**Prerequisites**

**🧩 Software Required**

| **Tool** | **Version (min)** | **Download Link** |
| --- | --- | --- |
| Node.js | 18+ | [nodejs.org](https://nodejs.org) |
| Python | 3.10+ | [python.org](https://python.org) |
| PostgreSQL | 12+ | [postgresql.org](https://www.postgresql.org/) |

**🔧 1. Clone or Extract Project**

If ZIP:

* Extract to: C:\Users\<you>\Inferrix\_AI\_Agent\_Demo\_Complete\_Final

**🛠️ 2. Setup PostgreSQL**

**🔹 Step 1: Create DB**

Open pgAdmin or psql terminal and run:

sql

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CREATE DATABASE inferrix\_ai;

**🔹 Step 2: Run schema and insert test user**

Open psql terminal and run:

bash

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psql -U postgres -d inferrix\_ai -f postgres/schema.sql

psql -U postgres -d inferrix\_ai -f postgres/dummy\_users.sql

**📁 3. Configure .env**

Create a copy of .env.example and rename it to .env inside /backend.

**Example .env:**

env

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POSTGRES\_URL=postgresql://postgres:<your\_password>@localhost:5432/inferrix\_ai

JWT\_SECRET\_KEY=your\_jwt\_key\_here

MCP\_BASE\_URL=http://localhost:8001/api/inferrix

LANGCHAIN\_API\_KEY=your\_langsmith\_key\_here

GEMINI\_API\_KEY=your\_gemini\_key\_here

Replace <your\_password> with your actual PostgreSQL password.

**🚀 4. Run Backend**

**🔹 Step 1: Set up virtual environment**

bash

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cd backend

python -m venv venv

venv\Scripts\activate

pip install -r requirements.txt

**🔹 Step 2: Run FastAPI backend**

bash

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uvicorn main:app --reload

* Backend will run at: http://localhost:8000

**🌐 5. Run MCP Server**

Open a new terminal and run:

bash

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cd backend

python mcp\_server.py or uvicorn mcp\_server:app --port 8001 --reload

* MCP will run at: http://localhost:8001

**💻 6. Run Frontend (React)**

bash

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cd frontend

npm install

npm run dev

* Open browser → <http://localhost:5173>

**🔑 7. Login Credentials**

Use test user (from dummy data):

text

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Email: tech@inferrix.com

Password: admin@123

**🧪 8. Sample Prompts for Demo**

| **Prompt** | **Feature** |
| --- | --- |
| Show me critical alarms in Tower A | Alarm Summary |
| Acknowledge the smoke alarm in Block B | Alarm Action |
| What is the current temperature in HVAC-01? | Telemetry |
| Is HVAC-01 sending telemetry? | Health Check |
| Who am I? | Identity from JWT |
| Predict overheat risk due to heatwave | Gemini + sensor data |