

# Project Title: AI-Powered Regulatory Compliance Checker for Contracts

## Project Statement:

This project aims to develop an advanced AI system that automates the review and updating of contracts to ensure compliance with regulatory standards across various jurisdictions, such as GDPR and HIPAA. The solution will leverage LLMs like OpenAI GPT, Meta LLaMA, and LangChain to automatically detect missing clauses, assess risks, and recommend amendments based on the latest regulatory updates, industry standards, and contract-specific parameters. By integrating and scraping data from multiple sources like Google Sheets, public websites, and emails, the system will provide real-time compliance checks and notifications. This will significantly reduce manual efforts in contract management and minimize compliance risks.

## Outcomes:

- Automated compliance checking for contracts across multiple regulatory frameworks.
- Real-time risk assessment and context-based clause recommendations.
- Continuous monitoring and application of regulatory updates to active contracts.
- Streamlined contract management process with reduced manual intervention.

## Modules to be Implemented:

1. Clause Identification and Risk Analysis Engine
  - Automatically identifies key clauses in contracts and assesses potential risks based on regulatory requirements.
2. Regulatory Update Tracking and Integration System
  - Continuously monitors legal databases for changes in regulations and integrates updates into existing contracts.
3. Contract Modification and Deployment Module
  - Suggests modifications to contracts based on detected risks or missing clauses and integrates them into the contract lifecycle.
4. Multi-platform Integration and Notification System

- Integrates with platforms like Google Sheets, public websites, emails, and Slack to provide real-time notifications on compliance status.

## Milestones:

### Milestone 1: Weeks 1-2

#### Introduction & Initial Training

Objective: Set up the project infrastructure, introduce team members to the tools (LLMs like OpenAI GPT, Meta LLaMA), and gather initial data for training models.

#### Tasks:

- Set up the environment for data collection (e.g., scraping tools).
- Train team members on using LLMs for contract analysis.
- Begin collecting initial data from contract documents (clauses, risks).

### Milestone 2: Weeks 3-4

#### Module 1: Clause Identification and Risk Analysis Engine

Objective: Build a system that automatically identifies key clauses in contracts and assesses risks.

#### Tasks:

- Implement LLMs (OpenAI GPT, Meta LLaMA) to extract key clauses.
- Build a risk assessment algorithm that flags potential compliance issues based on regulatory standards.

### Milestone 3: Weeks 5-6

#### Module 2 & 3: Regulatory Update Tracking System & Contract Modification Module

Objective: Develop a system that tracks regulatory updates across jurisdictions while automating contract modifications based on detected risks.

#### Tasks:

- Integrate APIs that track legal changes (e.g., GDPR updates).
- Build a system that automatically applies relevant updates to active contracts.
- Implement a system that suggests amendments to contracts based on identified risks or missing clauses.

### Milestone 4: Weeks 7-8

#### Module 4: Multi-platform Integration & Notification System Deployment

Objective: Provide real-time notifications about compliance status through integrated communication platforms.

Tasks:

- Integrate the system with Google Sheets API, public websites, emails, and Slack for real-time alerts.
- Test the notification system by sending alerts based on detected compliance issues or updates.

## Evaluation Criteria:

- Milestone 1 Evaluation (Week 2): Successful setup of the project environment, initial training completed, and first batch of data collected from contract documents.
- Milestone 2 Evaluation (Week 4): Clause identification engine successfully implemented with risk analysis capabilities.
- Milestone 3 Evaluation (Week 6): Regulatory update tracking system integrated with active contracts; contract modification module deployed with automated risk-based suggestions.
- Milestone 4 Evaluation (Week 8): Real-time notifications integrated with communication platforms, providing timely updates on compliance status.