EcoAwaken Project Documentation

1 Project Overview

EcoAwaken is a web platform dedicated to raising awareness about climate change, its causes, effects, and potential solutions. The project combines educational content with a weather application to provide users with both information and real-time environmental data.

2 Technology Stack

- **HTML5**: Web page structure
- **CSS3**: Styling and responsive design
- **JavaScript**: Interactive features
- **Vite**: Build tool and development server
- **Font Awesome**: Icons
- **AOS**: Scroll animations

3 Key Features

1. Responsive Design

- Mobile-first approach
- Adaptive layouts
- Flexible navigation

2. Weather Application

- Real-time weather data (OpenWeatherMap API)
- Temperature conversion
- Location-based information
- City search

3. Theme System

- Dark/Light mode toggle

- Persistent preferences

- Smooth transitions

4 Project Structure

```
EcoAwaken/
        public/
            assets/
                    logo.png
            components/
                    causes.html
                    effects.html
                    solutions.html
                    weather-App.html
                    contact.html
            css/
                    style.css
                    sections/
            js/
                main.js
                menu.js
                navigation.js
                theme.js
                weather-app.js
                config.js
        index.html
        package.json
        vercel.json
        _redirects
```

5 Section Details

1. Home Page (index.html)

- Hero section with climate change awareness

- Quick navigation

- Featured content

- Call-to-action buttons

2. Causes Section (causes.html)

- Greenhouse gas emissions
- Deforestation
- Industrial activities
- Transportation impact

3. Effects Section (effects.html)

- Rising temperatures
- Sea level rise
- Extreme weather events
- Biodiversity loss

4. Solutions Section (solutions.html)

- Renewable energy
- Sustainable practices
- Individual actions
- Policy recommendations

5. Weather Application (weather-App.html)

- Real-time weather data
- Location-based forecasts
- Temperature conversion
- Weather conditions
- Humidity and wind speed

6. Contact Section (contact.html)

- Contact form
- FAQ section
- Newsletter signup
- Social media links

6 Development Setup

1. Prerequisites

- Node.js

- npm or yarn

2. Installation

```
npm install
```

3. Development Server

```
npm run dev
```

4. Build

```
npm run build
```

7 API Integration

Weather API (OpenWeatherMap)

- **Endpoint**: api.openweathermap.org

- **Features**:

  - Current weather data
  - Temperature conversion
  - Weather conditions
  - Wind and humidity data

8 Security

- API keys in environment variables

- Local storage for theme preferences

- No sensitive user data collection

9 Deployment

- **Platform**: Vercel

- **Configuration**:

  - Static file serving
  - Client-side routing
  - Environment variables