Project Initialization and Planning Phase

Project Name:	Inquisitive: A Multilingual AI Question Generator Using Palm's Text-Bison-001
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Development Tools and Technologies

- **Programming Language:** Python (for its versatility, extensive libraries, and strong community support in AI and NLP domains)
- **Cloud Platform:** Google Cloud Platform (for seamless integration with Palm's Text-Bison-001 and leveraging other GCP AI services)
- **Pre-trained LLM Model:** Palm's Text-Bison-001 (as the core question generation model)
- **APIs:** Google Generative AI API (for potential integration of additional AI capabilities), Hugging Face Transformers API (for access to a wide range of pre-trained models)

Project Management Methodology

- **Agile Development Methodology:** Scrum (for iterative development, flexibility, and adaptability to changes)
- **Project Management Tool:** Jira Software (for task management, sprint planning, and tracking)

Risk Management Plan

- **Potential Risks:**
  - Model bias and fairness issues
  - Quality and relevance of generated questions
  - Computational resource constraints
  - Data privacy and security concerns
- **Mitigation Strategies:**
  - Rigorous testing and evaluation for bias
  - Human-in-the-loop validation of generated questions
  - Optimization techniques and cloud resource management
  - Robust data anonymization and encryption

Research and Analysis

- **Data Collection:** Gather a diverse dataset of text corpora in multiple languages to train the model effectively.
- **Language Analysis:** Analyze the linguistic structures and patterns of different languages to identify key features for question generation.
- **Evaluation Metrics:** Define appropriate metrics to measure the quality and diversity of generated questions (e.g., BLEU score, ROUGE, question relevance).

Design and Development

- **Model Architecture:** Design a question generation model based on Palm's Text-Bison-001, incorporating language-specific adaptations if necessary.
- **Multilingual Capabilities:** Develop techniques to handle different languages, such as language identification and translation.
- **Question Types:** Explore generating various question types (e.g., open-ended, closed-ended, wh-questions) based on the context.

Testing and Iteration

- **Model Evaluation:** Conduct thorough evaluation of the model's performance on different datasets and languages.
- **User Testing:** Gather feedback from language experts and potential users to refine the model and user interface.
- **Iterative Improvement:** Continuously update the model based on evaluation results and user feedback.

Launch and Marketing

- **Target Audience:** Identify potential users (e.g., language learners, educators, researchers) and tailor marketing efforts accordingly.
- **Platform Selection:** Choose suitable platforms for distributing the question generator (e.g., web application, mobile app, API).
- **User Support:** Provide comprehensive documentation and support channels for users.