

Project Demo

Put the bricks together

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Project Idea

- Chat2MapMetadata: Interactive geospatial data exploration
- Core features:
 - Natural language interface for querying spatial data
 - Semantic search for metadata fields
 - Interactive map visualization
 - Automated location navigation

Data Source: WAMEX

- Western Australian Mineral Exploration Reports (WAMEX):
 - Comprehensive geological data
 - Spatial references and metadata
 - Historical exploration records
 - Technical reports and findings
- Data format:
 - GeoJSON/Shapefile structure
 - Geometry fields for spatial data
 - Rich metadata fields for context

Requirement Analysis

A large, faint watermark logo is centered on the slide. It consists of a light blue circle containing the letters 'NTLP' in a bold, sans-serif font. The 'N' and 'L' are light blue, while the 'T' and 'P' are a slightly darker shade of blue.

Requirement Analysis

- 1 Load geojson/shapefile and save them to database
- 2 Embed and store the vector of the metadata
- 3 A map visualization of geometry field together with metadata
- 4 An API endpoint take chat query and search the vector db to locate the relevant record
- 5 Frontend UI/UX be able to navigate through the map



System Design

Platform

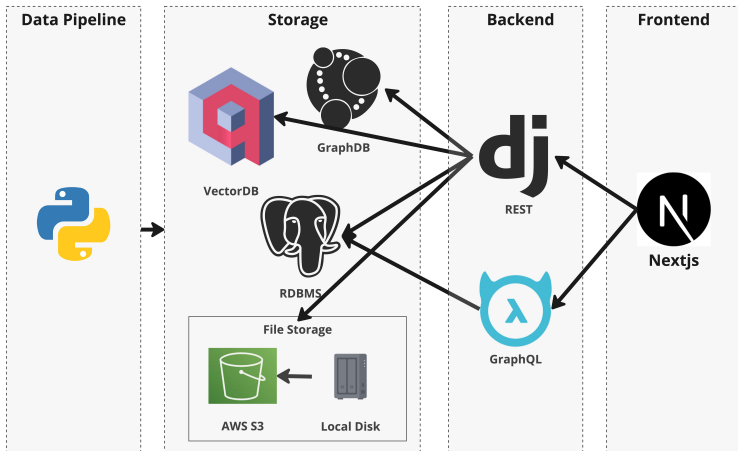
Natural Language Process and Technical Language Processing Group
from The University of Western Australia

Figure: Our Architecture

