Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	**30 Oct 2023**
Team ID	**NM2023TMID01111**
Project Title	**Keyword Research using Google Keyword Planner**

Functional Requirements:

It defines what a product must do, what its feature and functions are. Google Keyword Planner is a tool primarily designed for keyword research and planning in the context of Google Ads. While I don't have access to real-time information, as of my last knowledge update in January 2022, the typical functional requirements of Google Keyword Planner include:

FR. No	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Keyword Research	Google Keyword Planner allows users to find relevant keywords and phrases for their advertising campaigns based on a seed keyword or website.
FR-2	Keyword Suggestion	It provides keyword suggestions and related keywords to help users discover additional search terms that may be relevant to their business or content.
FR-3	Search Volume Data	The tool offers information about the average monthly search volume for specific keywords, helping users gauge their potential reach.

FR-4	Competition Level	It provides insights into the level of competition for specific keywords in Google Ads. This information helps users understand how competitive it is to bid on these keywords in their campaigns.
FR-5	Filtering and Sorting	The tool allows users to filter and sort keyword results to focus on the most relevant and valuable keywords for their campaigns.
FR-6	Targeting Options	Users can refine their keyword research based on location, language, and other targeting options to align with their specific advertising needs.
FR-6	Integration with Google Ads	It is often integrated with Google Ads accounts, allowing seamless transfer of keyword research into ad campaigns.
FR-7	Bid Estimates	Users can get estimates of the "C**ost per click (CPC)"** for keywords and insights into the potential budget required for their ad campaigns.

Overall, the functional requirements of a Keyword Research using google keyword planner will depend on the specific needs and goals of the supplier, as well as the preferences and expectations of their customers. A well-designed and implemented system can improve billing accuracy, streamline operations, and provide valuable insights into food delivered patterns and trends.

Non-functional Requirements:

It is not related to the system functionality, rather than define how the system should perform. Here, we'll briefly describe the most typical non-functional requirements. Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The usability of a keyword research using google keyword planner will depend on the specific features and functionality of the system, as well as the needs and preferences of the supplier and their customers. However, in general, a well-designed and implemented software can bring significant benefits to both the supplier and the end-users. Here we design a model with S**imple Handed Criteria (SHC)**. So that everyone can use it efficiently.
NFR-2	**Security**	Security is an important consideration for any software system, including those used by food suppliers. Such systems typically collect and store sensitive data, such as customer billing information and usage data, which can be a target for cyberattacks and data breaches. To ensure the security of a smart billing system for food suppliers, several measures can be taken: • Data encryption • Access controls • Regular updates and patches • Monitoring and logging • Employee training In addition, it is important for suppliers to work with trusted vendors who have a strong track

		record in developing and maintaining secure smart billing systems.
NFR-3	**Reliability**	Reliability is a critical aspect of any food delivery system, as accuracy and timely delivery of bills are essential to the smooth functioning of food supply operations. A reliable smart billing system ensures that customers are accurately billed for their food order , and that suppliers can efficiently manage their billing processes. To ensure the reliability of a smart billing system for food suppliers, several measures can be taken: • Robust infrastructure • Regular maintenance and upgrades • Data validation and accuracy checks • Customer support
NFR-4	**Performance**	Performance is an important consideration for any food delivery system, as it affects the speed and accuracy of billing processes, data collection and management, and customer service. A high-performing smart billing system can help food suppliers to optimize their operations, improve customer satisfaction, and enhance revenue collection. To ensure optimal performance, the following are the steps taken by a system are: • Hardware and software optimization • Network optimization • Data management • Automation • Monitoring and maintenance By taking these measures, suppliers can ensure that their smart billing system delivers fast and reliable performance, helping them to optimize their operations and provide high-quality customer service.

NFR-5	**Availability**	The availability of a system refers to its ability to be operational and accessible to users when needed. To ensure the availability of a food delivery system for suppliers, several measures can be taken: • Redundancy and failover • Monitoring and alerts • Disaster recovery plans • Regular maintenance and updates
NFR-6	**Scalability**	Scalability is an important consideration for any food delivery system, including those used by food suppliers. As the number of customers or food consumers data grows, a scalable system can accommodate the increased demand without sacrificing performance or accuracy. To ensure the scalability of a food suppliers, several measures can be taken: • Design for scalability • Flexible architecture • Cloud-based infrastructure • Distributed computing • Load testing By taking these measures, the food suppliers can ensure that their delivery software system can scale up or down as needed to accommodate changing demand and growth.

These are all the solution requirements for my project. Hence, by meeting these solution requirements, a keyword research using google keyword planner can improve accuracy, efficiency, and customer satisfaction, while also helping the food supplier optimize their operations and improve their bottom line.