

Peakrando

1. Project context

The PeakRando project was born from a simple observation shared by many hiking enthusiasts: the outdoor experience is currently fragmented across too many different tools. A hiker often has to switch between a mapping application, another for health statistics, and various online sources to plan their outings. PeakRando aims to break these silos by offering a single platform capable of supporting the user from home preparation all the way to the summit.

The core of our solution relies on deep personalization from the moment the user joins the application. Rather than offering generic itineraries, we ask the user to set up a complete profile including their physiological data, sporting habits, and location. This approach allows us to leverage geolocation to instantly suggest relevant and accessible routes nearby, ensuring a smooth and immediate user experience.

The major innovation of PeakRando lies in the integration of a conversational artificial intelligence acting as a true personal guide. This assistant not only allows users to refine searches based on specific contexts—such as organizing a family outing, but more importantly, it becomes a pillar of physical and logistical preparation. For an ambitious goal such as climbing Mont Blanc, the application does more than just provide a GPS track, it develops a tailor-made training plan spanning several months.

This intelligent plan manages everything: from the progressive selection of training hikes to specialized equipment recommendations via our partners, including crucial reminders for refuge reservations. The strength of our system is its adaptability: if the user struggles during a training session, the AI dynamically recalculates the entire remaining program to ensure safe and consistent progress. In short, PeakRando does not just display maps; it becomes an intelligent adventure partner that adapts to the capabilities and dreams of every hiker.

2. User Role

Role	Description & Responsibilities
Administrator	Responsible for global platform management, they oversee accounts, handle community reports, and certify proposed itineraries to ensure catalog reliability.
Standard User	Primary user role tasked with testing profile creation, GPS navigation, the recommendation AI, augmented reality features, and the submission of new routes.
Premium User	Tester benefiting from the full experience, including Extended AI access, offline navigation mode, and advanced hiking data analysis tools.

3. Feature table

ID	Audience	Feature Name	Description	Priority/Scale
F1	Admin	Member Moderation	Tools to modify, suspend, or delete user profiles in case of TOS violations.	Minor
F2	Admin	Report Management	Interface for processing community alerts with a direct response system.	Minor
F3	Admin	Route Certification	Back-office dashboard for admins to manually review, validate, or reject submitted hikes.	Major
F4	Everyone	Community Submission	Structured form for users to propose new routes with photos.	Intermediate

F5	Everyone	Active Navigation	Launching and real-time tracking of a hiking itinerary with GPS guidance.	Major
F6	Everyone	Onboarding & Profiling	Profile creation based on physiological data for personalization.	Major
F7	Everyone	Conversational AI	Natural language search interface for tailor-made route recommendations.	Intermediate
F8	Everyone	AR Immersion	Augmented reality including ludic quests and contextual field info.	Intermediate
F9	Everyone	Statistics Dashboard	Performance data and history of the last completed hike.	Minor
F10	Everyone	Goal Planner	Progressive training program to reach a specific peak or objective.	Principal (Major)
F11	Everyone	App Navigation	Centralized menu and intuitive navigation between sections.	Major
F12	Premium	Offline Mode	Capability to download maps and tracks for use without network.	Intermediate
F13	Premium	Extended AI Access	Removal of token restrictions for generating/recalculating plans.	Intermediate

4. Success Criteria

ID	Success Criterion	Test Scenario / Metric	Status
F1	Administrative profile management	Test on a sample of 20 account modifications and deletions.	Not Started
F2	Moderation system effectiveness	Ability to process and respond to 20 distinct reports.	Not Started
F3	Manual certification reliability	Human-led validation or refusal of 10 community itineraries.	Not Started
F4	Submission form robustness	Successful integration of 10 new hikes with media.	Not Started
F5	Navigation module stability	Launch and completion of 10 hiking sessions without crashes.	Not Started
F6	User data integrity	Success rate on 10 profile creations and 10 edits.	Partially Achieved
F7	AI recommendation relevance	Consistency analysis on 10 personalization requests.	Partially Achieved
F8	AR recognition accuracy	Detection test on 10 environmental elements (trees).	Partially Achieved
F9	Statistical data accuracy	Reliability of metrics display after 10 sessions.	Not Started
F10	Training plan consistency	Generation of 10 long-term personalized programs.	Not Started

F11	App navigation fluidity	Error-free access to the 6 main interface pages.	Achieved
F12	Offline mode availability	Ability to launch and follow a track without network access.	Not Started
F13	Assistant restriction lift	Verification of the absence of limits in Premium mode.	Not Started