**Project Name: Smart Review AI**

**1. Introduction** Smart Review AI is a web-based application that enables users to fetch reviews of a place using its Google Place ID and ask questions about the reviews using AI. The system leverages Google Places API for fetching reviews and OpenAI's GPT for answering user queries based on review data.

**2. Functional Requirements**

* The system shall allow users to input a Google Place ID.
* The system shall fetch place details, including name, location, and reviews, from Google Places API.
* The system shall consolidate multiple reviews into a structured format.
* The system shall allow users to input a question related to the fetched reviews.
* The system shall use OpenAI’s GPT API to generate an answer based on the reviews.
* The system shall display the AI-generated response to the user.

**3. Non-Functional Requirements**

* The system shall provide responses within 5 seconds of input submission.
* The system shall ensure data privacy by not storing user queries and responses.
* The system shall handle at least 100 concurrent users.
* The system shall provide a user-friendly interface using Streamlit.
* The system shall be accessible on both desktop and mobile browsers.

**4. Dependencies**

* Google Places API
* OpenAI API
* Streamlit for UI
* Python 3.x
* Requests library for API calls

**5. Assumptions & Constraints**

* Users must provide a valid Google Place ID.
* The system relies on third-party APIs, and response times may vary.
* Internet connectivity is required for API calls.

**6. Risks & Mitigation**

* API Rate Limits: Implement caching mechanisms or request API quota increase.
* Incorrect Place ID: Display appropriate error messages to the user.
* Delayed Responses: Implement timeout handling and user feedback mechanisms.