

Heuristic Evaluation

Structure of the individual report

Part I: Your Name

Name: Falconi Eleonora

E-mail: eleonora.falconi@studio.unibo.it

Part II: Project Description

The evaluated application is “**Komoot**”, a mobile application designed for outdoor activities such as hiking, biking, and trekking. It allows users to plan routes, explore maps, and access detailed information about points of interest such as trails, routes, and bivouacs.

Part III: Evaluation Execution

The heuristic evaluation was conducted individually using the Komoot mobile application on an iOS device updated to version 2026.5.0. The evaluation followed Nielsen’s ten usability heuristics and was based on the execution of three representative tasks:

- Searching for outdoor locations
- Exploring map elements and route details
- Accessing detailed information about points of interest.

The application interface and available functionalities were sufficient to perform the evaluation, and no additional documentation was required.

Part IV: List of Violations

- *Issue1. H1, Visibility of system status*
 - *Where: recalculation after modifying a waypoint in route planning*
 - *What: When the user modifies the route, the system recalculates the path but does not provide immediate or clear feedback that the operation is in progress.*
 - *Why: The lack of visible system feedback makes it unclear whether the system is responding to the user's action.*

- *Severity: 2*
- *Issue2. H5, Error prevention*
 - *Where: activity type selection in route planning*
 - *What: The system allows users to select an inappropriate activity type (for example road cycling on unpaved trails) without a clear warning.*
 - *Why: The interface does not prevent potentially problematic choices that could lead to user errors during navigation.*
 - *Severity: 3*
- *Issue3. H3, User control and freedom*
 - *Where: Activity type selection in route planning*
 - *What: If the user wants to exit during active recording, there is no immediate button to close it.*
 - *Why: Users do not have an immediate and intuitive way to return to planning.*
 - *Severity: 3*
- *Issue4. H3, User control and freedom*
 - *Where: Activity type selection in route planning*
 - *What: If the user accidentally exits the navigation screen during an active recording, returning to the tracking interface is not immediate or obvious.*
 - *Why: Users lack an easy way to quickly recover from accidental navigation actions.*
 - *Severity: 3*
- *Issue5. H8, Aesthetic and minimalist design*
 - *Where: Route details screen*
 - *What: The route details screen displays many types of information at once (elevation, surface, difficulty, ...).*
 - *Why: The amount of information shown can overwhelm users and reduce clarity.*
 - *Severity: 2*
- *Issue6. H1, Visibility of system status*
 - *Where: Route planning and navigation start*
 - *What: When the user selects “Hiking” as the activity type and plans a route from their home to a mountain destination, starting the navigation immediately begins the route without clearly distinguishing the driving segment from the actual hiking route.*
 - *Why: The system does not clearly communicate the current state and structure of the route.*
 - *Severity: 3*

- *Issue7. H1, Visibility of system status*
 - *Where: Downloading offline maps*
 - *What: When downloading offline maps, the progress indicator is very small and easy to miss, especially on smaller screens. It is not immediately clear whether the download is ongoing, paused, or completed.*
 - *Why: The system status is not sufficiently visible, which may lead users to think the app is frozen or the download failed.*
 - *Severity: 2*
- *Issue8. H7, Flexibility and efficiency of use*
 - *Where: Downloading offline maps*
 - *What: Users who frequently plan routes starting from the same location must manually re-enter or re-select the starting point each time.*
 - *Why: The lack of quick presets or favorites reduces efficiency for frequent users.*
 - *Severity: 2*
- *Issue9. H10, Help and documentation*
 - *Where: First time use*
 - *What: Some advanced features are not explained during onboarding and are only discoverable through exploration.*
 - *Why: The lack of contextual help makes it harder for new users to learn important features.*
 - *Severity: 2*
- *Issue10. H3, User control and freedom*
 - *Where: Route planning*
 - *What: When the user accidentally places a waypoint on the map, removing it requires opening a secondary menu, and there is no quick “undo” action.*
 - *Why: The interface does not support easy recovery from accidental actions, reducing user control and freedom.*
 - *Severity: 2*

Part V: Summary and Recommendations

Report in the table below the total number of identified violations.

| Heuristic | # violations |
|---|--------------|
| H1: Visibility of system status | 3 |
| H2: Match between system and the real world | |

| | |
|---|---|
| H3: User control and freedom | 3 |
| H4: Consistency and standards | |
| H5: Error prevention | 1 |
| H6: Recognition rather than recall | |
| H7: Flexibility and efficiency of use | 1 |
| H8: Aesthetic and minimalist design | 1 |
| H9: Help users recognize, diagnose, and recover from errors | |
| H10: Help and documentation | 1 |
| HN: Non-heuristic issue | |

Overall, Komoot provides a rich and well-designed user experience, especially for users familiar with outdoor navigation tools. The application offers advanced functionalities for route planning and activity tracking, but some aspects of the interface may overwhelm novice users. The main usability issues relate to feedback visibility, error handling, and information density.

Improvements could focus on providing clearer system feedback during loading and recalculation processes, as well as offering more informative and actionable error messages. Additionally, simplifying certain screens and making advanced options more visible could improve usability for both novice and experienced users.

Finally, introducing shortcuts or customizable presets for frequent users could significantly enhance efficiency of use, while maintaining the overall quality and completeness of the interface.