## H

# In Heir.Al

Smart and secure property dispute management, at your fingertips

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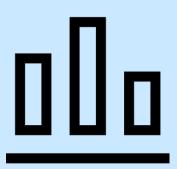
### The Problem



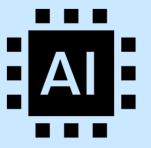
High costs and legal complexity in title resolution and property inheritance



Slow and inefficient dispute resolution due to prolonged legal procedures and lack of support



Absence of system for reporting and aggregating data on vulnerable properties



Lack of deploy-able, privacy-compliant software solutions for intelligent legal assistance

## Our Solution



Intelligent document summarization, case resolution and understandable insights to commoners



Contextual chatbot with custom legal knowledge base without sacrificing privacy



Geo-spatial insights for understanding patterns of vulnerable properties



Empowering community and legal professionals for management and reporting vulnerable properties

### Features



Case creation with document upload and summarization



Anonymous reporting and outreach on vulnerable properties



Pluggable system with redaction and automated deletion of data



GIS based identification of at-risk property



Tailored, updated knowledge base for accurate assistance

### Tech Stack

**Frontend** Infrastructure **Backend** GitHub Actions FastAPI LangChain **Azure Al search** Fluent UI
Insights **Azure SDK** OpenCage MapLibre **Azure Registry Azure Functions** Microsoft Azure Blob Storage **Azure AI Foundry** Azure Cosmos DB

## Approach



#### User-First Design:

Focused on intuitive, accessible interfaces for both legal professionals and the public.

#### Al Integration:

Automated legal research, document analysis and chat bot assistance for pluggable, comprehensive analysis.

#### Responsible AI:

Built to preserve privacy, fairness, inclusive, transparency and understandably by simple interfaces.

#### Streamlined data management:

Real-time case and report management and aggregation, external knowledge base, GIS and data integration for actionable insights.

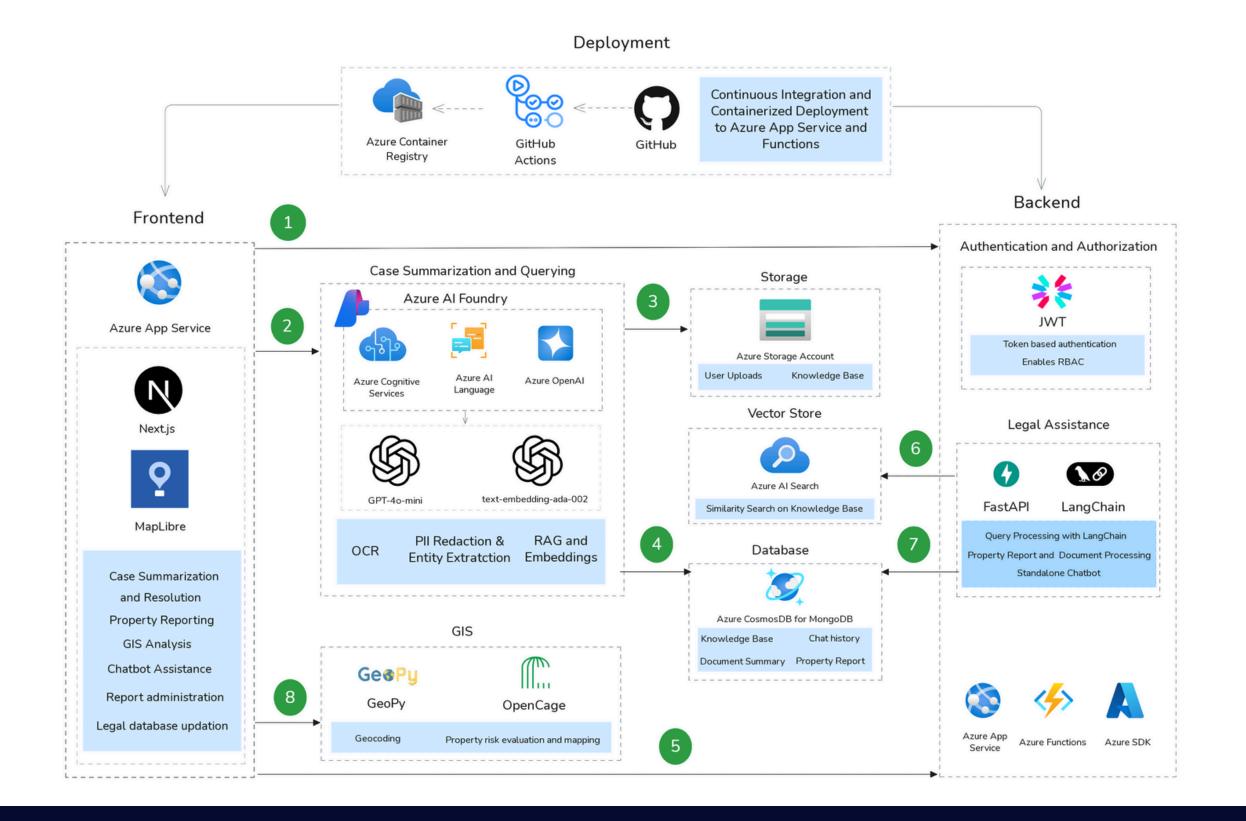
#### Security and compliance:

Ensure sensitive information is perprocessed for maintaining compliance to regulatory requirements

#### Collaboration & Transparency:

Enabled role-based access and clear audit trails to foster trust and teamwork among users

## Architecture







Improved policy
comprehension among
marginalized sections allowing
legal awareness regarding their
rights around inheritance



Reduced property and title disputes due to accessible platform and improved awareness among the general public reducing overhead on legal administrators.



Improved analysis of property risks by crowdsourcing data from community people, allowing comprehensive enhancement and coverage of open data



Reduced privacy breaches due to redaction of information, allowing accelerated legal adoption

### **Use Cases**

Citizens

To understand their rights, create legal cases for their comprehension and self-resolution of cases, and report vulnerable properties.

To manage, analyze, and resolve inheritance/property disputes efficiently, and understand and analyze property risks in geographic locations.

Legal professionals

NGOs & civic bodies

To gather and advocate for crowdsourced data among community for policy action and advocacy

To understand dispute trends and identify risk areas and plan urban/legal interventions accordingly

Government agencies

# Challenges ®

Ensuring quality of responses when redacted text is used after processing with Azure Al Language.

Performance issues
while using CSFLE in
MongoDB, resulting in
poor user experience
for user-facing
applications.

Accuracy in GIS due to lack of comprehensive dataset and complexity involved in training models.

Computational complexity in PII substitution resulting in performance overhead.

Technical challenges in retrieval of information from documents in structured manner, requiring trained models for different forms.

Improper handling of non-form or non-computer generated PDFs which will need usage of Azure Custom Vision for more tailored training on property form fields for accurate extraction.

## Future Enhancements >>

Implement support and enhance accuracy for scanned documents of low quality for providing comprehensive document summarization.

Training of custom models for field based extraction for structured processing and improved accuracy.

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Enhance the quality of self-hosting for organizations to have control over data processing.

# Team



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## Thank You



GitHub



Demo Video