

ETrailX

Integrating a visually pleasing interactive installation, IoT automated edge computing, and dashboard for increased user engagement, safer travel, and easier trail management.



OVERVIEW

Eastrail is a beloved 42-mile trail system in Seattle's Eastside suburbs. It currently faces challenges impacting user experience, safety, and community engagement.

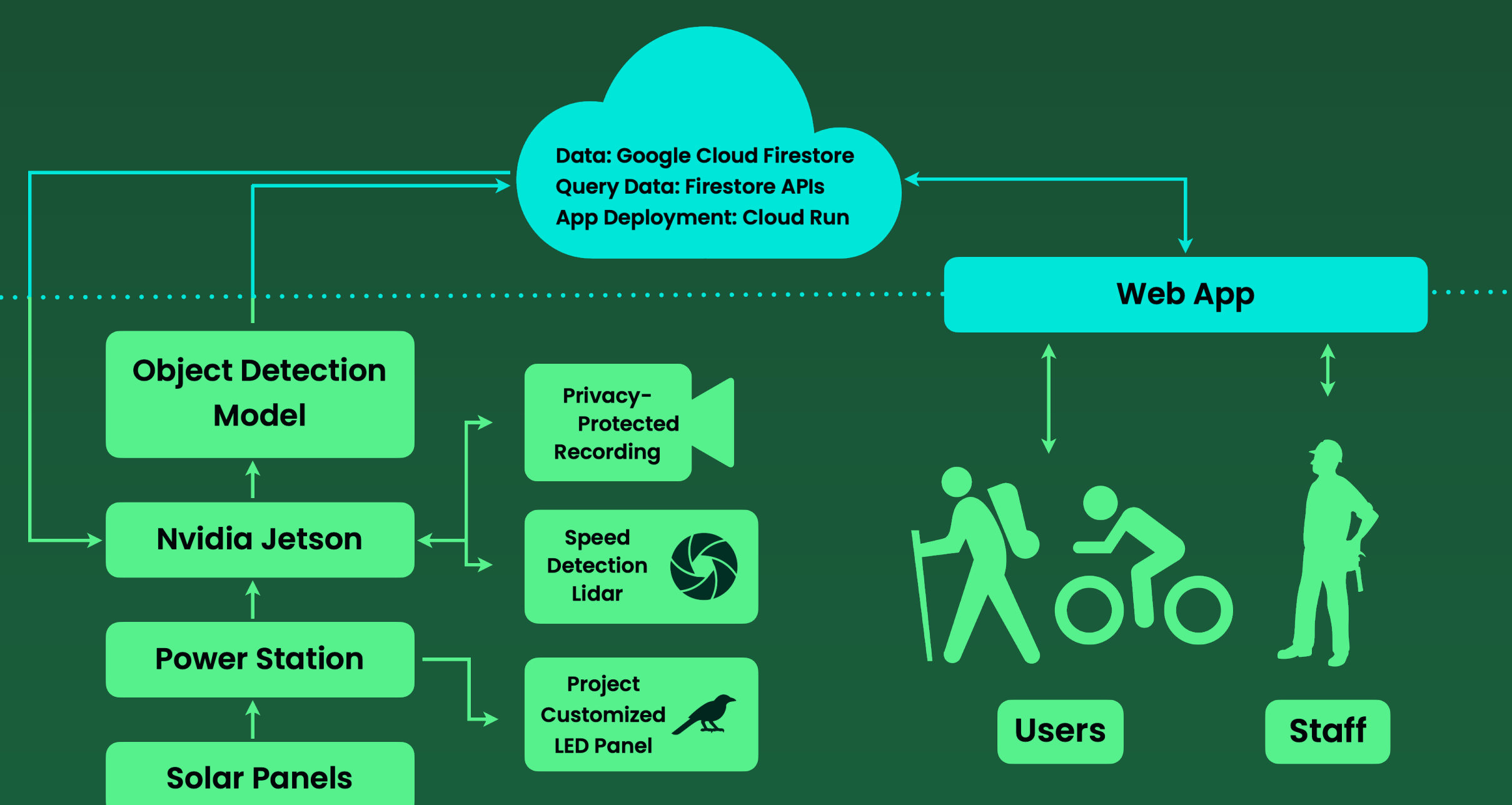
Key Issues:

1. Real-time user count updates and analysis.
2. Safety risks posed by high-speed bike traffic.
3. Under-utilization of the trail's natural and historical attributes.

PROCESS

In our quest for innovation, we embraced **Design Thinking** to anchor our project in user-centricity, informed by **19 interviews, 1,145 surveys, and 4 expert insights**. This approach cultivated a culture of iterative enhancement and continuous feedback.

By integrating **Lean** and **Agile (Scrum)** methodologies, we honed our focus on delivering value and fostering a nimble, collaborative environment for rapid development and refinement. This fusion of methodologies not only propelled the Eastrail experience to new heights but also showcased our adherence to industry benchmarks, underscoring our dedication to excellence and inventive solutions.



Hardware & Software Architecture

SOLUTION: NATURE STORE

Installation on the Trail

We are reimagining Eastrail as a localized **Nature Store**, uniquely tailored to celebrate and educate about the region's distinct natural environment and wildlife, fostering a profound and safe engagement with the wonders of nature.

Speed Tracking & LED Alerts

Track rider's speed and emits 2 modes of LED warnings to ensure pedestrian safety.



1

Augmented Reality Nature Review

Our QR-coded journey offers a localized and professional augmented reality experience, inviting users to delve into the unique history and wildlife of Eastrail. This interactive platform merges historical context with engaging fun, ensuring a memorable educational adventure.



2

Interactive Local Fauna Display: Dynamic User-Responsive Eastrail Creatures

Experience the magic of Eastrail with our cutting-edge equipment that tracks your movement and digitally displays local wildlife on LED displays.

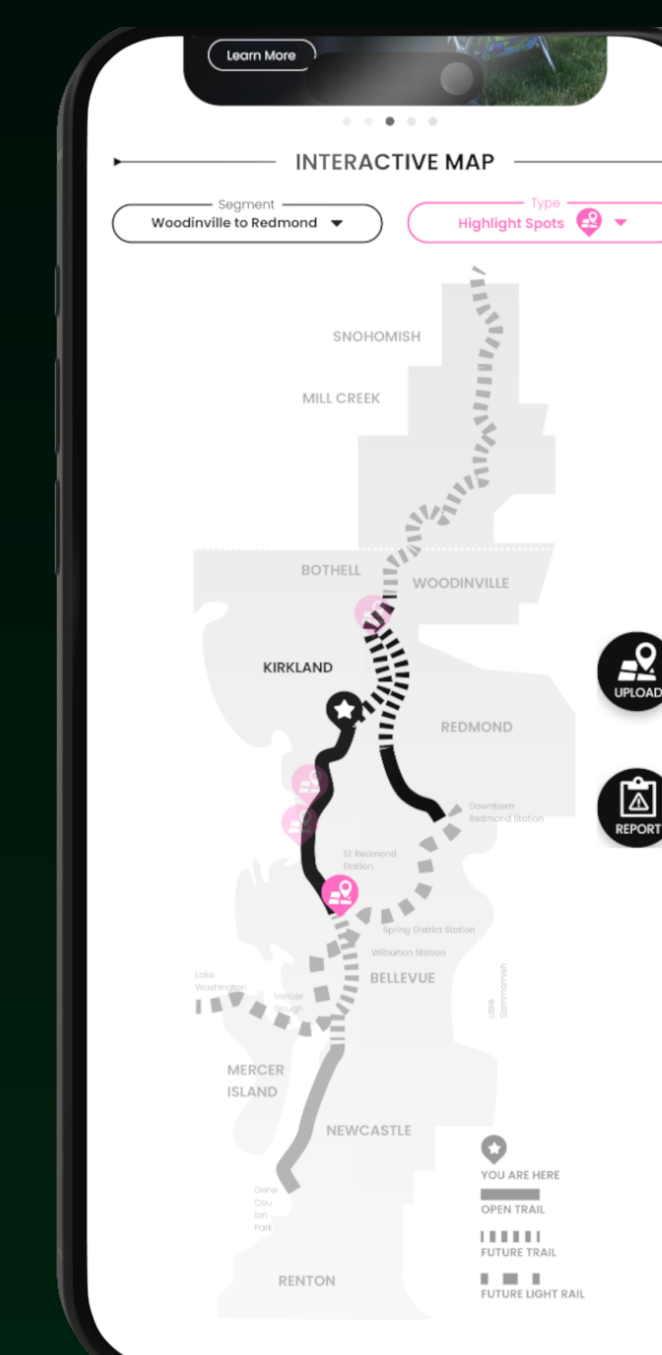
Leverage our immersive technology for professional engagement that responds intuitively to your presence and connects you to Eastrail's unique ecosystem.



3

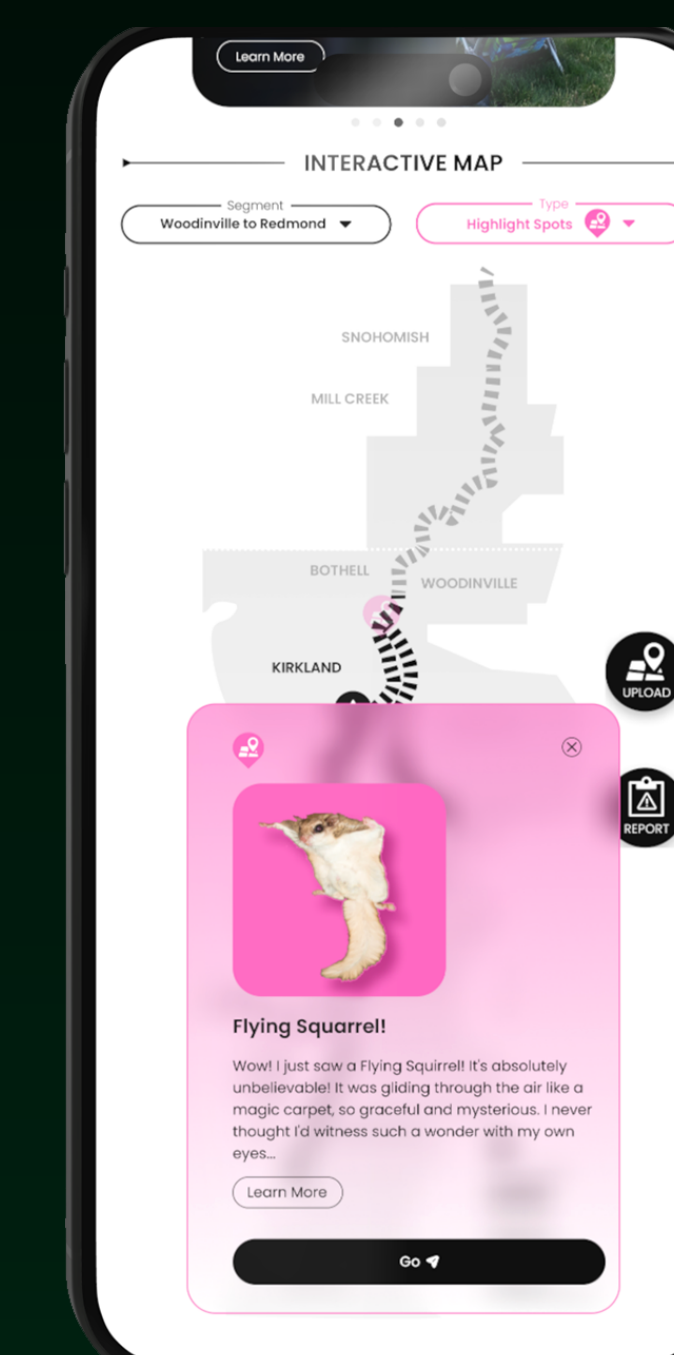
SOLUTION: DIGITAL TRAIL

Web App For Trail Users



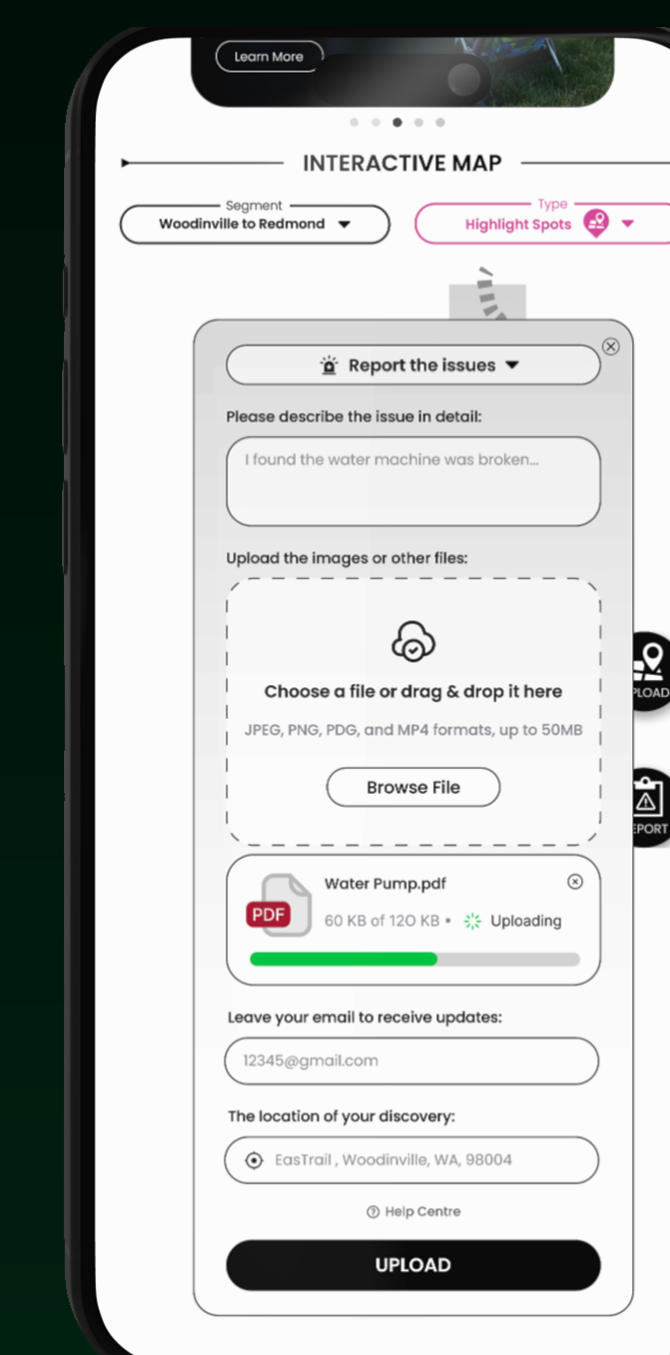
Trail Pulse: The Live Eastrail Atlas

Navigate the Eastrail with **Trail Pulse**, our real-time interactive map that vividly presents the trail's blueprint, current ambiance, visitor flow, and ongoing events.



Trail Compendium: Amenities & Lore

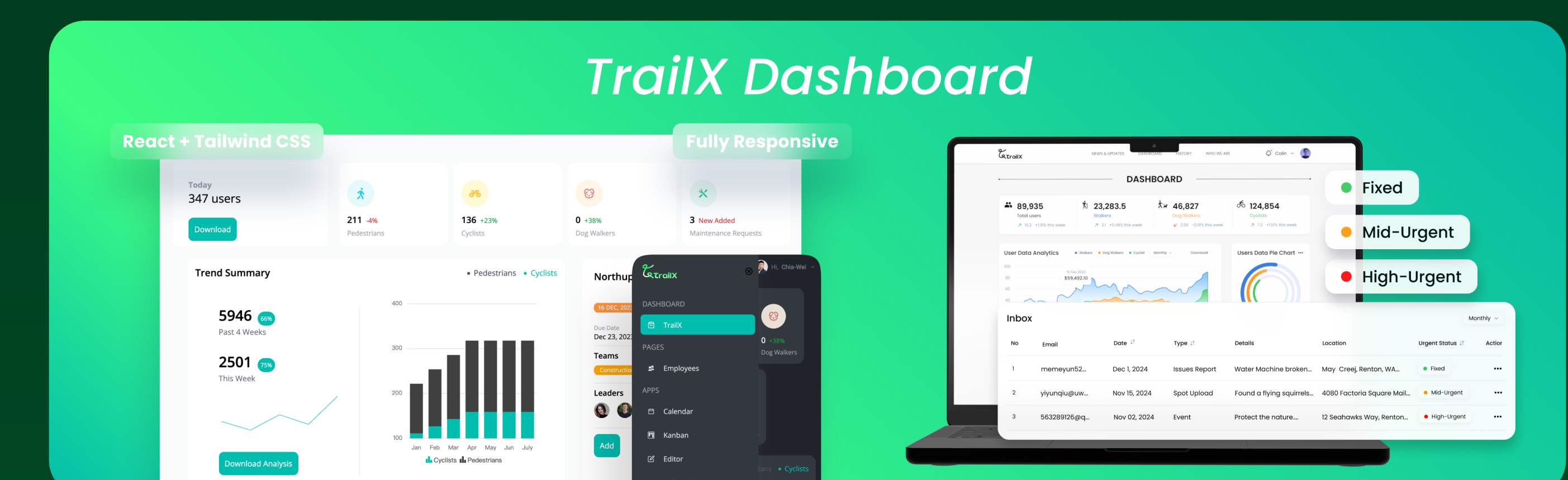
Discover the conveniences and stories of Eastrail with our **Trail Compendium**, offering insights into trail facilities, historical landmarks, and wellness spots, crafted to enhance your journey's planning and enjoyment.



Trail Echo: Your Voice, Our Trail

Make your mark on Eastrail with **Trail Echo**, a dedicated feature for your valuable feedback and reports, fostering a seamless dialogue with trail stewards and enhancing our collective trail experience.

Web App For Trail Managers



Trail Insights Panel

A dashboard for administrators to visualize trail activity data, streamlining management and strategic planning.

Trail Alerts Hub

A quick-update platform for managing issues and events, keeping the trail experience safe and lively.