



KENYA CONSTITUTION CHATBOT

Extracting and Analyzing the Kenyan Constitution



OVERVIEW.

Purpose:

- To extract, process, and analyze the text of the Kenya Constitution from a PDF file.
- To enable users to query specific sections of the constitution.

Tools Used:

- Jupyter Notebook, pdfplumber, spaCy, SpellChecker.



BUSINESS PROBLEM.

- Significant gap in public understanding of the Constitution in Kenya.
- Challenges in accessing information on constitutional rights and legal interpretations.
- Complex legal language intimidates and undermines comprehension.
- Lack of understanding leads to confusion and reduced civic engagement.
- Proposed platform aims to simplify access to constitutional knowledge.
- Empowers individuals to advocate for rights and participate in democracy.



DATA UNDERSTANDING.

The notebook is organized into several sections each focusing on different aspects of the constitution.

This includes:

- 1) Chapter-wise analysis,
- 2) Synonym mapping for enhanced question-answering
- 3) Examples of how to query the constitution using natural language processing techniques.

OBJECTIVES.

1. **Create a User-Friendly Interface:** Develop a clean, intuitive user interface that enables users to easily interact with the Q&A system, ensuring a seamless user experience that encourages frequent use.
2. **Improve Legal Literacy:** Educate users about their rights and responsibilities under the Constitution.
3. **Support Legal Practitioners:** Assist legal professionals in quickly retrieving relevant constitutional information to enhance their practice and advocacy.
4. **Leverage Natural Language Processing (NLP) Techniques:** Apply advanced NLP techniques to extract relevant information, interpret questions correctly, and match them with the most appropriate sections of the Constitution



STAKEHOLDERS.

1. Lawyers and legal practitioners
2. Government institutions
3. Citizens
4. Media
5. Civic activists

FEATURES

PDF Text Extraction:

- Extracts text from specified pages of the Kenya Constitution PDF.

Text Processing:

- Organizes extracted text into structured chapters and sections.

Natural Language Processing:

- Preprocesses user queries for better understanding.

Question Answering System:

- Allows users to ask questions and receive relevant answers.

Synonym Mapping:

- Enhances query recognition by mapping synonyms to key terms.



CONCLUSION

This tool is valuable for legal studies, civic education, and research, offering an accessible way to explore constitutional content.

❑ ***Future Work:***

Potential enhancements include expanding the question-answering capabilities and integrating more advanced NLP techniques.

❑ ***Call to Action:***

Encourage feedback and contributions to further improve the project.