

Legal Cases RAG Chatbot

Key Features

Approach 1:

- Fine-tuned a **Llama 3 model** using the **Huggingface legal cases question-answering dataset** to improve its understanding of legal contexts.
- Achieved **faster response generation**, although the accuracy of outputs was suboptimal.

Approach 2:

- Utilized the **same dataset** but restructured it in a more descriptive format rather than a question-answering setup.
- Resulted in much **improved response quality**, with slightly longer processing times compared to the fine-tuned model.
- **Scalability**: On larger datasets, response generation times would increase significantly due to the model's need to process extensive descriptive data.

```
[12]: rag_chatbot("list down some points about prevention of offences of security for keeping peace from code of
```

Batches: 100%  1/1 [00:00<00:00, 5.14it/s]

The attention mask and the pad token id were not set. As a consequence, you may observe unexpected behavior. Please pass your input's `attention_mask` to obtain reliable results.
Setting `pad_token_id` to `eos_token_id`:128009 for open-end generation.
The attention mask is not set and cannot be inferred from input because pad token is same as eos token.As a consequence, you may observe unexpected behavior. Please pass your input's `attention_mask` to obtain reliable results.

```
[12]: 'A great question about the Code of Criminal Procedure!\n\nAccording to the Code of Criminal Procedure (Act V of 1898), the following points highlight the prevention of offences of security for keeping peace:\n\n1. Section 107 of the Code provides for the security for keeping the peace, which empowers the Magistrate to require a person to execute a bond for keeping the peace, if there is reason to believe that the person is likely to commit a breach of the peace.\n2. The Magistrate may also require the person to furnish one or more sureties, who are bound to pay a specified amount if the person fails to keep the peace.\n3. The Code also provides for the procedure to be followed in case of failure to keep the peace, including the power of the Magistrate to arrest the person and detain them in custody until the bond is executed.\n4. The Magistrate may also impose additional conditions on the person, such as residing in a specified place or reporting to the police station, to ensure that they keep the peace.\n5. The Code emphasizes the importance of keeping the peace and the role of the Magistrate in ensuring public order and safety.\n\nThese provisions are aimed at preventing breaches of the peace and promoting public order and safety by requiring individuals to take responsibility for their actions and to ensure that they do not engage in behavior that is likely to disturb the peace.\n\nI hope this helps! Let me know if you have any further questions.'
```