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LABOUR DIGITAL

AI Contact Extraction Module

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PROBLEM DESCRIPTION

Manual processing of unstructured contact data and complex relationships from JSON files is inefficient and error-prone.

SOLUTION ARCHITECTURE

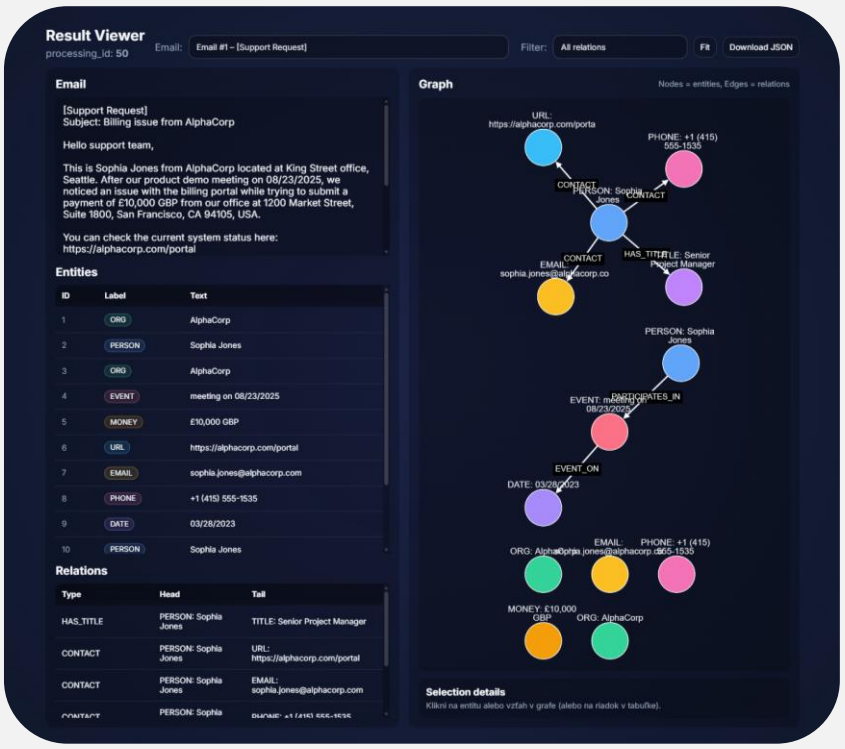
A Python-based backend infrastructure integrating a custom-trained GLiNER model fine-tuned on manually annotated email datasets for high-precision entity recognition. The system employs advanced NLP techniques for unstructured data processing and subsequent mapping of complex relationships within a relational structure.

HOW IT IS USED

Users upload a JSON file with emails to extract. The model extracts the contacts and a visualization of the relationship links is displayed on the page. A copy of this data will be downloadable from the email sent.

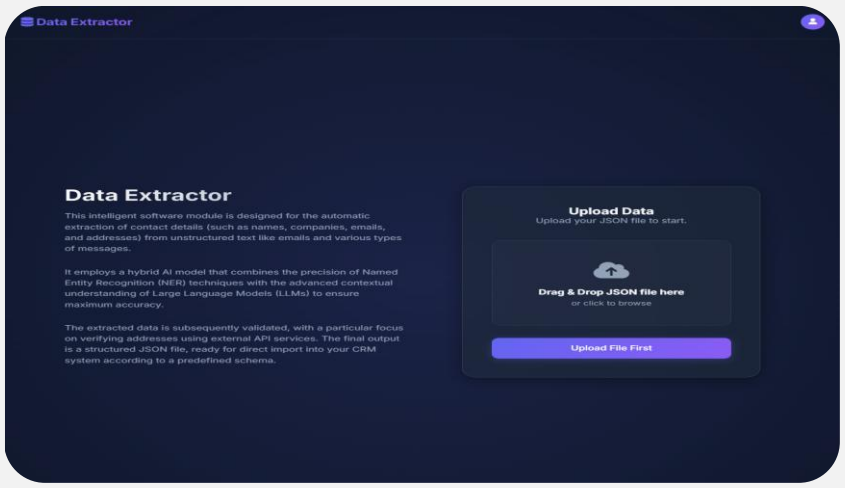
SOLUTION FEATURES

- Automated JSON extraction
- Email integration
- Interactive network visualization
- Intelligent relationship identification
- Domain-specific entity extraction
  PERSON, ORG, EMAIL, PHONE, ORG_ADDRESS, TITLE, DATE, EVENT, URL, SOCIAL_URL



SOLUTION EVALUATION

The system performs AI-based extraction of domain-specific entities including persons, organizations, contact details, events, and addresses, followed by automatic identification of relationships between them.



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