

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

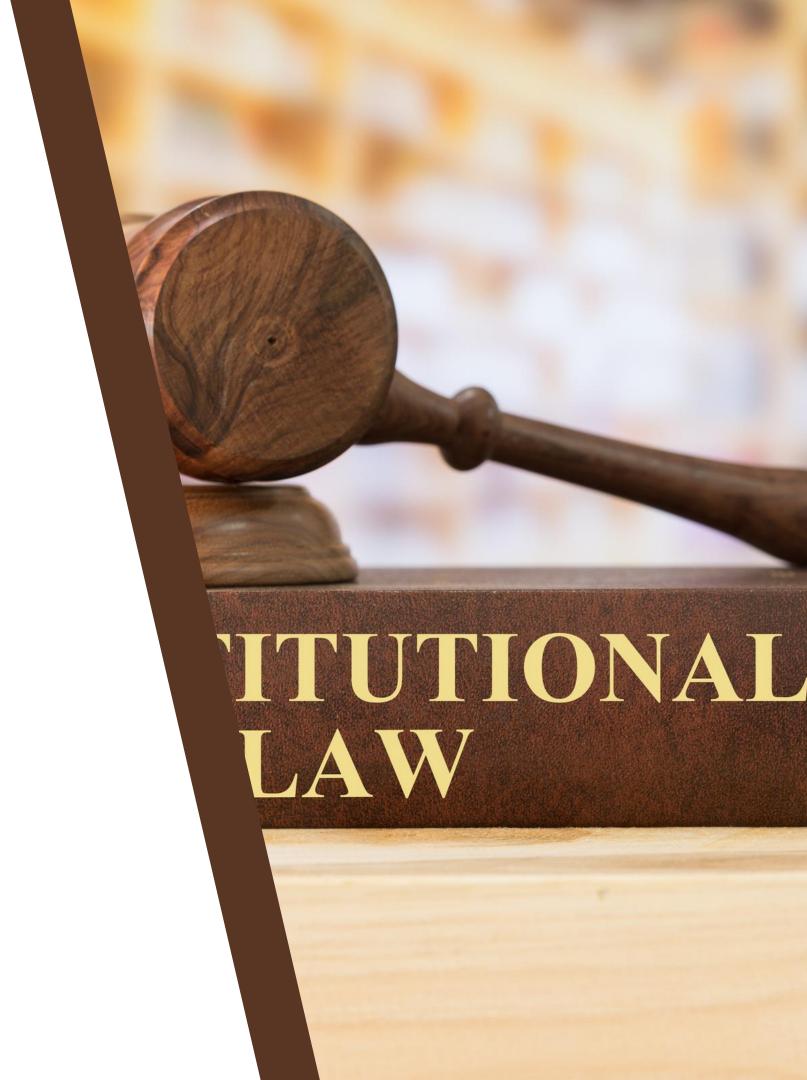
mbled in Consequence of the first Clection, they shall ted at the Expiration of the second year, of the second t one third may be chosen every second year; and if & tive thereof may make temporary appointments until all not have attained to the Age of thirty years, and bee te for which he shall be chosen. shall be President of the Senate, but shall have no Vou ers, and also a Resident pro tempore, in the Absence of to try all Impeachments. When setting for that Sur ride: And no Person shall be convicted without the Co hall not extend further than to removal from Ofice, Sarty convicted shall nevertheless be liable and sub ner of holding Elections for Senators and Represent Law make or atter such Regulation , except as to the once in every year, and such Meeting shall be on the ve of the Elections, Returns and Qualifications of its on ber may adjourn from day to day, and may be autho ch House may provide. of its Proceedings, punish its members for disorderly to Proceedings, and from time to time publish the San ers of wither House on any question shall at the Desire of Bongress shall without the Consent of the other, adjoin

DATA UNDERSTANDING

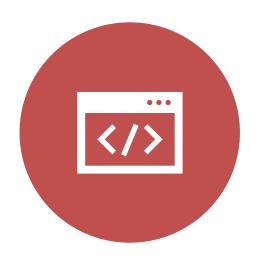
The notebook is organized into several sections each focusing on different aspects of the constitution.

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



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.



Improve Legal Literacy: Educate users about their rights and responsibilities under the Constitution.



Support Legal Practitioners: Assist legal professionals in quickly retrieving relevant constitutional information to enhance their practice and advocacy.



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.

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__modifier_ob.
  mirror object to mirror
mirror_object
 peration == "MIRROR_X":
irror_mod.use_x = True
irror_mod.use_y = False
irror_mod.use_z = False
 _operation == "MIRROR_Y":
lrror_mod.use_x = False
 irror_mod.use_y = True
 irror_mod.use_z = False
  operation == "MIRROR_Z":
  rror_mod.use_x = False
  rror_mod.use_y = False
 rror_mod.use_z = True
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   er ob.select=1
   ntext.scene.objects.action
  "Selected" + str(modification
   lrror_ob.select = 0
  bpy.context.selected_obj
  ata.objects[one.name].se
 int("please select exactle
  -- OPERATOR CLASSES ----
      mirror to the selected
    ect.mirror_mirror_x"
  ext.active_object is not
```

DEPLOYMENT

The chatbot is deployed on Telegram, making it accessible to anyone with a smartphone.

Users can simply ask their questions, and the bot will provide the answer instantly.

It removes the need for people to read through the entire Constitution. It is now possible to get specific answers in a matter of seconds.



CONCLUSION AND NEXT STEPS

In conclusion:

This chatbot will make the Constitution more accessible to everyone, empowering people with knowledge about their rights and duties.

Next Steps:

We plan to continue improving the bot by adding more features and expanding its capabilities.

Future updates may include; legal advice, broader government functions, or even a glossary of legal terms.



