



# LegalEagleEyeAI

## AGENTIC AI Hackathon

Eagle-eyed clarity to reveal every hidden detail in your documents.

Arulselvi Amirrthalingam (Selvi)



# Why I Choose to create LegalEagleEyeAI?

## The Persuasive Problem of Unread Documents:

Daily, we encounter agreements when registering for events, joining social media platforms, renting vehicles, signing leases, and even accepting hackathon rules.

## My Solution: Making Legal Documents Accessible

- Empowers everyday users to quickly identify risks in documents like rental agreements, terms of service, and contest rules, transforming overwhelming text into actionable insights
- Enhances accessibility through text-to-speech and translation features for users with disabilities or language barriers, ensuring equitable access to critical legal information
- Provides interactive clarification via a dedicated chatbot feature that answers specific questions about clauses and obligations, mimicking a conversation with a legal advisor
- Respects user judgment by incorporating human-in-the-loop review of AI-generated risk assessments, maintaining the appropriate balance between automation and human oversight

In a world where the "I have read and agree" checkbox has become "the biggest lie on the internet," LegalEagleEyeAI stands as a practical tool to transform how we interact with the legal documents that increasingly govern our digital and physical lives.

# Experience Building LegalEagleEyeAI



My journey building LegalEagleEyeAI involved creating a comprehensive system that leverages multiple AI technologies through an agent-based architecture while giving priority to responsible AI principles:

- A modular backend with specialized agents for PDF processing, OCR, risk analysis, translation, and speech synthesis
- A React frontend with intuitive user interfaces for document upload, risk review, chatbot interaction, and multilingual support
- A robust orchestration system using a Manager Agent to coordinate specialized tasks
- Human-in-the-loop (HITL) capabilities allowing users to review and regenerate analysis, ensuring oversight and accuracy

I embedded responsible AI practices throughout the development process by implementing:

- **Transparency** in risk assessment with clear severity labels and explanations
- **Accessibility features** through the Speech Agent, providing text-to-speech functionality for users with visual impairments
- **Language inclusivity** via the Translator Agent, supporting multiple languages
- **Comprehensive error logging** to ensure system reliability and accountability
- **Privacy safeguards** for handling sensitive legal documents

# How Did Agentic Framework Help Build This Solution?



The agentic framework was fundamental to my solution's success:

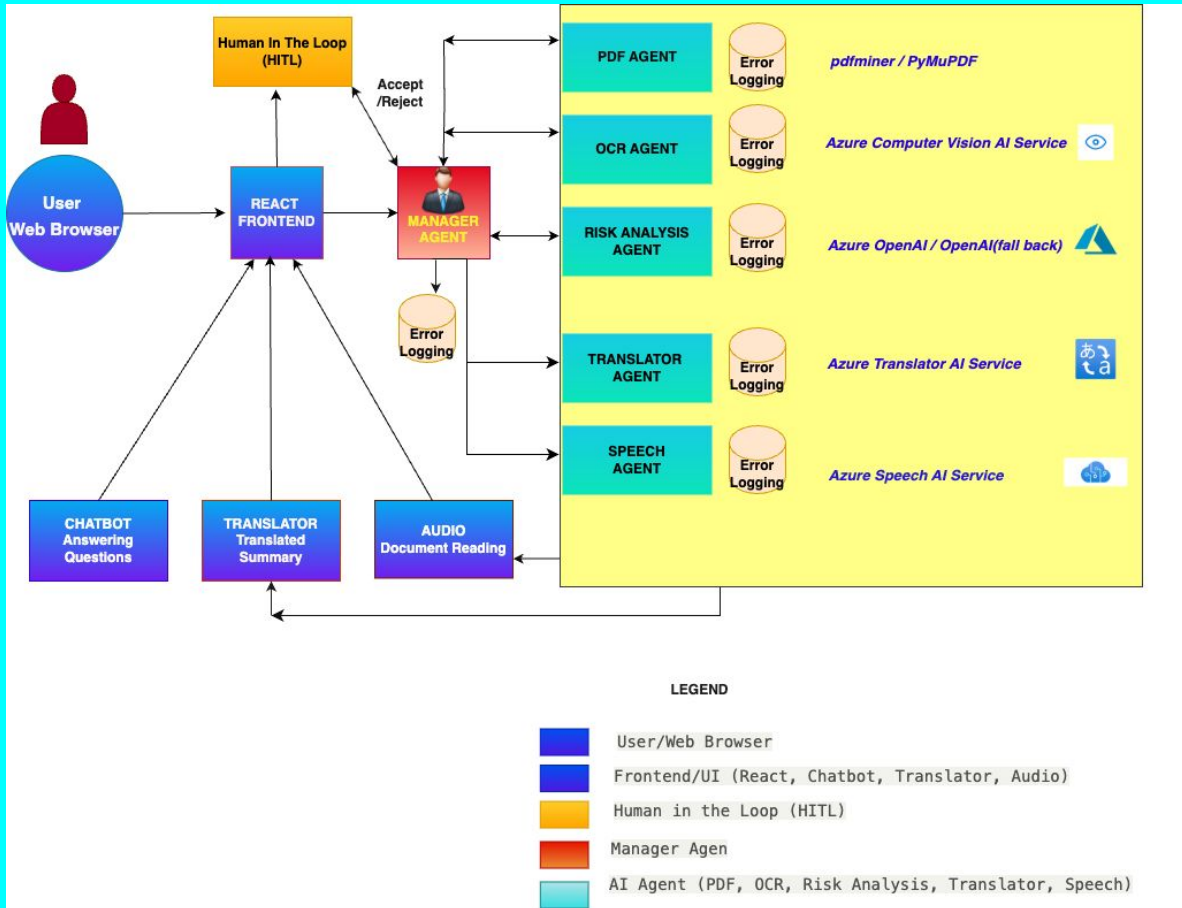
- **Specialized expertise:** Each agent focuses on a specific capability (PDF processing, risk analysis, translation, speech), allowing for modular development and maintenance
- **Flexible orchestration:** The Manager Agent smartly delegates tasks based on document types and user requests
- **Graceful error handling:** Each agent includes dedicated error logging, ensuring system robustness
- **Human augmentation:** The HITL component enables users to provide feedback, improving results and maintaining human oversight
- **Seamless integration:** Agents abstract away the complexity of multiple AI services (Azure Computer Vision, OpenAI, Azure Translator, Azure Speech)

This approach allowed me to build a system that's both powerful and extensible. New capabilities can be added by simply creating new specialized agents without disrupting the existing architecture.

In summary, LegalEagleEyeAI demonstrates how an agentic framework can transform complex AI integration challenges into manageable, specialized components working together to deliver meaningful user value. The architecture's clarity and modularity were key to successfully implementing all planned functionalities.



# LegalEagleEyeAI Architecture Diagram





**LegalEagleEyeAI**  
Live Demo