

C.L.E.A.R :- Contract Language Evaluation and Risk Analysis

Problem Statement:- Business Contract Validation -To Classify Content within the Contract Clauses and Determine Deviations from Templates and highlight them.

Team Members:-

1. Samruddhi Bhabad (**Leader**)
2. Atharav Agale
3. Vedant Dumbhare

Faculty Coordinator :- Dr. Girija Chiddarwar

Unique Idea



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What is CLEAR?

1. **Automated Validation:** CLEAR uses ML to validate business contracts by ingesting and preprocessing documents with NLP algorithms.
2. **Deep Learning Models:** BERT and GPT classify contract clauses accurately.
3. **Semantic Matching:** CLEAR compares clauses using semantic similarity, not just keywords.
4. **Risk Assessment:** Rule-based and predictive analytics identify high-risk deviations.
5. **Continuous Learning:** CLEAR adapts over time based on feedback and real-world outcomes.
6. **Interactive Dashboard:** Streamlined workflow with an interactive dashboard.

Features Offered

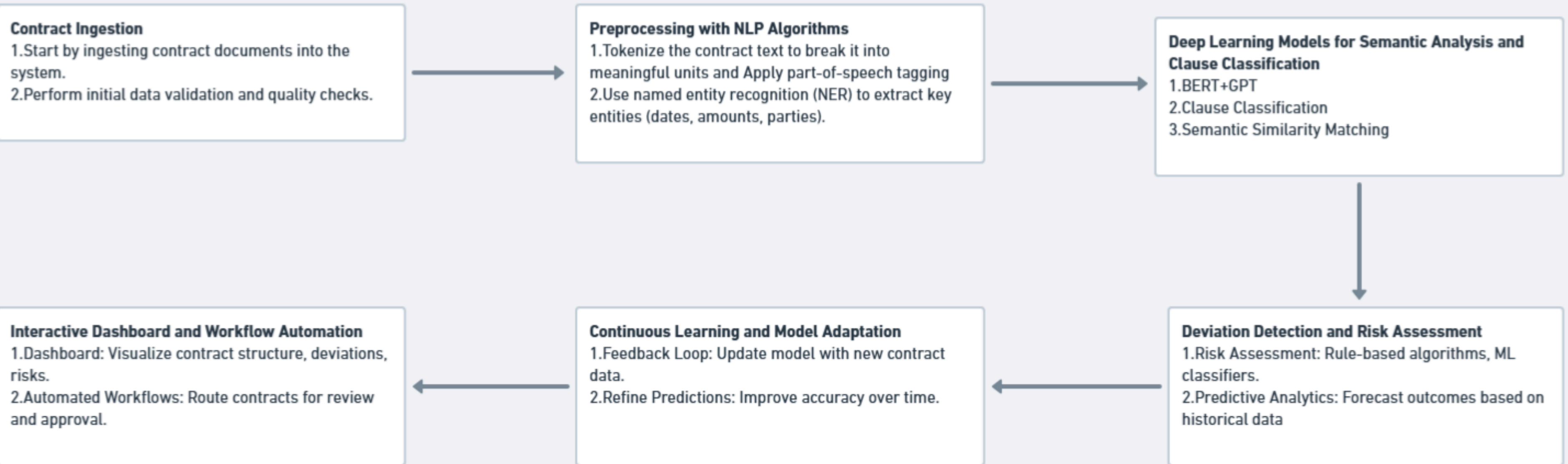


*“A clear vision, backed by definite plans,
is what confidence and power is about.”*

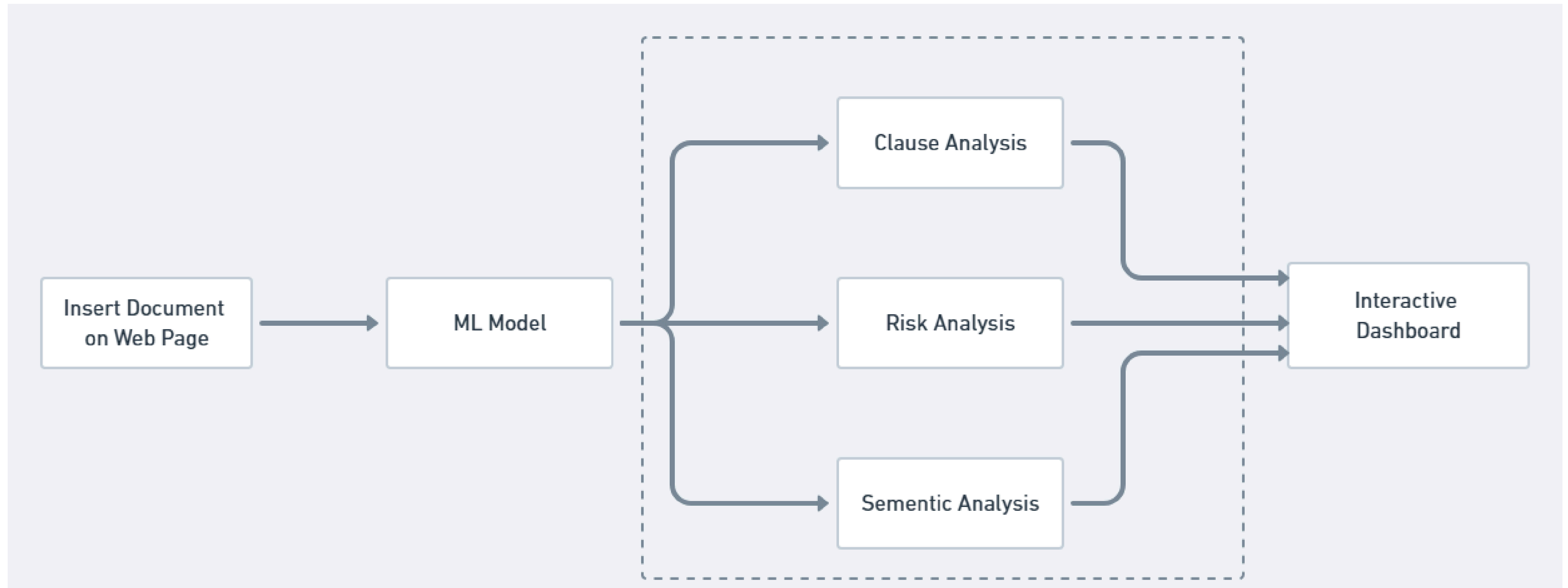
Why Choose CLEAR ?

1. **Accuracy:** CLEAR’s deep learning models (BERT and GPT) ensure precise clause classification, minimizing errors in contract analysis.
2. **Risk Mitigation:** By assessing deviations and predicting outcomes, CLEAR helps identify high-risk clauses, preventing potential disputes.
3. **Efficiency:** Automated validation and streamlined workflows save time, allowing stakeholders to focus on strategic decisions.
4. **Adaptability:** Continuous learning ensures that CLEAR evolves based on user feedback and real-world contract outcomes.
5. **Visual Insights:** The interactive dashboard provides visual representations of contract structures, making complex data more accessible.
6. **Comprehensive Understanding:** CLEAR’s semantic similarity matching goes beyond keywords, capturing nuanced context and meaning.

Process Flow



System Architecture



Technologies Used

Website

- Front-end :- React.js
- Back-end :- Node.js, Django
- Database Management :- MongoDB

Machine Learning

- Libraries :- spaCy, BERT, GPT, scikit learn, Tensorflow

Team members and contribution:



1. **Samruddhi Bhabad** :- Model Developement + Website Development
2. **Atharav Agale** :- UI Development + Website Development + Model Development
3. **Vedant Dumbhare** :- Model Development + Website Development

Conclusion



- CLEAR represents a transformative leap in contract management.
- By automating validation, leveraging deep learning models, and offering risk insights, it streamlines processes and empowers decision-makers.
- Looking ahead, CLEAR's future lies in continuous learning, expanding its model to handle diverse contract types, and integrating with other enterprise systems.
- As organizations embrace digital transformation, CLEAR will play a pivotal role in ensuring efficient, compliant, and intelligent contract management.