

AI-Powered Prediction of Exam Questions with Resource Recommendations

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In the HumanAlze Hackathon, we present an innovative solution leveraging GenAI to predict exam questions and recommend resources for 10th-grade students. Our AI-powered system uses advanced LLMs to analyze historical exam data and current syllabus content to predict the most likely questions students might face. Moreover, the platform offers personalized resource recommendations tailored to individual learning needs, ensuring an efficient and focused preparation experience.

UNIQUENESS:

Our solution stands out in its dual capability: predicting exam questions and providing tailored study resources. This dual approach, powered by GenAI, ensures that students receive specific and relevant study aids, unlike traditional resources that often provide generic information. By integrating personalized learning paths, our platform maximizes study efficiency and effectiveness, making exam preparation smarter and more intuitive.

POTENTIAL IMPACT :

Our LLM (Large Language Model) powered solution predicts potential questions specifically for 10th-grade board exams, providing a unique and targeted approach to exam preparation. Here's how it empowers 10th-grade students:

Predictive Power for 10th-Grade Exams: Leveraging the power of GenAI, our platform analyzes vast amounts of past exam data to generate likely questions tailored to the 10th-grade board exams. This predictive capability helps students focus their study efforts on the most relevant topics.

Personalised Learning Boost: The platform recommends targeted resources, such as articles, practice problems, and video lectures, based on the predicted questions. By catering to individual learning styles and needs, students receive a personalized learning experience that enhances their understanding and retention of key concepts.

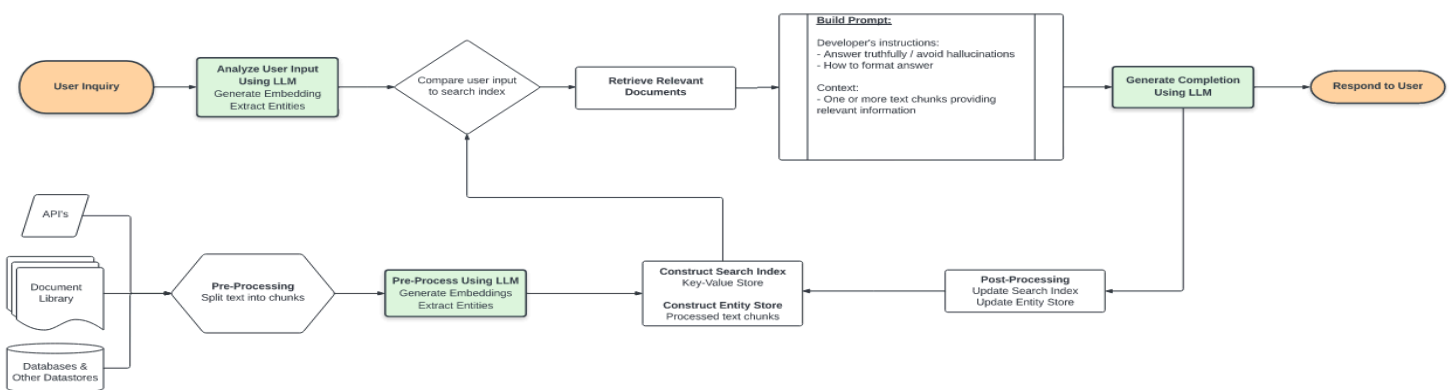
Reduced Test Anxiety: Knowing what to expect on their 10th-grade board exams significantly reduces students' anxiety. With a clearer idea of potential exam questions, students can approach their studies with greater confidence and calm. Deeper Understanding for Lasting Success:

By focusing on predicted questions and relevant study materials, students develop a stronger grasp of essential concepts. This not only prepares them for their exams but also contributes to long-term academic success.

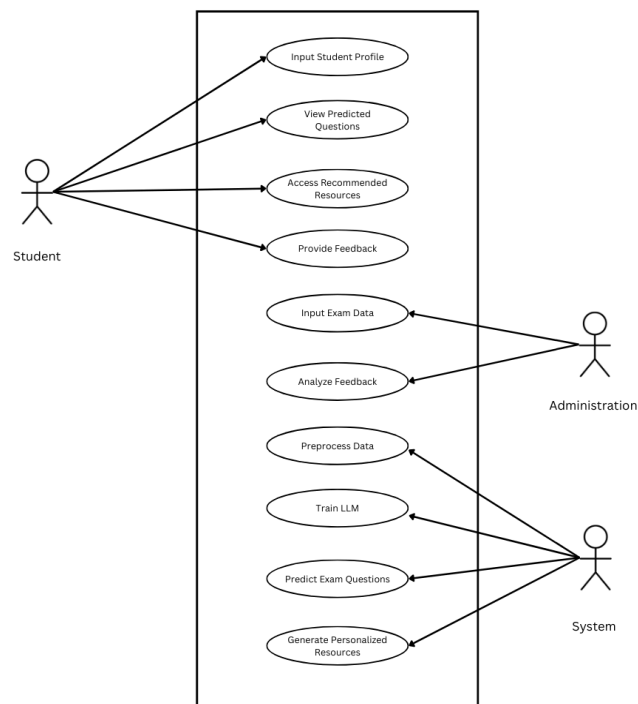
Benefits for 10th Graders

1. **Focused Exam Preparation:** Gain a clear understanding of what to expect on their board exams, allowing for a more targeted and efficient study approach.
2. **Customized Study Resources:** Access personalized recommendations for study materials that match their learning preferences and academic needs.
3. **Enhanced Confidence:** Alleviate exam stress by knowing the types of questions that are likely to appear, boosting their confidence and performance.

PROCESS FLOW DIAGRAM:



USE CASE DIAGRAM:



TECHNOLOGIES USED :

platforms: Hugging Face Transformers: Utilized for Large Language Model (LLM) implementation and predictive analytics.

Flask: Web framework employed for constructing the API and dispensing predictions.

Pandas: Data manipulation and analysis library employed to manage past exam data.

HTML/CSS/JavaScript: Utilized for crafting a user-friendly web interface.