Vision & Scope Document

Project Name: AI-Generated Jokes & Gags for American Culture

1. Background and Purpose

Humor is a vital part of culture, and jokes often reflect shared experiences, language nuances, and societal norms. This project aims to develop an AI model capable of generating culturally appropriate jokes and gags tailored for an American audience. By leveraging a Large Language Model (LLM), the system will understand humor patterns, avoid offensive content, and ensure jokes align with cultural sensibilities. The system will generate completely original jokes upon receiving a command, without relying on pre-existing jokes. The project is part of an iterative development process using the Scrum methodology, with biweekly meetings to refine objectives and functionalities.

2. Business Opportunity

This AI-powered joke generation system has various potential applications, including:

- **Content Creation:** Assisting comedians, writers, and entertainment professionals.
- **Education & Language Learning:** Helping non-native speakers understand cultural humor.
- **Marketing & Advertising:** Crafting engaging, humorous content for brands.
- **Conversational AI:** Enhancing chatbots and virtual assistants with humor capabilities.
- **Entertainment & Social Media:** Enabling platforms like Twitter, TikTok, and Instagram to automatically generate and post engaging humorous content.
- **Mental Health & Well-being:** Offering lighthearted humor as a way to boost morale and improve user mood in wellness applications.

3. Project Scope

- In Scope:

  - Developing an LLM-powered system for generating culturally appropriate jokes and gags using Hugging Face.
  - Implementing content filtering mechanisms to avoid offensive or inappropriate humor.
  - Fine-tuning the model using datasets of American humor.
  - User feedback loop to improve joke quality over time.
  - Integration with external applications (e.g., chatbots, websites) as a future goal.

- Enabling real-time joke generation upon receiving a user command.
- Ensuring all generated jokes are original and not pre-existing.
- Allowing users to provide feedback to improve joke relevance and style.
- Implementing multiple joke formats, including puns, one-liners, and storytelling-based humor.

- Out of Scope:

- Real-time stand-up comedy generation.
- Multi-language humor adaptation (initial focus is solely on American culture).
- Deep emotional or ethical discussions on humor (focus remains on lighthearted jokes).
- AI-generated video content (only text-based joke creation is within scope).

4. Techincal Considerations

- **LLM Training & Fine-Tuning:** The AI model will be developed and fine-tuned using Hugging Face's framework, leveraging pre-trained models and custom datasets.
- **Content Filtering & Ethical Constraints:** NLP-based moderation systems will ensure jokes are appropriate and free from offensive content.
- **Real-time Processing:** The AI should generate a joke within a few seconds of receiving a command.
- **User Interaction:** Users will interact via a simple interface (web, mobile, or chatbot) to request jokes.
- **Data Collection for Improvement:** Anonymous feedback and engagement data will be collected to refine joke quality over time.

5. Success Metrics

To evaluate the success of the project, the following criteria will be used:

- **Joke Quality Rating:** User ratings on joke relevance and humor (e.g., 1-5 scale).
- **Cultural Appropriateness Score:** Ensuring jokes align with American humor norms (assessed via feedback or moderation tools).
- **User Engagement:** Measuring interactions and repeated usage.
- **Reduction of Offensive Content:** Monitoring flagged content to improve filtering accuracy.
- **Iteration Improvements:** Continuous refinement based on sprint feedback in Scrum meetings.

- **Originality Check:** Ensuring that AI-generated jokes are unique and not sourced from existing joke databases.
- **Response Time:** Ensuring the AI generates jokes within an acceptable time frame for seamless user experience.
- **Expansion Potential:** Evaluating the feasibility of integrating the system into social media platforms or chatbot services.
