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# 📂 Decision Node Graphing Tool - Project Structure

/decision-node-graphing-tool
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├── 📂 backend/                  # Backend API (Flask/FastAPI)
│   ├── app.py                  # Main API entry point
│   ├── routes.py               # API route definitions
│   ├── database.py             # Legacy (to be removed)
│   ├── neo4j_manager.py        # Handles Neo4j queries (NEW)
│   ├── config.py               # Configuration settings
│   ├── requirements.txt        # Backend dependencies
│
├── 📂 graph_processing/         # Graph-related operations
│   ├── graph_builder.py        # **Builds graph from Neo4j instead of
CSV** (UPDATED)
│   ├── graph_analysis.py       # Analyzes graph structure
│   ├── graph_export.py         # Exports graph structures
│
├── 📂 frontend/                 # Frontend UI (Dash/Plotly)
│   ├── app.py                  # Launches Dash UI
│   ├── layout.py               # UI layout components
│   ├── callbacks.py            # Manages user interactions
│
├── 📂 database/                 # Database models & queries
│   ├── models.py               # **Defines Neo4j schema (UPDATED)**
│   ├── neo4j_manager.py        # **Manages Neo4j CRUD operations
(NEW)**
│   ├── seed.py                 # **Seeds initial data into Neo4j**
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├── 📂 config/                   # Configuration files
│   ├── .env                    # Environment variables
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|   ├── config.py               # Reads config settings
|
├── 📂 tests/                    # Unit tests
|   ├── test_api.py             # API tests
|   ├── test_graph.py           # Graph processing tests (UPDATED for
Neo4j)
|
├── 📂 docs/                     # Documentation
|   ├── system_architecture.md # System design & module breakdown
(UPDATED)
|   ├── api_reference.md        # API documentation (UPDATED)
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├── .gitignore                  # Git ignored files
├── README.md                   # Project overview (UPDATED)
├── docker-compose.yml          # Docker configuration (if needed)
└── requirements.txt            # Python dependencies


# Clone the repository, set up a virtual environment, and install
dependencies:
git clone <repo-url>
cd decision-node-graphing-tool
python -m venv venv
source venv/bin/activate  # Windows: venv\Scripts\activate
pip install -r requirements.txt

# To run Neo4j (ensure Neo4j is installed and running)
neo4j console

# Seed Neo4j with initial data
python database/seed.py
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# To run the backend:
python backend/app.py

# To run the frontend:
python frontend/app.py
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