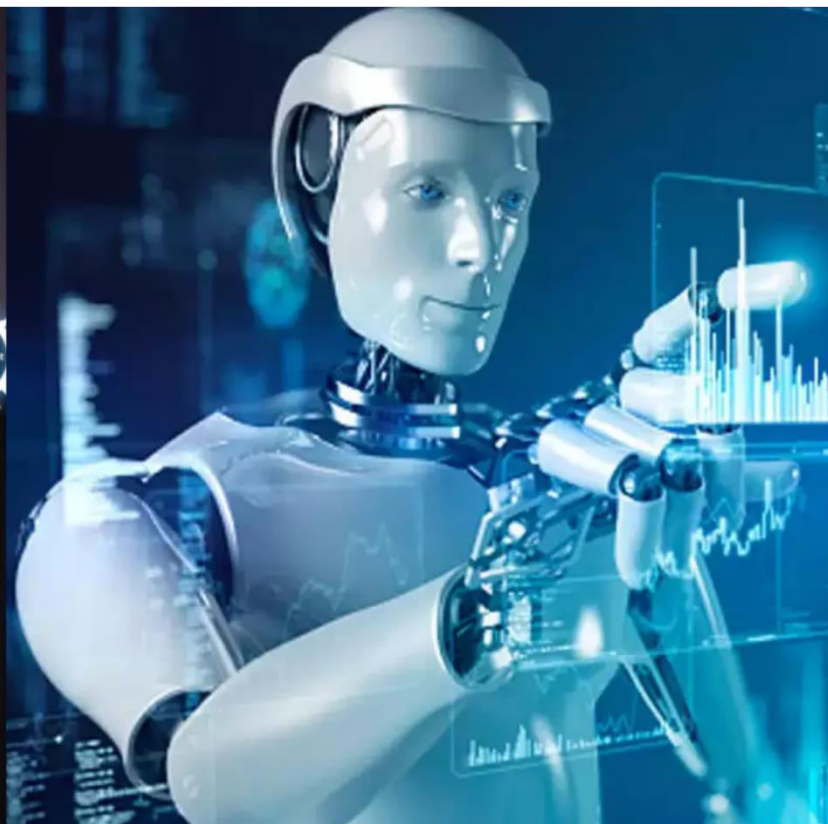




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Jublie - The Judicial Assistant

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ABSTRACT: In the digital age, the integration of artificial intelligence in the legal domain has opened new avenues for enhancing judicial efficiency and accessibility. *JUBLIE: The Judicial Assistant* is an intelligent legal support system designed to assist users with legal inquiries, constitutional references, and case outcome predictions. The proposed system employs a hybrid architecture that combines Natural Language Processing (NLP), Machine Learning (ML), and Large Language Models (LLMs) to deliver accurate, context-aware legal insights. It leverages trained models and text similarity techniques, such as TF-IDF and embedding-based retrieval, to identify relevant constitutional articles and predict case outcomes based on historical data. Additionally, JUBLIE integrates the Gemini API to generate human-like explanations, ensuring transparency and interpretability in its responses. Experimental evaluations demonstrate that the system effectively enhances the accuracy of legal predictions, improves user understanding, and serves as a reliable digital assistant for both legal professionals and the general public.

KEYWORDS: Artificial Intelligence, Legal Tech, Machine Learning, Natural Language Processing, Legal Prediction, Constitutional Article Retrieval, Judicial Assistant, API

I. INTRODUCTION

The JUBLIE: The Judicial Assistant system is developed to address these challenges by offering an AI-powered platform capable of handling legal queries, retrieving relevant constitutional articles, and predicting case outcomes based on past judicial data. The system integrates Natural Language Processing (NLP), Machine Learning (ML), and Large Language Models (LLMs) to deliver intelligent responses that are both interpretable and reliable. By leveraging techniques such as TF-IDF-based document retrieval, supervised learning models for case prediction, and the Gemini API for generative explanations, JUBLIE ensures comprehensive legal assistance that adapts to user needs. The paper is organized as follows. Section II describes the overall system architecture of JUBLIE and outlines the major components, including legal article retrieval, case prediction, and the Gemini-powered conversational interface. Section III discusses the hybrid approach combining ML and NLP models for improved accuracy and transparency. Section IV presents the experimental results and evaluation metrics validating system performance. Finally, Section V concludes the paper with a summary of findings and potential future enhancements for the JUBLIE system.

II. LITERATURE SURVEY

The application of artificial intelligence in the legal domain has gained significant attention in recent years, aiming to automate legal research, case prediction, and document retrieval. Early legal information systems primarily focused on keyword-based search and rule-based expert systems, which provided limited contextual understanding and required manual query formulation. While these systems improved access to legal information, they lacked the ability to interpret natural language or infer relationships between legal provisions and case outcomes.

Recent advancements in Large Language Models (LLMs) and transformer-based architectures (e.g., BERT, GPT, Gemini) have further revolutionized the field by enabling context-aware reasoning, legal summarization, and question answering. Despite these improvements, existing systems often lack domain-specific adaptability, transparent explainability, and integration of multiple legal functionalities within a single framework.

The JUBLIE: The Judicial Assistant system addresses these limitations by combining NLP, ML, and LLM-based techniques to deliver an integrated legal support platform. It offers article retrieval, case prediction, and human-like

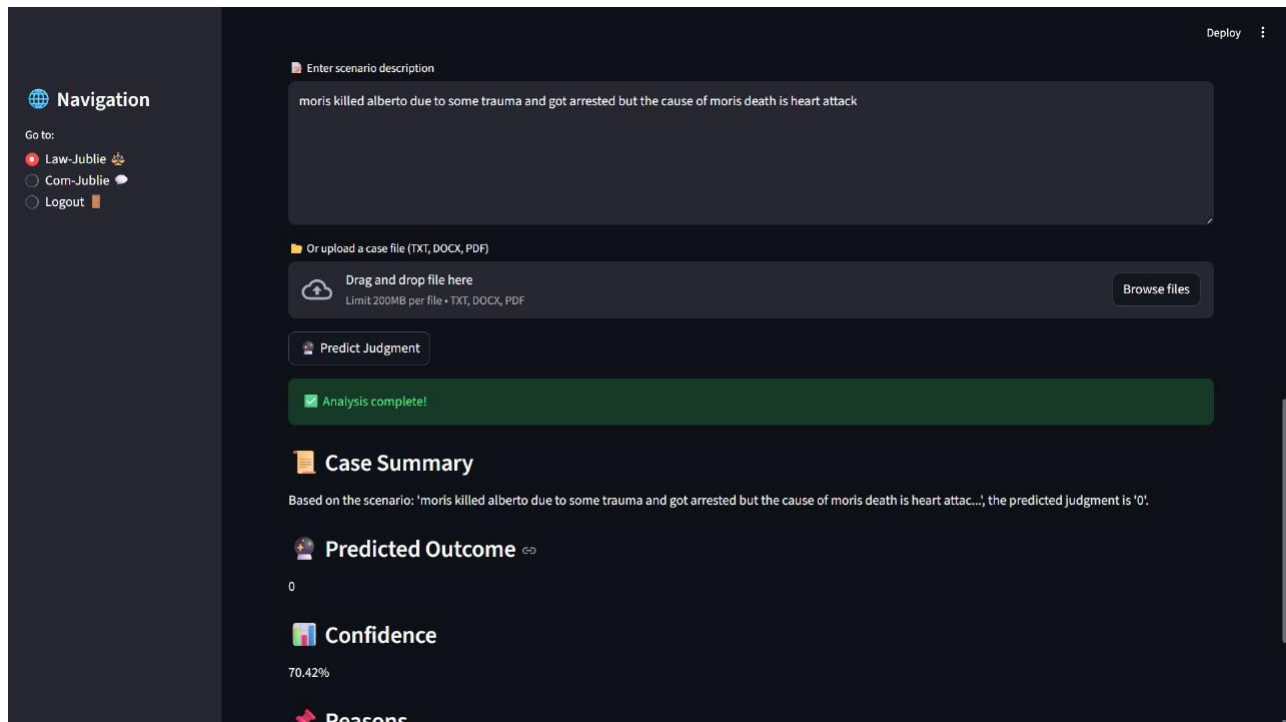
response generation through the API, ensuring accuracy, interpretability, and real-time assistance for both legal practitioners and general users.

III. METHODOLOGY

The JUBLIE system uses a combination of content-based filtering and case similarity analysis to deliver personalized legal predictions. User inputs such as case facts, charges, and referenced articles are collected and preprocessed to remove noise and inconsistencies. Features from case records and legal provisions are extracted to create vector representations that capture contextual and semantic details.

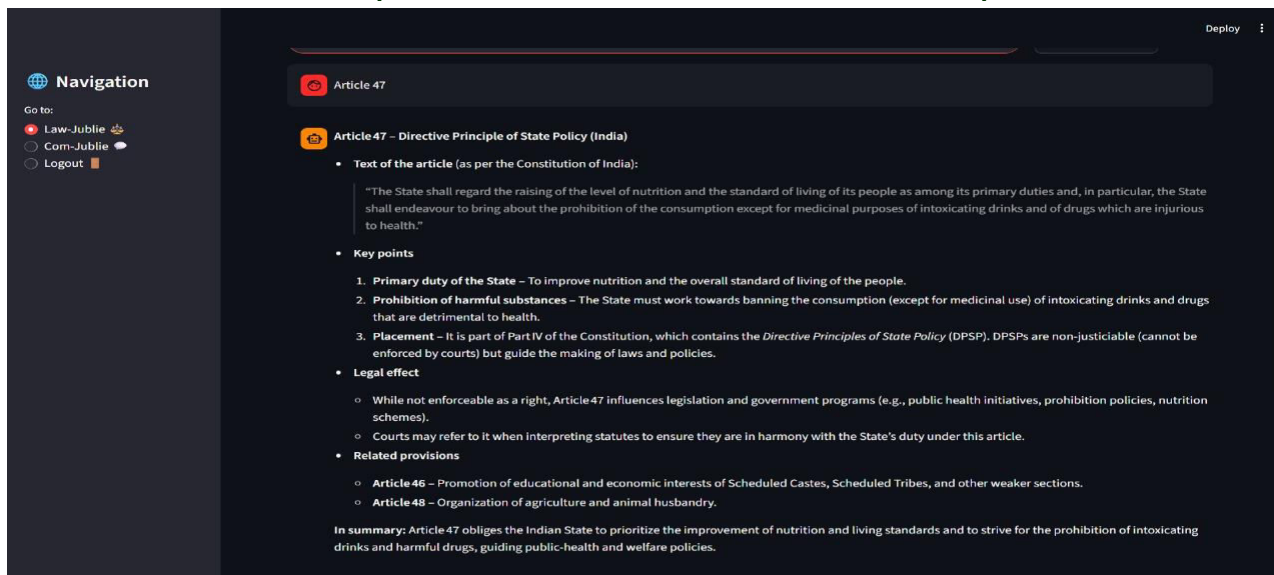
A feedback mechanism updates the model continuously to improve future recommendations.

IV. EXPERIMENTAL RESULTS



The screenshot displays the JUBLIE web application interface. On the left is a dark sidebar with a 'Navigation' menu containing 'Go to:', 'Law-Jublie', 'Com-Jublie', and 'Logout'. The main content area has a dark theme. At the top right is a 'Deploy' button. Below it is a text input field labeled 'Enter scenario description' containing the text 'moris killed alberto due to some trauma and got arrested but the cause of moris death is heart attack'. Below the input is a file upload section with a cloud icon, the text 'Or upload a case file (TXT, DOCX, PDF)', 'Drag and drop file here', 'Limit 200MB per file • TXT, DOCX, PDF', and a 'Browse files' button. A 'Predict Judgment' button is below the upload section. A green success message 'Analysis complete!' is displayed. The 'Case Summary' section shows the scenario text and the predicted judgment '0'. The 'Predicted Outcome' section shows '0'. The 'Confidence' section shows '70.42%'. The 'Reasons' section is partially visible at the bottom.

The figures show the results of legal case prediction and article recommendation from the JUBLIE system using the content-based filtering and case similarity analysis algorithms.



Navigation

Go to:

- Law-Jublie
- Com-Jublie
- Logout

Article 47

Article 47 – Directive Principle of State Policy (India)

- Text of the article (as per the Constitution of India):**

"The State shall regard the raising of the level of nutrition and the standard of living of its people as among its primary duties and, in particular, the State shall endeavour to bring about the prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."
- Key points**
 - Primary duty of the State** – To improve nutrition and the overall standard of living of the people.
 - Prohibition of harmful substances** – The State must work towards banning the consumption (except for medicinal use) of intoxicating drinks and drugs that are detrimental to health.
 - Placement** – It is part of Part IV of the Constitution, which contains the *Directive Principles of State Policy (DPSP)*. DPSPs are non-justiciable (cannot be enforced by courts) but guide the making of laws and policies.
- Legal effect**
 - While not enforceable as a right, Article 47 influences legislation and government programs (e.g., public health initiatives, prohibition policies, nutrition schemes).
 - Courts may refer to it when interpreting statutes to ensure they are in harmony with the State's duty under this article.
- Related provisions**
 - Article 46** – Promotion of educational and economic interests of Scheduled Castes, Scheduled Tribes, and other weaker sections.
 - Article 48** – Organization of agriculture and animal husbandry.

In summary: Article 47 obliges the Indian State to prioritize the improvement of nutrition and living standards and to strive for the prohibition of intoxicating drinks and harmful drugs, guiding public-health and welfare policies.

V. CONCLUSION

Jublie – The Judicial Assistant represents a significant advancement in the integration of artificial intelligence within the legal domain. By combining intelligent document analysis, law-specific chat interaction, and real-time summarization features, Jublie simplifies complex legal research and enhances judicial efficiency. Its ability to process and interpret legal documents such as acts, case laws, and constitutional materials provides users—lawyers, students, and citizens alike—with accurate, instant, and context-aware legal insights. Furthermore, the inclusion of explainable summaries and automated content export ensures accessibility and transparency in legal understanding.

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