

UX Exam Case 4

Web Development 2025

This is a 48-hour group assignment immediately followed by an oral exam.

Case: FOG Hardware Store – Equipment Rental Experience

The case for this assignment is FOG Hardware Store. Customers have expressed frustration with the current equipment rental experience—ranging from lack of information about available tools, unclear pricing and terms, no digital booking options, and uncertainty about item availability.

Your task is to design a prototype for a digital solution that improves the overall user experience for renting equipment at FOG.

This could be an app or web-based system that provides features such as browsing available equipment with descriptions and photos, real-time availability status, online booking and payment, personalized recommendations, filters by category or skill level, maintenance and safety instructions, sustainability tracking, or customer reviews.

Your design must follow the principles and best practices presented during the course, including those outlined in the **UX slides compendium** and **course literature list**.

Requirements:

Use a structured UX process to design your prototype. As a minimum, your process must address the following:

1. Methodology / Framework

- Choose and apply a design method such as **Double Diamond** to structure your process.

2. Research & Personas

- You will be provided with one/two personas representing typical users FOG's rental service.
- Create an **empathy map** for each persona to visualize what users say, think, feel, and do.
- Conduct additional research as needed (e.g., user interviews, desk research, observations).

3. Sustainable UX Canvas

- Use the **Sustainable UX Canvas** to reflect on how your design addresses:

- **Environmental impact** (e.g., promoting tool sharing over buying, extending equipment lifespan, digital receipts).
- **Social sustainability** (e.g., clear safety guidance, inclusive language, transparent terms and conditions).
- **Behavioral nudging** (e.g., reminders to return equipment on time, suggestions for eco-friendly alternatives).

4. User Flows & IA

- Create **user flows**, **wireframes**, **wireflows**, and **user stories**.
- Include edge cases such as unavailable equipment, payment errors, or damaged items.
- Address errors like:
 - Equipment not found or unavailable.
 - Payment failure.
 - Missing safety or maintenance instructions.

5. Accessibility & Ethics

- Follow **WCAG** principles.
- Design for all users, including different skill levels, languages, and physical accessibility needs.
- Avoid manipulative upselling or confusing subscriptions.

6. Visual / Graphic Design

- Focus on **energy-efficient UI**: system fonts, dark mode, image optimization.
- Prioritize intuitive layout and visual hierarchy.

7. Avoid Dark Patterns

- Ensure the design is persuasive but fair.
- Clearly present prices, rental terms, and safety requirements.

8. Data & Performance

- Include options for **ethical data collection** (e.g., feedback, meal preference).
- Use tools like **EcoGrader** or **Website Carbon** to validate environmental performance.

Product

- Your final product is a **clickable prototype** in **Figma** or coded in **HTML/CSS/JS**.
 - It must demonstrate how your concept improves the canteen experience and reflect sustainable design.
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Oral Exam

- **20 min** group presentation (your process, insights, UX methods, and prototype demo).
 - **30 min** group discussion and individual questions.
 - **10 min** grading. (Individual grades based on the 7-point scale).
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Remember:

- Structure your documentation using UX methods from the course.
- Support your decisions using the literature list and the UX compendium.
- Sustainability and inclusion must be central to your design choices.