



## Software Requirement Specification (SRS)

Project Title: **GreenAI Comparometer**

### Team Members

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### Software Requirements

Category	Tool	Purpose
Frontend	React.js, Tailwind CSS, HTML, JS, Streamlit	Build UI, style components, lightweight interactive dashboards
Backend	Python (Flask/Django), REST API	Build API services and logic layer, Communication between frontend and backend
Carbon Trackers	CodeCarbon, eco2AI, CarbonTracker, Impact Tracker, ML CO Calculator, EnergyVis	Lightweight, GPU/CPU-based real-time carbon tracker, Tracks carbon and energy during training, Monitors resource usage and logs metrics, Visualize model energy consumption, Online estimation based on inputs
Database	SQLite / Firebase / PostgreSQL	Store model run logs, metrics, user data
Dev Tools	VS Code, GitHub, Postman	Code editor, Version control and collaboration, API testing
Deployment	Streamlit / Heroku / Render	Optional online hosting

### Hardware Requirements

Component	Specification	Purpose
Processor	Intel i5+ / M1+	Model training & development
RAM	8–16 GB	Efficient multitasking
GPU (Optional)	GTX/RTX or Colab	Deep learning support
Disk Space	50 GB+	Dataset/model storage
OS	Windows/Linux/macOS	Compatibility
Internet	Stable broadband	Deployment, API calls