Usability Test Plan CCL3-WS2025: DOLAP

Dolap is a mobile wardrobe app that allows users to:

- Add clothing items with photos and tags
- Create and manage outfits
- Track wear history
- View insights about clothing usage

Target Users for the Study:

- 6-8 participants, ideally
- Students and young professionals (18–35)
- People who want to dress well with less effort
- Users interested in making better use of their existing clothes

Heuristic Evaluation:

Heuristic	Observations	Severity
Visibility of system status	The app usually gives clear feedback (e.g. snack bars for delete/undo, wear counts updating). Some actions, like saving edits, could give clearer confirmation feedback.	Minor
Match between system & real world	Concepts like Outfits, Tags, and Wear history match how people think about their wardrobe. The wording is simple and easy to understand.	Minor
User control & freedom	Users can undo deletions, giving them control over mistakes. Removing delete actions from grid items reduced the risk of accidental actions.	Minor
Consistency & standards	Material 3 components are used consistently across screens. Image handling and button placement were recently unified, which improves consistency.	Minor
Error prevention	Important fields (e.g. name, photo) are validated. Removing delete actions from quick taps helps prevent accidental errors.	Minor
Recognition rather than recall	Images, thumbnails, chips, and previews help users recognize items instead of remembering details.	None
Aesthetic & minimalist design	The app is colourful but still structured. Some screens were simplified to reduce clutter and make content easier to scan.	Minor
Help users recognize, diagnose & recover from errors	Error messages exist, but some could be clearer (e.g. explaining *why* a form cannot be saved).	Minor
Flexibility & efficiency	Search for clothes and outfits helps experienced users work faster.	Minor
Help & documentation	There is no built-in help or onboarding yet, but the app is simple enough to understand on your own.	Minor

Overall, the heuristic evaluation indicates that Dolap is easy to use and well structured. It uses familiar concepts, consistent layouts, and clear visuals that help users understand and navigate the app. Most actions give good feedback and error prevention is handled well, though some confirmations and error messages could be clearer. Only minor usability issues were found.

Testable Questions, Hypotheses and Variables

TQ1: Core Task Completion

Testable Question

Can users successfully complete the core tasks of the Dolap app (adding, editing, deleting clothing items and creating outfits)?

Hypothesis (H1)

Most participants will be able to complete the core tasks successfully without critical errors.

Variables

- **IV:**
  - Task type (add clothing, edit clothing, delete clothing, create outfit)
- **DV**:
  - Task completion rate (%)
  - Time on task (in seconds)
  - Error rate (number of errors per task)
  - SEQ score per task

TQ2: Workflow Clarity

Testable Question

Do users understand the workflow and required steps for completing tasks in the Dolap app?

Hypothesis (H2)

Participants will understand the required steps for completing tasks and follow the intended workflow without major confusion.

Variables

- **IV**:
  - Task workflow (e.g. add clothing → save → find item → edit)
- **DV**:
  - Task completion rate (%)
  - Observation notes
  - SEQ score per task

TQ3: Search Function Effectiveness

Testable Question

Can users effectively find clothing items and outfits using the search functionality?

Hypothesis (H3)

Participants will be able to find specific clothing items and outfits using the search function within a reasonable time and with few errors.

Variables

- **IV:**
  - Search task type (clothing search, outfit search)
- **DV**:
  - Task completion rate (%)
  - Time on task (in seconds)
  - Error rate
  - SEQ score for search tasks

TQ4: Understanding of Insights

Testable Question

Do users understand the information presented on the Insights screen?

Hypothesis (H4)

Participants will be able to correctly interpret the insights provided by the app.

Variables

- **IV:**
  - Use of the Insights screen
- **DV**:
  - Accuracy of interpretation
  - Time spent on Insights screen
  - Verbal explanation during post-task interview
  - SEQ score for Insights task

TQ5: Overall Usability Satisfaction

Testable Question

How do users perceive the overall usability of the Dolap app?

Hypothesis (H5)

The Dolap app will achieve a System Usability Scale (SUS) score above the acceptable threshold and positive user experience ratings, particularly for hedonic quality.

Variables

- **IV:**
  - Use of the Dolap app
- **DV**:
  - SUS score
  - UEQ-S scores:
    - Pragmatic Quality
    - Hedonic Quality
  - Qualitative feedback from post-test interview

Methods for Data Collection

Setup

- Lab-based (moderated usability test)
- 6-8 participants
- Environment: Quiet room with a laptop and an Android phone provided by us
- Audio recording for think-aloud protocol

Quantitative Methods

Task Performance Metrics

- Time on task (in seconds)
- Task completion rate (%)
- Error rate (number of errors per task)

Standardized Questionnaires

- SEQ after each task
- SUS at the end of each test
- UEQ-S before the Post-Test Interview

EQ and SUS help us understand how easy the tasks and the app are to use, while UEQ-S helps us understand how users feel about the app overall, such as whether it is enjoyable, attractive, and pleasant to use.

Qualitative Methods

- Think-aloud protocol
- Observation notes (hesitation, confusion, unexpected behaviour)
- Semi-structured Post-Test Interview (likes/dislikes, perceived problems, improvement suggestions, ...)

Planned tasks:

1. Add a new clothing item with photo, category, and tags
2. Search for your created item by filtering for it.
3. Edit an existing clothing item
4. Delete an existing clothing item
5. Create a new outfit and add clothes to it
6. Find an outfit using the search function
7. View insights and interpret the data available (most worn clothes, never worn clothes, least worn clothes, not worn in 90 days)

Documents:

- Script for Moderators (what we say to the participant at the beginning of the study, general information, etc.)
- Informed Consent
- Participant Background Questionnaire
    - To evaluate age, gender, etc.
- Task Sheet for Moderators
    - On this task sheet, we have listed each task/scenario, time needed for the task, Success (yes/no), Help needed (yes/no) and Additional Notes
- Task Sheet for participants
- Post-task: Single Ease Question (SEQ)
- Post-study: System Usability Scale (SUS) Questionnaire
- Post-Test Interview
- User Experience Questionnaire (Short) with 8 items
- Observer Notes

Tools:

- Android Device
- Laptop with Microsoft Forms open (Informed Consent + Digital Questionnaires)