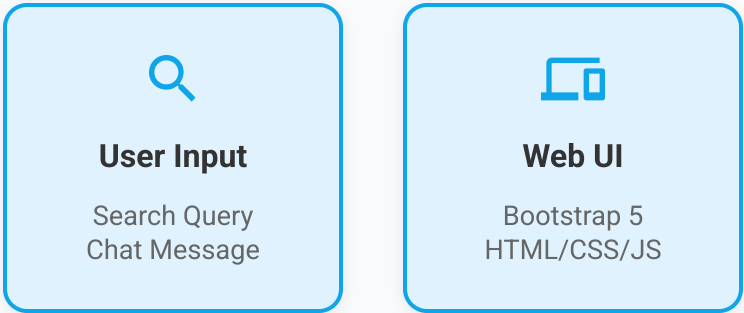
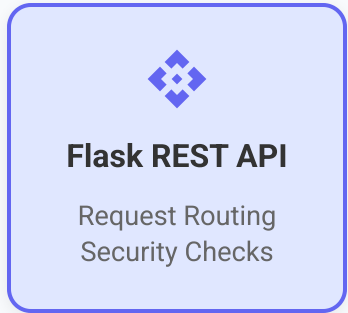


CyberSpace Architecture

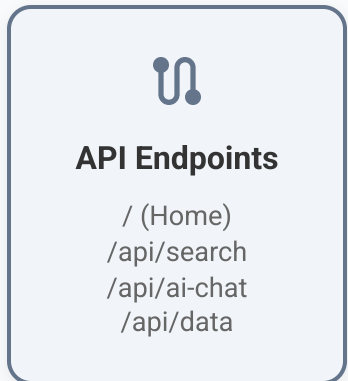
AI-Powered Cybersecurity Knowledge Platform - Technical Overview



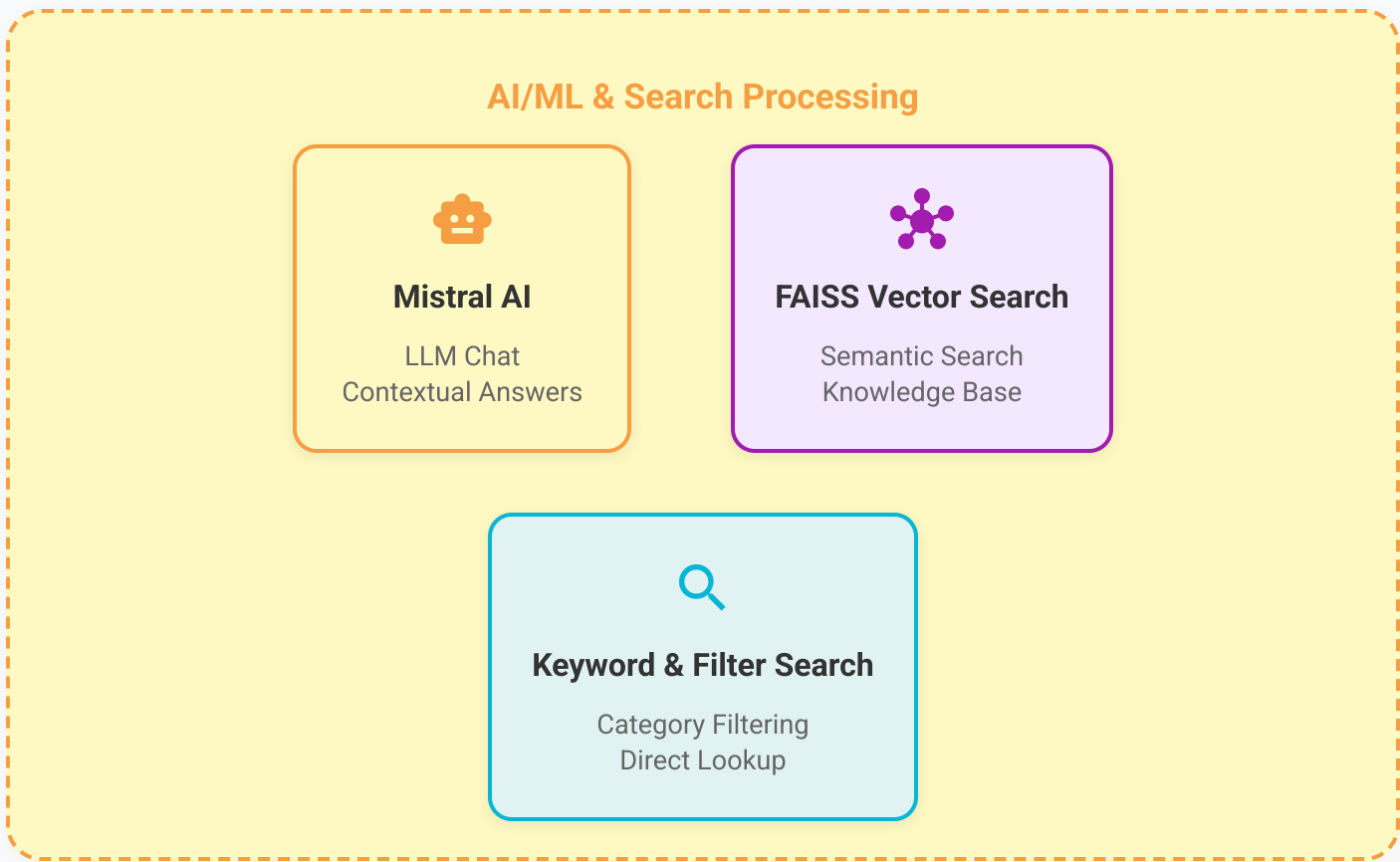
User submits a search or chat message via the web interface



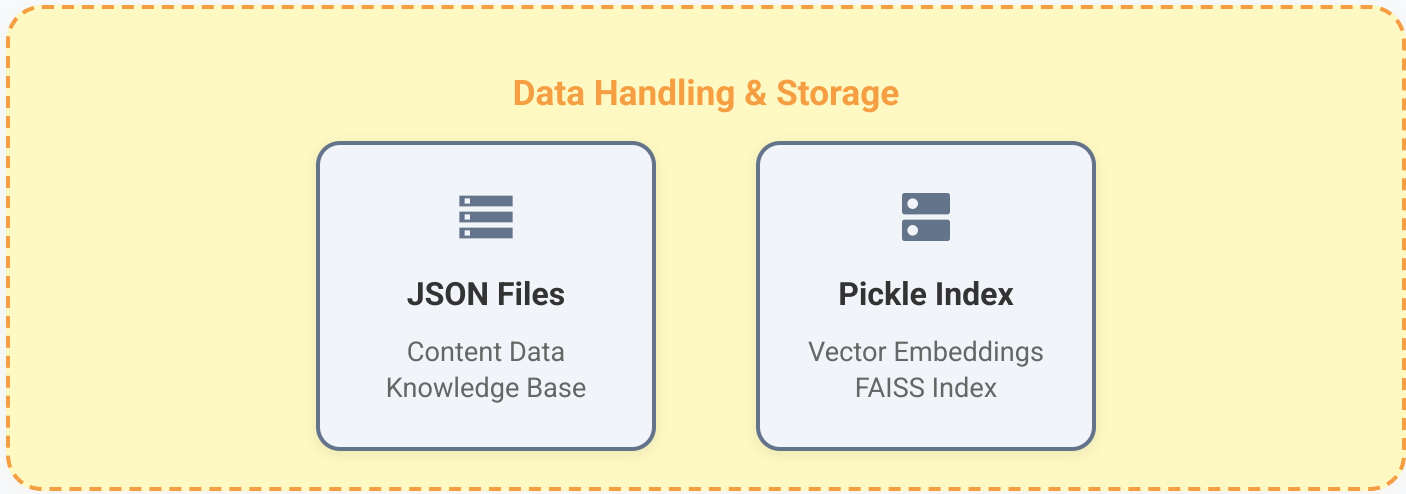
API receives request and routes to appropriate service



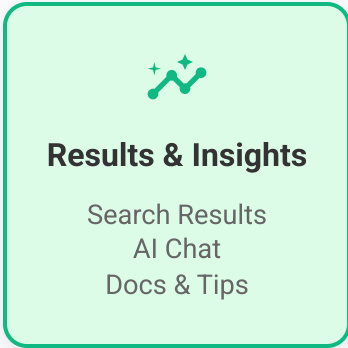
Routes determine which backend logic to invoke



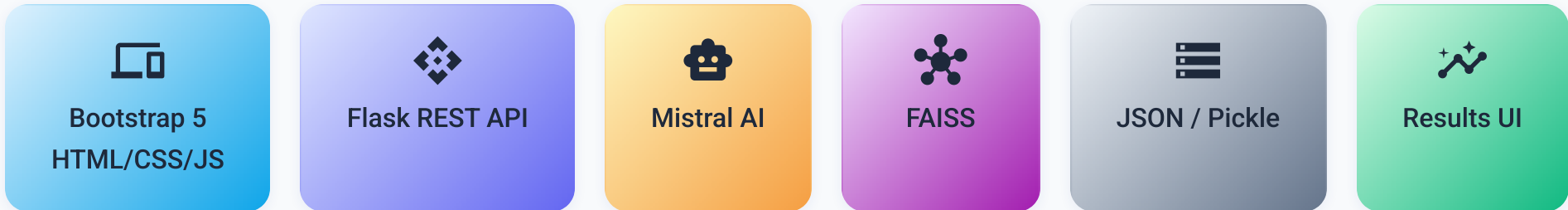
AI, vector, and keyword search process the query and retrieve relevant knowledge



Data is loaded, indexed, and searched as needed



User receives results, chat responses, and documentation



★ System Features & Capabilities

📁 Input & UI

Search & Chat

Responsive Web UI

Category Navigation

Docs & Tips

⚙️ API & Routing

RESTful Endpoints

/api/search

/api/ai-chat

/api/data

Security Checks

🧠 AI & Search

Mistral LLM

FAISS Vector Search

Keyword & Filter Search

Contextual Answers

📁 Data Handling

JSON Content

Pickle Index

Efficient Loading

Knowledge Base

📄 Output

Instant Results

AI Chat

Docs & Tips

Responsive UI

📄 How the Application Works

- User enters a search or chat message in the web UI.
- The Flask REST API receives the request and determines the correct route (e.g., `/api/search`, `/api/ai-chat`).
- The route invokes backend logic: semantic search (FAISS), AI chat (Mistral), keyword search, or data retrieval.
- Data is loaded from JSON files or Pickle index as needed for the query.
- The system returns results, chat responses, or documentation to the user in the web UI.