ember

GAMIFYING ECO-FRIENDLY TRANSPORTATION

Problem Statement

Environment | Gamifying Eco-Friendly Transportation

Description-

Urban areas face challenges like traffic congestion, air pollution, and carbon emissions due to increased private vehicle usage.

- To promote eco-friendly transportation options (walking, biking, carpooling, public transit), we need an innovative mobile app that uses gamification and social elements to motivate users, reduce private car dependence, and create sustainable cities.
- Daily challenges, leaderboards, and a supportive community foster engagement, while real-time incentives, optimized route planning, and carbon footprint tracking enhance the experience and environmental impact awareness.
- With an intuitive interface and seamless integration, the application must revolutionize urban commuting habits for greener, healthier, and vibrant spaces.

Solution

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A Carbon Footprint Reduction App with Monetization Strategies

Key Features

- Eco Transit
- Carbon Tracking
- Gamified Sustainability
- Community Hub
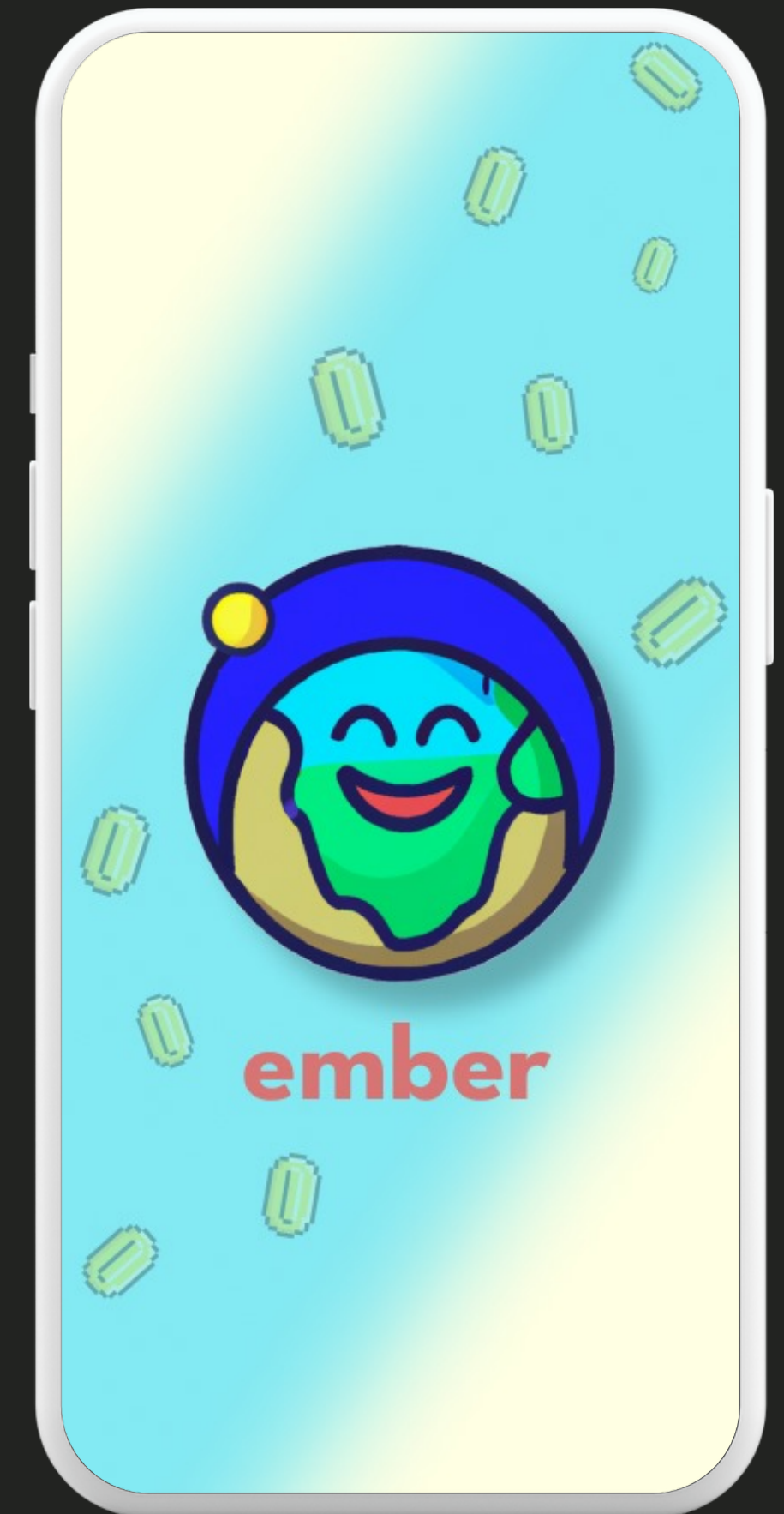- Incentives
- Green Marketplace
- Carbon Offset

Monetisation Strategies

- Advertisements
- Coupons
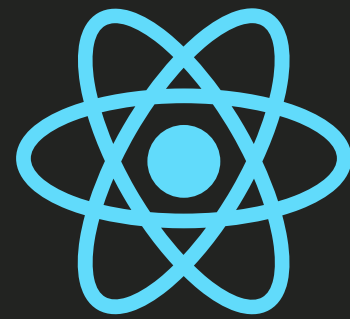- Eco-Products Marketplace
- Location

Figma Designs
Survey Form
Survey Responses

Technology Stack

Frontend

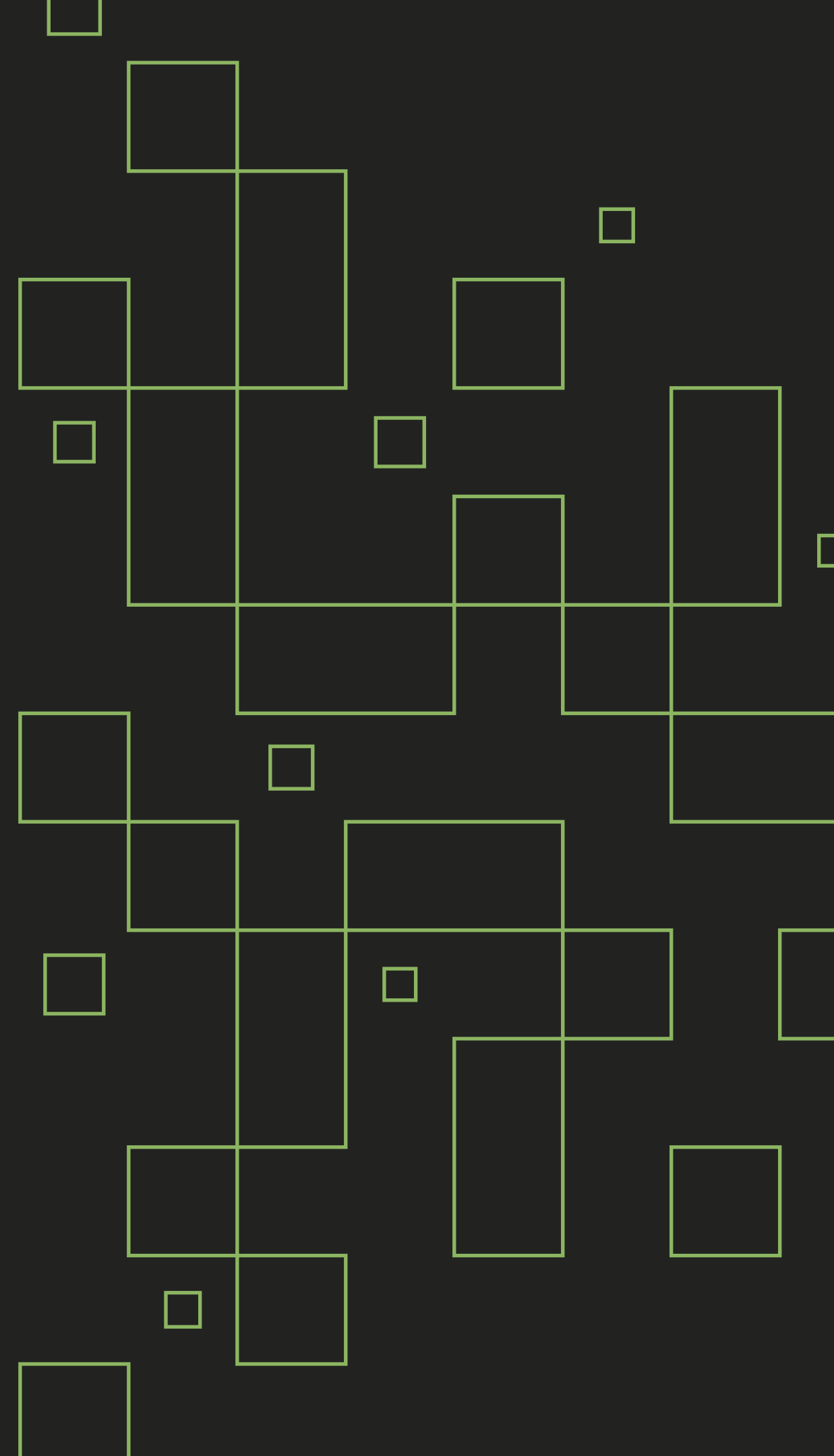
React Native

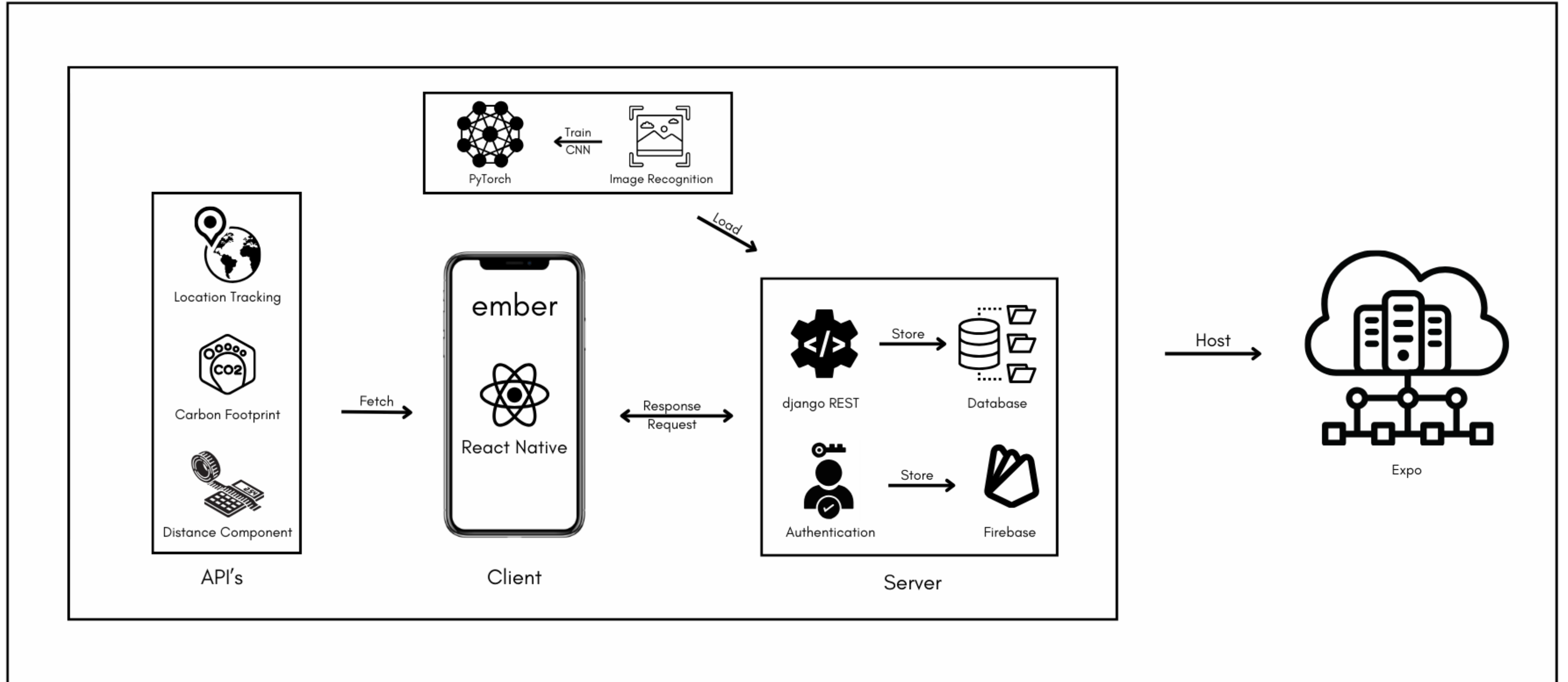Tailwind CSS

Machine
Learning

PyTorch
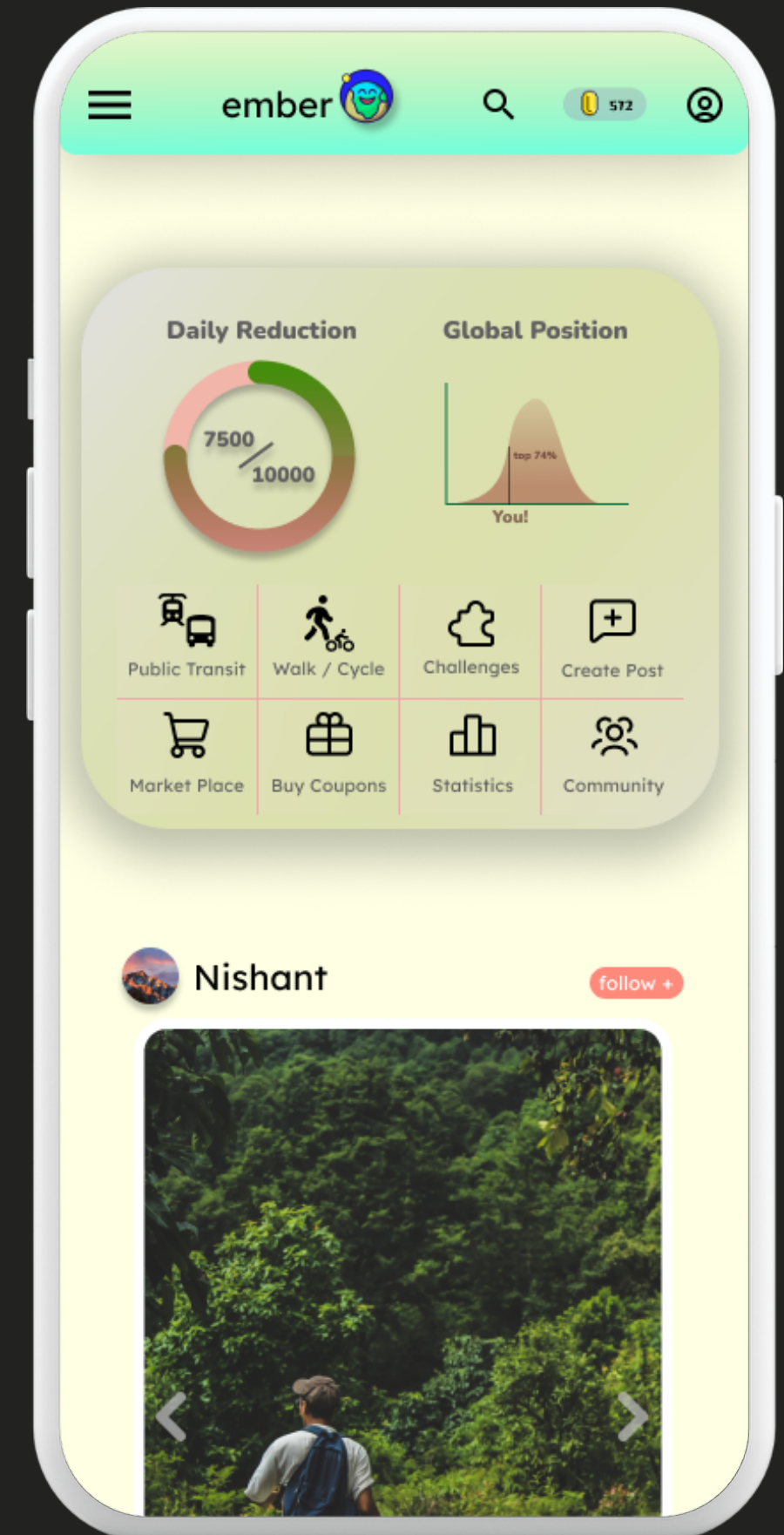
Backend

django REST

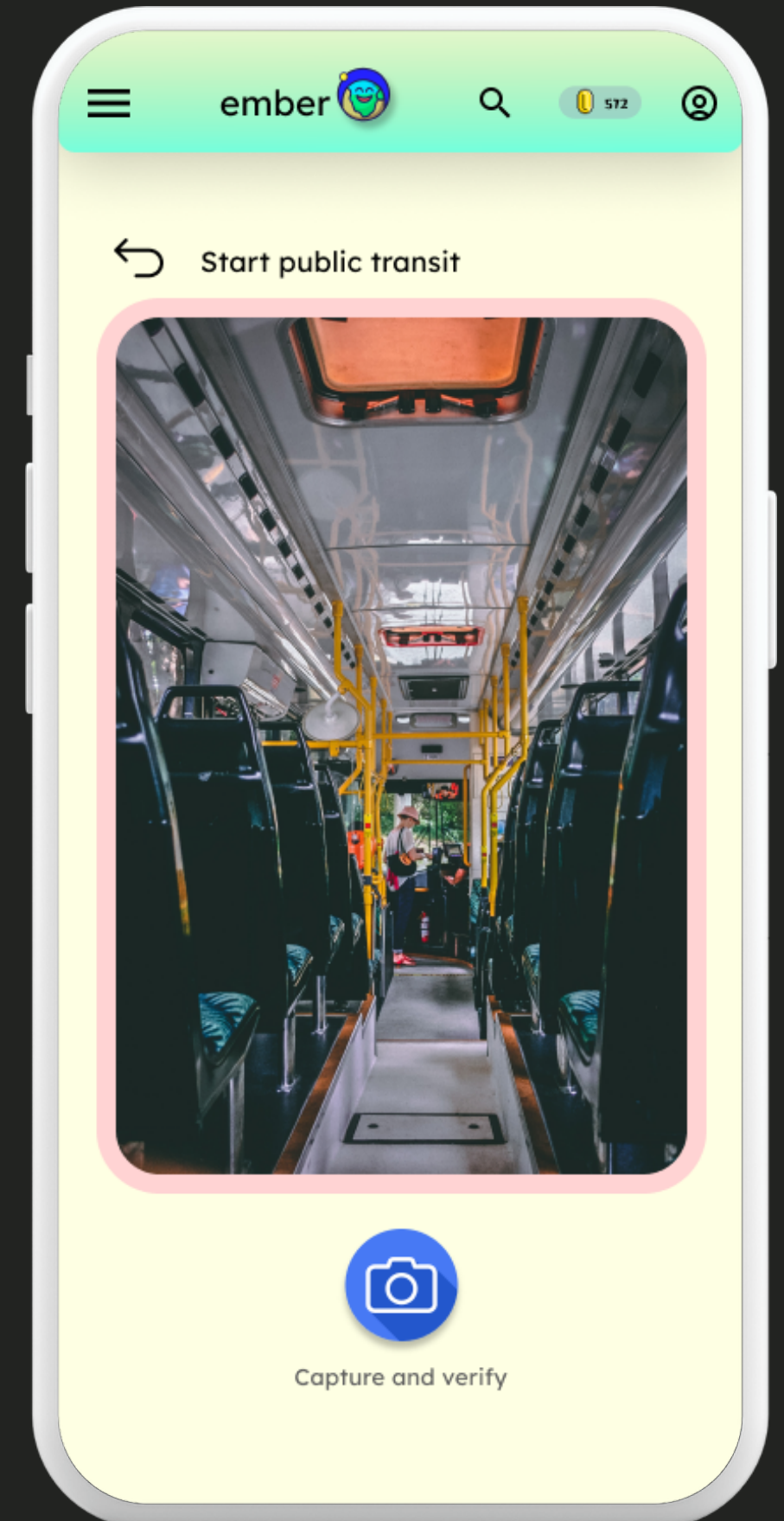# Mechanism

Proof of Concept

General

- Healthier lifestyles & eco-consciousness promotion
- Community engagement in activities
- emcoin rewards for discounts & eco-products
- Vibrant, like-minded community
- Broad audience appeal with deals & coupons
- Revenue from ads & partners

Transitization

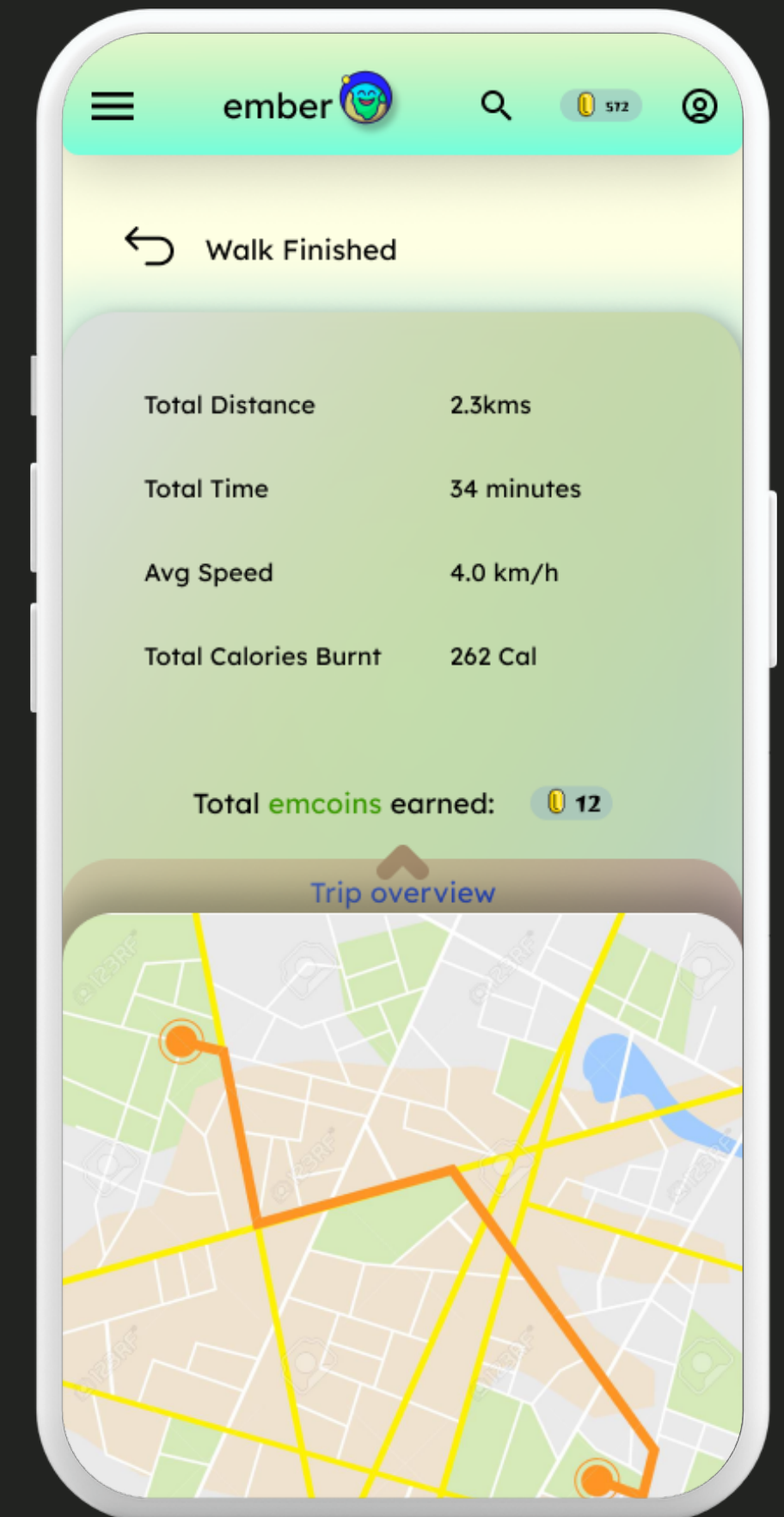## Incentivizing Public Transit

- Capture in-app transit photos for recognition
- Verify location for minimum distance travelled
- Scores based on Carbon Footprint Reduction
- Use of Google's Distance Matrix API
- Daily cap on emcoins (in-app currency) earnings

  - **Public Transit API**
  - **Google Maps Transit API**

Prospect

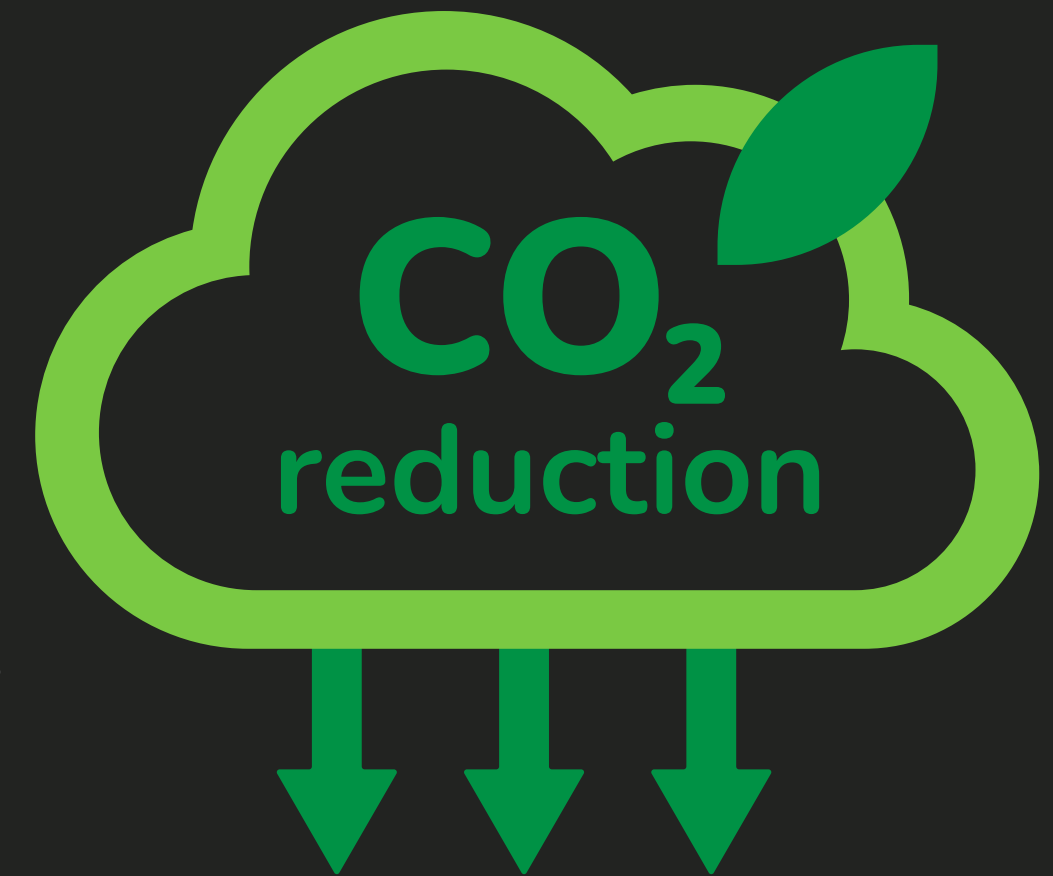## Vision for Walking and Cycling

- Reinventing tracking with motivation
- emcoins through distance and speed algorithm
- Expanded incentive system for cycling
- Daily and weekly challenges with rewards
- Community for sharing achievements

  - **Direction API**
  - **Here API**

Greening

Carbon Footprint Reduction

- Eco-friendly commuting promotion
- emcoins for carbon reduction
- Periodic green challenges for extra emcoins
- Eco-product marketplace with emcoin redemptions
- Partnerships with eco-initiatives

  - **myclimate API**
  - **travelco2 API**

Unique Selling Proposition

- Comprehensive Sustainability
- User-Centric Engagement
- Marketplace Integration
- Monetization Diversification
- Data Privacy
- Tangible Impact
- Partnership Potential

References

- **IEA: International Energy Agency. (1985-2021). Greenhouse Gas Emissions from Energy Data Explorer**
- **Our World in Data: Global Change Data Lab. (2022). Outdoor Air Pollution**
- **Our World in Data: Global Change Data Lab. (2022). Outdoor Air Pollution**
- **Here Technologies. Public Transit API**
- **Google Developers. Transit API**
- **Google Developers. Directions API**
- **Here Technologies. Here API**
- **myclimate. myclimate API**
- **TravelCO2. travelco2 API**