flow or storyboard (main screens and transitions)