

Bussiness Contract Validation

presented by saisri.AR

Solution

Developed a smart contract validation system that leverages advanced AI models to classify and highlight specific clauses within business contracts dynamically. This system will not only identify standard clauses but also understand the context and nuances, providing a comprehensive analysis and risk assessment.

Advanced NLP Models: Utilized transformers like BERT for deep contextual understanding.

Custom Entity Recognition: Trained custom NER models to identify unique entities such as specific legal terms, parties involved, obligations, and dates.

Interactive Interface: Used Streamlit to create an interactive interface where users can upload contracts.



Features Offered

1. Contextual Clause Classification:

Utilizes advanced NLP models to understand and classify contract clauses based on context.

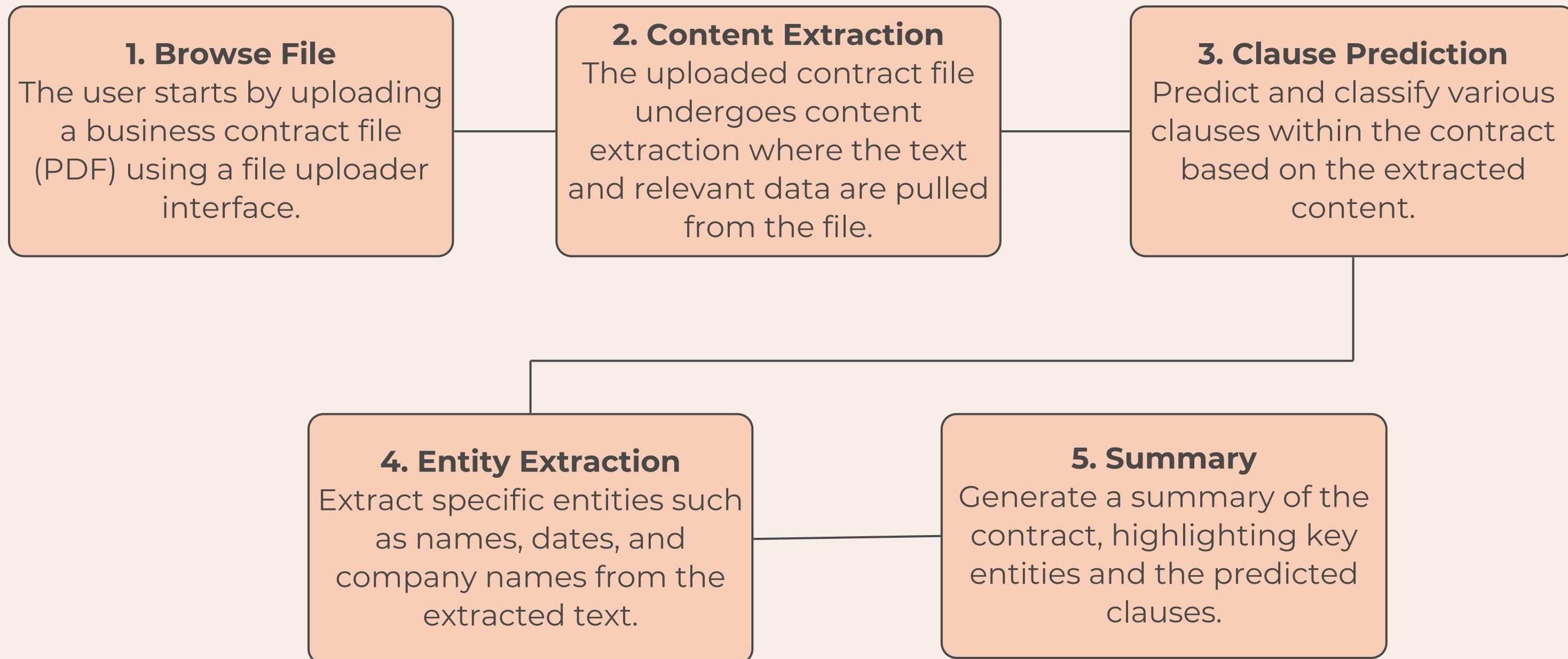
Identifies unique entities like legal terms, parties, obligations, and dates.

2. Dynamic Highlighting and Visualization:

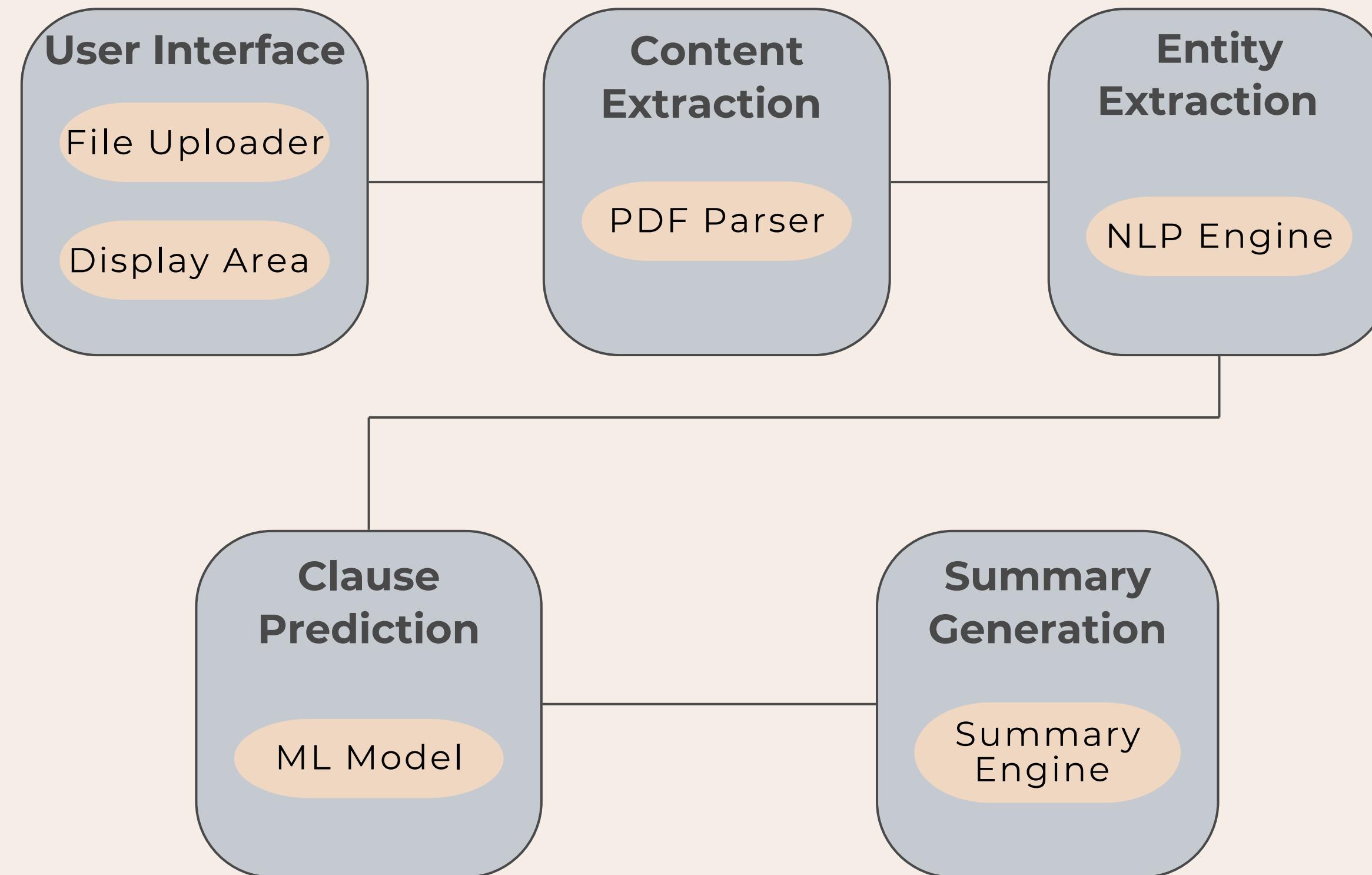
Use Streamlit or a similar tool to create an interactive interface where users can upload contracts.

Color-Coded Highlights: Highlight clauses in different fonts based on their classification.

Process Flow



Architectural Diagram



Technologies Used

Bert Sequential Classification: BERT sequential classification refers to the application of BERT (Bidirectional Encoder Representations from Transformers) models for tasks where the goal is to classify sequences of text.

Bert Tokenization: BERT (Bidirectional Encoder Representations from Transformers) tokenization is a method specifically designed for use with BERT models.

Named Entity Recognition (NER): Identifying and categorizing entities such as dates, names, and legal terms within the text.

Natural Language Toolkit (NLTK): a comprehensive suite of tools and libraries designed for working with human language data (text). It is a powerful tool to perform complex text processing tasks with minimal effort.

Conclusion

In conclusion, the process of parsing and analyzing business contracts involves leveraging advanced natural language processing (NLP) techniques to extract structured data, identify key details, and classify content into meaningful categories such as clauses and sub-clauses. By applying methodologies like tokenization, named entity recognition (NER), and classification models, organizations can efficiently navigate through complex legal documents. Crucially, detecting and highlighting deviations from established templates ensures clarity and compliance, ultimately facilitating informed decision-making and enhancing operational efficiency in contract management. This structured approach not only streamlines contract analysis but also empowers businesses to mitigate risks and optimize their contractual relationships effectively.



THANK YOU
VERY MUCH!