Temus

Machine Learning Assignment

Objective
To develop a generative Q&A chatbot that can provide factual answers to user questions, by referring to a knowledge base created from the PDF files of financial reports of big listed public companies. The chatbot must use proper grounding techniques to minimize hallucination and provide accurate information.

Problem Statement
- Develop a generative Q&A chatbot to answer questions related to financial reports of large public companies.
- The chatbot must refer to a knowledge base generated from the provided PDF files of financial reports.
- The chatbot should be grounded in the knowledge base, minimize hallucination, and provide accurate information.

Data
- Use PDF files of financial reports from big listed public companies.

Requirements
- Use any open-source language models, frameworks, and coding languages.
- Use cloud-based SaaS offerings as necessary for powering the chatbot.
- Minimize hallucination with proper grounding techniques.

Deliverables
- A presentation explaining the overall approach, architecture diagram, flow diagrams, deployment options, and any assumptions made.
- Working prototype of the chatbot.
- Source code of the chatbot.

Evaluation Criteria
- Accuracy and relevance of the generated answers.
- Quality and clarity of the presentation.
- Creativity in addressing the problem statement and minimizing hallucination.
- Robustness and scalability of the proposed architecture.

Resources
- You may use any resources available on the internet to help you with this assignment, but please cite them in your work.

Timeframe
- You will have two weeks to complete this assignment.

Submission

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- Submit your presentation, source code, and a link to the working prototype by the specified deadline.