# MIT | Academy of Engineering

## Department of Computer Engineering

## Presentation for SYProject Design (Review 1) AY 2025-26

## "AI Powered legal document analyzer"

Name: PRN:

Guide:
Mrs. Kavitha.S

Vallabh V Sardesai (202401040041)
Payal V Wani (202401040103)
Vedant S Patil (202401040107)
Tejashri V Kolte (202401040120)

# INTRODUCTION

**Legal Document Analysis:**
The process of examining and understanding legal documents such as contracts, agreements, and policies.
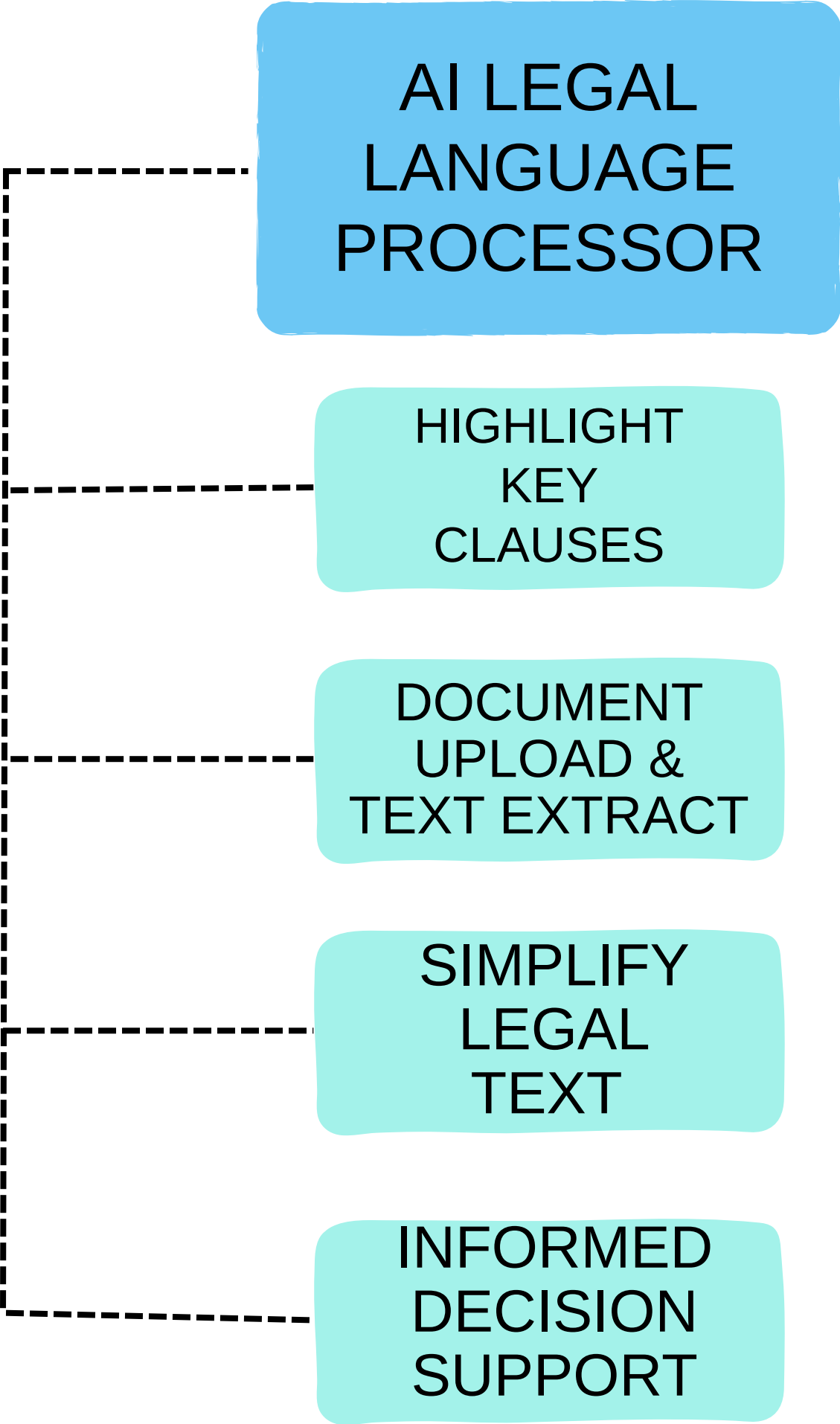
**Challenges for Non-Experts:**
Complexity of Language: Legal language is often complex, full of jargon, and difficult for everyday people to understand.
Risk of Misinterpretation: Misinterpretation can lead to unfavorable decisions or legal risks.

**Why AI-Powered Analysis?**
Automated Extraction and Simplification: AI and Natural Language Processing (NLP) can automatically extract important clauses and simplify legal text.
Accessibility: Makes legal documents accessible and understandable for people without legal training.

AI LEGAL LANGUAGE PROCESSOR

HIGHLIGHT KEY CLAUSES

DOCUMENT UPLOAD & TEXT EXTRACT

SIMPLIFY LEGAL TEXT

INFORMED DECISION SUPPORT

# PROBLEM STATMENT

***To design an AI tool to simplify complex legal documents,***

***extract key clauses, and flag risks for informed,***

***non-expert decision-making.***

# Objective and Scope:

🎯 **Project Objective**
- Automatically extract key clauses and highlight risky terms in easy-to-understand language.

- Build an AI system that simplifies and explains complex legal documents for non-expert users.

🧭 **Project Scope**

- **In Scope:**
- Develop NLP models and a user-friendly interface for document upload, analysis and summary.

- Ensure data privacy, accuracy evaluation and exclude providing formal legal advice.

- **Out of Scope:**
- Providing formal legal advice or interpretation beyond simplification.

# Applications:

- **Legal Document Simplification:**

  Translates complex legal jargon into plain language summaries that are easy to understand.

- **Key Clause Extraction & Explanation:**

  Automatically identifies important clauses (e.g., termination, confidentiality) and explains their meaning in simple terms.

- **Risk Identification:**

  Flags potentially unfavorable or risky clauses to help users avoid hidden pitfalls.

- **Contract Summarization:**

  Generates concise summaries to reduce reading time and enhance comprehension.

- **Pre-Legal Consultation Aid:**

  Helps users understand contracts before seeking professional legal advice, saving time and cost.

- **Educational Tool:**

  Assists individuals and students in learning about legal document structure and terminology.

- **Accessibility Enhancement:**

  Supports users with low legal literacy, language barriers, or disabilities in understanding legal documents.

# 🧰 Software Requirements

| Category | Tools / Technologies | Purpose |
|---|---|---|
| Operating System | Windows | Development environment |
| STORAGE / INTEGRATION | AWS CLOUDFRONT / AWS S3 BUCKET | To store the database and help in integration with IDE |
| Programming Language | Python , JavaScript, CSS, | Core development language for AI/NLP |
| Machine Learning / NLP Libraries | HuggingFace Transformers, spaCy, NLTK, Scikit-learn, PyTorch, TensorFlow, Github, Kaggle, | Model building, text processing, and training |
| Web Frameworks | Flask, FastAPI (optional) | For building user interface/API |
| Database | SQLite, PostgreSQL ,Mango DB | Store user data or document metadata |

# 📚 References List

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# Thank You!!
# Any questions.