Project Initialization and Planning Phase

Date	12 July 2024
Team ID	SWTID1720459891
Project Title	**INQUISITIVE**: A Multilingual AI Question Generator Using PaLM's Text-Bison-001
Maximum Marks	3 Marks

Project Proposal (Proposed Solution)

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	Inquisitive aims to harness the power of PALM architecture to develop an AI-driven application that autonomously generates contextually relevant questions from textual inputs. By enhancing learning through interactive quizzes, improving customer engagement with dynamic content, and facilitating more productive meetings with real-time question generation, Inquisitive aims to revolutionize knowledge retention, customer interaction, and organizational efficiency across diverse sectors. The project seeks to deliver a scalable and adaptable platform that significantly improves user engagement, fosters deeper comprehension of textual content, and supports seamless integration into existing workflows, thereby establishing Inquisitive as a pivotal tool for enhancing learning outcomes, customer relationships, and collaborative effectiveness.
Scope	The scope of the Inquisitive project includes developing an AI platform for accurate question generation, designing a user-friendly interface, and piloting implementations in corporate training, marketing content creation, and meeting facilitation. Emphasis will be on scalability to handle varying user demands and optimizing performance based on feedback. Continuous iteration will refine functionality, usability, and integration, ensuring Inquisitive enhances learning outcomes, customer engagement, and collaborative efficiency effectively.

Problem Statement	
Description	**Scenario 1: Corporate Training Programs** The current corporate training programs suffer from inefficiency and lack of engagement due to their heavy reliance on manual quiz creation and passive learning methods. Trainers face challenges in effectively reinforcing key concepts, leading to suboptimal knowledge retention and skill development among employees.
Impact	This outdated approach hampers the effectiveness of training sessions, diminishing employee engagement and hindering learning outcomes. The manual processes not only consume significant time and resources but also fail to adapt to individual learning paces and preferences, thereby limiting overall organizational growth and agility.
Description	**Scenario 2: Content Creation for Marketing** In the realm of marketing, there is a notable challenge in maintaining customer engagement and understanding consumer preferences through static promotional content. Current methods lack interactive elements that actively involve customers, thereby restricting insights into their preferences and impacting brand retention strategies.
Impact	The absence of interactive experiences in marketing content diminishes customer interaction and limits the effectiveness of promotional efforts. This results in reduced customer retention and missed opportunities to gather valuable feedback and insights that could inform future marketing strategies. Ultimately, it affects the company's ability to stay competitive and adapt to evolving consumer needs and trends.
Description	**Scenario 3: Knowledge Management in Meetings** Description: Corporate meetings often face inefficiencies in managing knowledge and engaging participants. Discussions frequently lack concise summaries and fail to provoke meaningful follow-up questions, leading to misunderstandings and incomplete exploration of crucial topics.
Impact	The lack of effective knowledge management in meetings results in wasted time and resources, as well as missed opportunities for informed decision-making. It diminishes the productivity of collaborative efforts and can lead to misaligned priorities within the organization. Addressing these inefficiencies is critical to fostering a more cohesive and productive work environment where meetings serve as effective platforms for knowledge exchange and strategic planning.

Proposed Solution	
Approach	**Scenario 1: Corporate Training Programs** **Enhance corporate training programs by incorporating Inquisitive:** The GenAI Question Generator. Employees can input training materials, and the application generates quizzes, fostering active learning and reinforcing key concepts. This automated process saves time for trainers and encourages self-paced learning, leading to improved knowledge retention and skill development. **Scenario 2: Content Creation for Marketing** **In marketing, utilize Inquisitive to transform product descriptions or promotional content into interactive quizzes or FAQs.** This engages customers, encourages interaction with the brand, and provides valuable insights into consumer preferences and understanding. The dynamic nature of generated questions keeps content fresh and engaging, driving customer interest and retention. **Scenario 3: Knowledge Management in Meetings** **During corporate meetings, employ Inquisitive to summarize discussions in real-time and generate follow-up questions.** This ensures thorough understanding among participants, stimulates critical thinking, and clarifies any ambiguities. By automating question generation, the tool streamlines the meeting process, promotes active engagement, and facilitates deeper exploration of topics, ultimately leading to more productive and insightful discussions.
Key Features	**Scenario 1: Corporate Training Programs** Unique Aspects: - Automated Quiz Generation: Inquisitive offers automated generation of quizzes based on input training materials, eliminating the need for manual quiz creation. This not only saves time for trainers but also ensures consistent and structured assessments.

- Self-Paced Learning: The application encourages self-paced learning among employees, allowing them to engage with training content at their own speed. This flexibility promotes deeper understanding and retention of key concepts.
- Enhanced Engagement: By fostering active learning through interactive quizzes, Inquisitive enhances engagement during training sessions, making learning more dynamic and effective.

Scenario 2: Content Creation for Marketing

Unique Aspects:
- Interactive Content Transformation: Inquisitive transforms static product descriptions or promotional content into interactive quizzes or FAQs. This innovative approach not only engages customers directly but also provides them with an active learning experience about the brand's offerings.
- Insightful Customer Engagement: By generating dynamic questions based on content, Inquisitive facilitates deeper insights into consumer preferences and understanding. This helps marketers tailor their strategies more effectively, improving customer engagement and retention.
- Fresh and Engaging Content: The dynamic nature of generated questions keeps marketing content fresh and interesting, encouraging repeat engagement and enhancing brand perception among consumers.

Scenario 3: Knowledge Management in Meetings

Unique Aspects:
- Real-Time Summarization: Inquisitive summarizes discussions in real-time during corporate meetings, ensuring that participants have clear and concise summaries of key points discussed.
- Automated Follow-Up Questions: By automatically generating follow-up questions based on meeting content, Inquisitive stimulates critical thinking among participants and encourages deeper exploration of topics.
- Streamlined Meeting Processes: The tool streamlines meeting processes by automating question generation and promoting active engagement, ultimately leading to more productive and insightful discussions. This enhances the overall effectiveness of meetings and improves decision-making within the organization.

In each scenario, Inquisitive leverages its unique capabilities to transform traditional processes, enhance user engagement, and provide valuable insights, thereby contributing significantly to

	organizational efficiency and effectiveness.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Streamlit
Libraries	Additional libraries	google-generativeai langdetect==1.0.9: googletrans==4.0.0-rc1: python-dotenv
Development Environment	IDE, version control	VS Code, Git
API		
API Key	Source	Google AI Studio