TravelTracker V2

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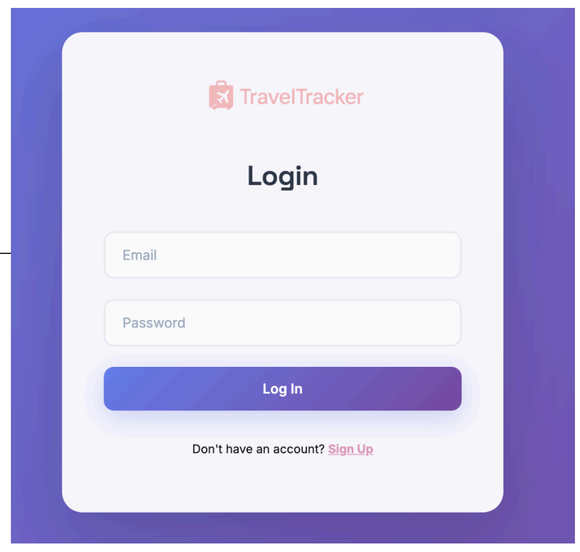
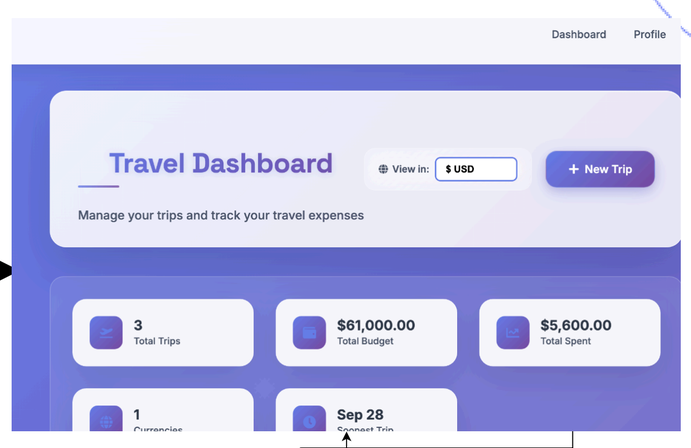
Project on GitHub

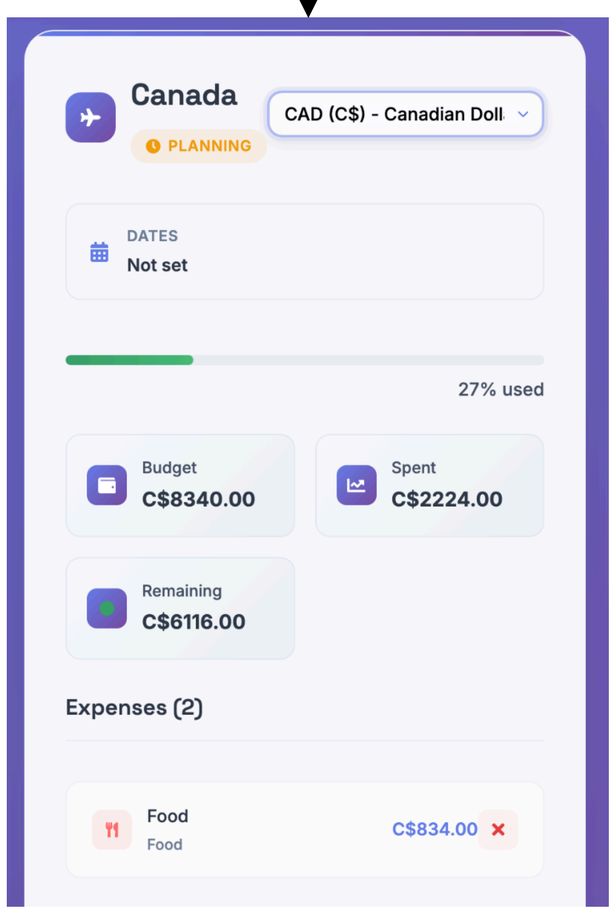
Travel Tracker is a cloud-native web app that streamlines trip planning by combining budgeting, itineraries, and expense tracking. Unlike Version 1, this release runs on **Kubernetes** for scalability and real-world deployment. It adds **real-time currency conversion** and an **AI-powered recommendation service** for personalized travel suggestions. These upgrades make Travel Tracker smarter, faster, and ready for production use.

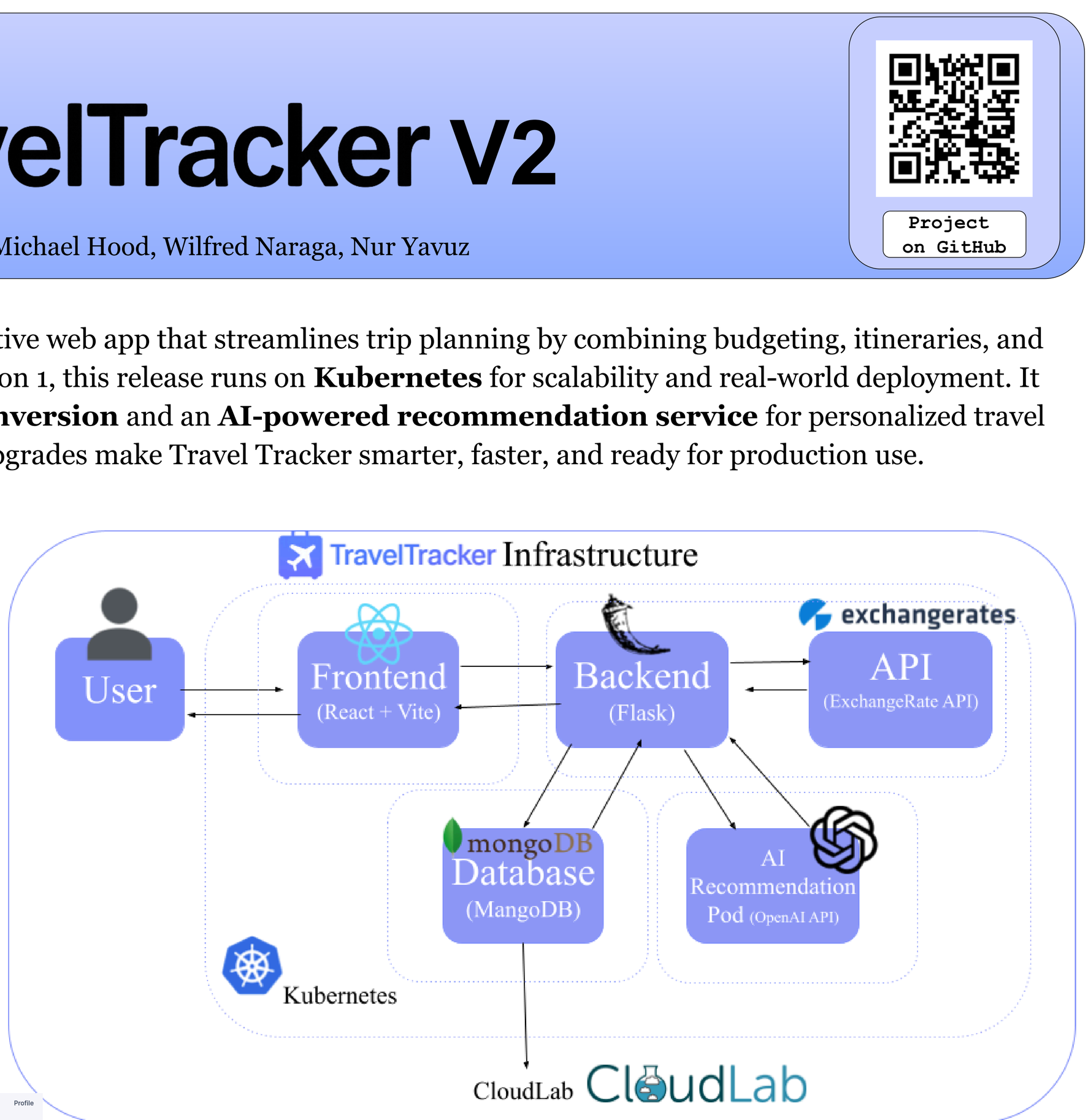
Interface



Users can sign up or login. Authentication is handled using JWT (JSON Web Tokens). User account information is stored in the users collection of the database.

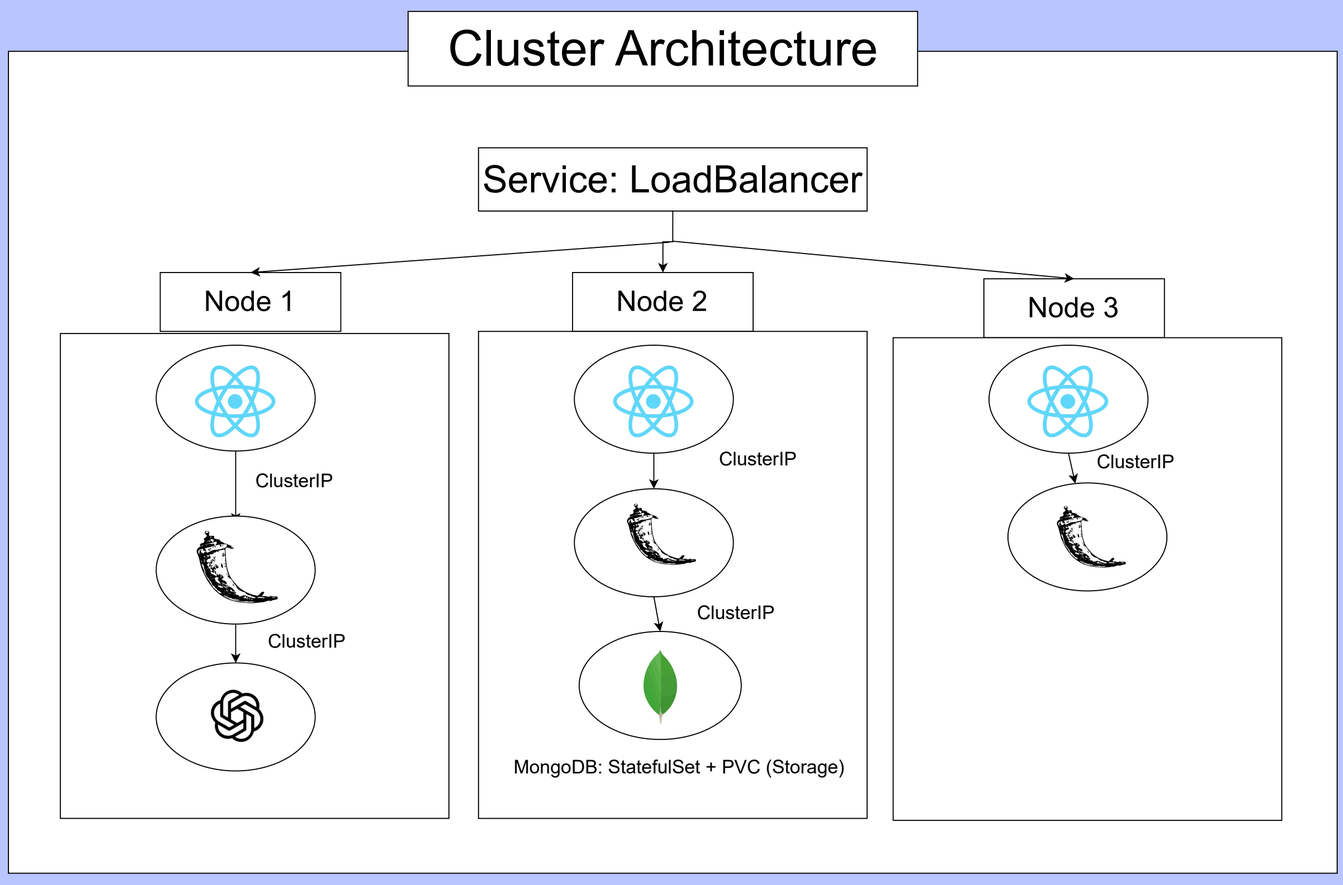






Container Orchestration

In Travel Tracker V2, containers are no longer run manually through Docker Compose. Kubernetes orchestrates them across a cluster of nodes.



Whats next

Finalize Kubernetes Deployment

- Deploy frontend, backend, and MongoDB on Rancher-managed cluster
- Validate LoadBalancer networking and autoscaling behavior

Integrate AI Recommendation Service

- Connect Flask backend with OpenAI API
- Enable personalized travel suggestions and cost-aware activity matching

Enhance Currency Conversion

- Expand ExchangeRate API integration for multiple base currencies
- Cache conversion rates and handle API fallback for outages

Implement Automated Testing

- Create unit and integration test suites for backend and frontend
- Set up CI/CD workflow for continuous validation and deployment

Monitoring & Observability

- Enable pod metrics and logging via Rancher/K8s Dashboard
- Validate fault tolerance, recovery, and backup snapshots

Add Advanced Features

- Trip sharing and document uploads
- Visualization dashboards for budget insights

https://github.com/LivTarsi/Travel-Tracker-V2