

🌿 EcoRoute Frontend

This is the **frontend** of EcoRoute – a smart route planning web app that helps users plan sustainable journeys with interactive maps, live weather updates, and CO₂ emission tracking.

🌐 **Part of the EcoRoute Project** → [\[See Full Project Overview\]\(../README.md\)](#)

🚀 Features

- ☑ Interactive maps with shortest route highlights
- ☑ Live weather updates at every route point
- ☑ CO₂ emission tracking using Climatiq API
- ☑ Add custom checkpoints for personalized routes
- ☑ Responsive design for mobile, tablet, and desktop
- ☑ Smooth animations with Framer Motion

🧩 Tech Stack

Framework/Library	Purpose
React.js (Vite)	Frontend framework
Tailwind CSS	Utility-first CSS styling
DaisyUI	UI components (Tailwind)
Framer Motion	Animations & transitions
Axios	API requests
React Icons	Icon library

🌐 APIs Used

API	Purpose
Geoapify API	Geocoding & Reverse Geocoding
OpenWeather API	Real-time weather updates
Climatiq API	CO ₂ emission estimation

⚡ Getting Started

📦 Prerequisites

- Node.js (v16+ recommended)
- npm or yarn

📦 Installation

1 Navigate to the frontend folder:
``bash
cd client

2 Install dependencies:

```
npm install  
# or  
yarn install
```

3 Create a `.env` file in the `client` directory:

```
VITE_GEOAPIFY_API_KEY=YOUR_GEOAPIFY_API_KEY  
VITE_WEATHER_API_KEY=YOUR_WEATHER_API_KEY  
VITE_CLIMATIQ_API_KEY=YOUR_CLIMATIQ_API_KEY
```

4 Start the development server:

```
npm run dev  
# or  
yarn dev
```

5 Open the app in your browser:

```
http://localhost:5173
```

🔧 Libraries & Tools

- [React.js](#)
- [Vite](#)
- [Tailwind CSS](#)
- [DaisyUI](#)
- [Framer Motion](#)
- [Axios](#)

🤝 Contribution

Have ideas or improvements? Fork the repo, make your changes, and submit a pull request.

