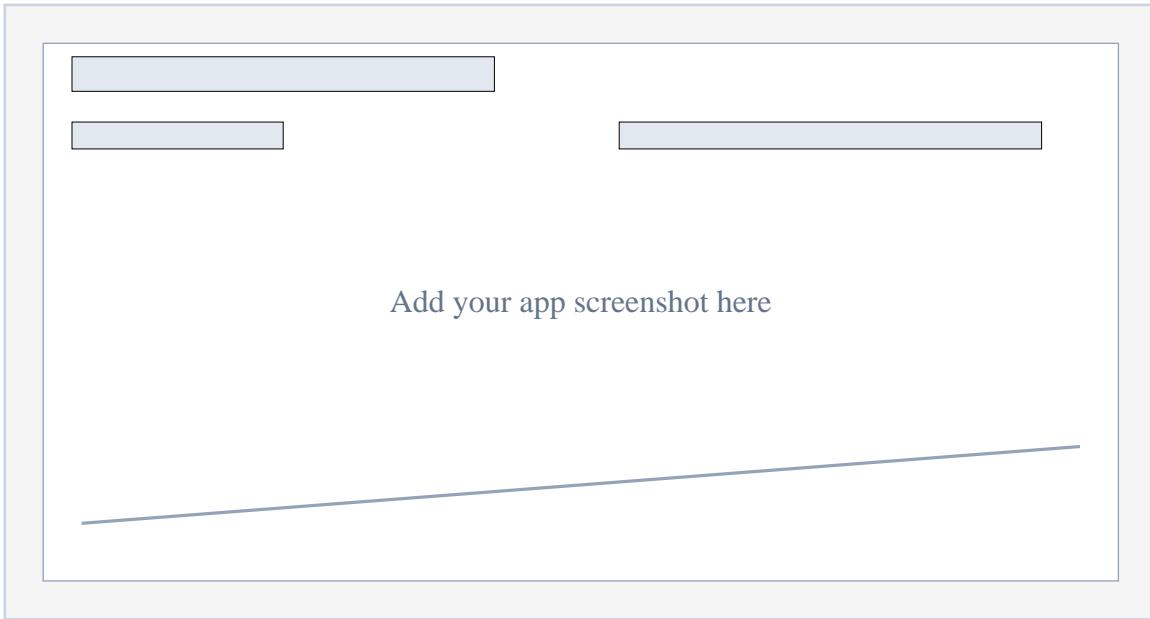


AtmoApp — Modern Weather App (Vite + React)

A fast, global weather app with live search, hourly & 7-day forecast, UV, sunrise/sunset, wind, humidity, and AQI — powered by OpenMeteo (no API keys).



Tip: Save a screenshot from your dev server as public/screenshot.png and replace this placeholder image when exporting.

■ Features

- ■ Global city search (OpenMeteo Geocoding)
- ■■■ Live weather: current, hourly (24h), daily (7d)
- ■ UV, ■ sunrise/sunset, ■ wind, ■ humidity
- ■■■ Air quality (US AQI) when available
- ■■■ Unit toggle °C/°F (persisted)
- ■ Instant dev with Vite, no API keys

■ Tech Stack

- Vite + React 18
- Pure CSS (Tailwind-like design via custom CSS)
- framer-motion (micro-animations)
- lucide-react (icons)
- recharts (hourly temp chart)
- OpenMeteo APIs (geocoding, forecast, air quality)

■ Getting Started

Prerequisites

- Node.js 18+ (recommend 20+)
- npm

Install

```
npm install
```

Run (dev)

```
npm run dev
# open http://localhost:5173
```

Build (prod)

```
npm run build
npm run preview
```

■ Project Structure

```
src/
  api/
    openMeteo.js      # API calls (geocode, forecast, air quality)
  hooks/
    useDebounce.js   # Debounced input for search
  components/
    WeatherApp.jsx  # Functional app (live data)
    WeatherAppMock.jsx # (optional) Pure mock UI (no API) – not mounted
  App.jsx
  main.jsx
  styles.css         # Pure CSS theme and layout
  index.html
```

■ APIs (OpenMeteo)

Service	Endpoint
Geocoding	https://geocoding-api.open-meteo.com/v1/search
Forecast	https://api.open-meteo.com/v1/forecast
Air Quality	https://air-quality-api.open-meteo.com/v1/air-quality

No API keys required. Requests are made client-side. See `src/api/openMeteo.js` for query params and normalization.

■ Configuration

- Units: °C/°F toggle persists in `localStorage`.
- Selected city: persists in `localStorage`.
- Search debounce: default 350 ms (`useDebounce`).

Tweak defaults in `src/components/WeatherApp.jsx` and `src/hooks/useDebounce.js`.

■ Scripts

```
{
  "scripts": {
    "dev": "vite",
    "build": "vite build",
    "preview": "vite preview"
  }
}
```

■ Troubleshooting

Blank page / root not found

Ensure `index.html` contains:

```
<div id="root"></div>
<script type="module" src="/src/main.jsx"></script>
```

“Identifier 'App' has already been declared”

Do not mount in `App.jsx`. Mount only in `src/main.jsx`.

CORS or network errors

Retry later; OpenMeteo can be rate-limited. AQI may be null in some regions (handled).

■ Accessibility & ■ Performance

- Keyboard-friendly search (basic).
- Lightweight CSS, no SSR required.
- Consider caching (`sessionStorage` with TTL) for geocode & forecast.

■ Roadmap

- [] “Use my location” (geolocation + reverse geocode)
- [] Recent searches
- [] Loading skeletons + retry UI
- [] Keyboard navigation ($\uparrow/\downarrow/\text{Enter}$) for search results (ARIA listbox)
- [] Dark mode (CSS variables)
- [] Basic offline cache (sessionStorage with TTL)

■ Contributing

PRs welcome. Keep code simple (KISS), documented, and follow project style.

■ License

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