

Keyword Research Using Google Keyword Planner

A Project Report

Submitted by

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INTRODUCTION

1.1Project Overview:

Keyword Research using Google Keyword Planner is a process of finding relevant keywords for search campaigns to improve SEO and PPC. Google Keyword Planner is a free tool that can be accessed through a Google Ads account. The tool generates a list of related keywords and their search volume data. Users can enter up to 10 words or phrases related to their business or enter a URL to get keyword suggestions based on the whole site or just that page. The tool also generates related ideas that don't contain the terms entered. Users can filter the keyword ideas generated by Keyword Planner to exclude any irrelevant keywords from their list. They can also analyze the data generated by Keyword Planner to determine which keywords are most relevant to their business. The tool can be used to analyze search volume data for a specific date range to inform content strategy and target the keywords that are most relevant to the business and industry. The non-functional requirements for Keyword Research using Google Keyword Planner include usability, security, and performance. The tool should be easy to use, accessible, secure, fast, scalable, reliable, and provide accurate data to help users make informed decisions about their keyword strategy.

1.2Purpose:

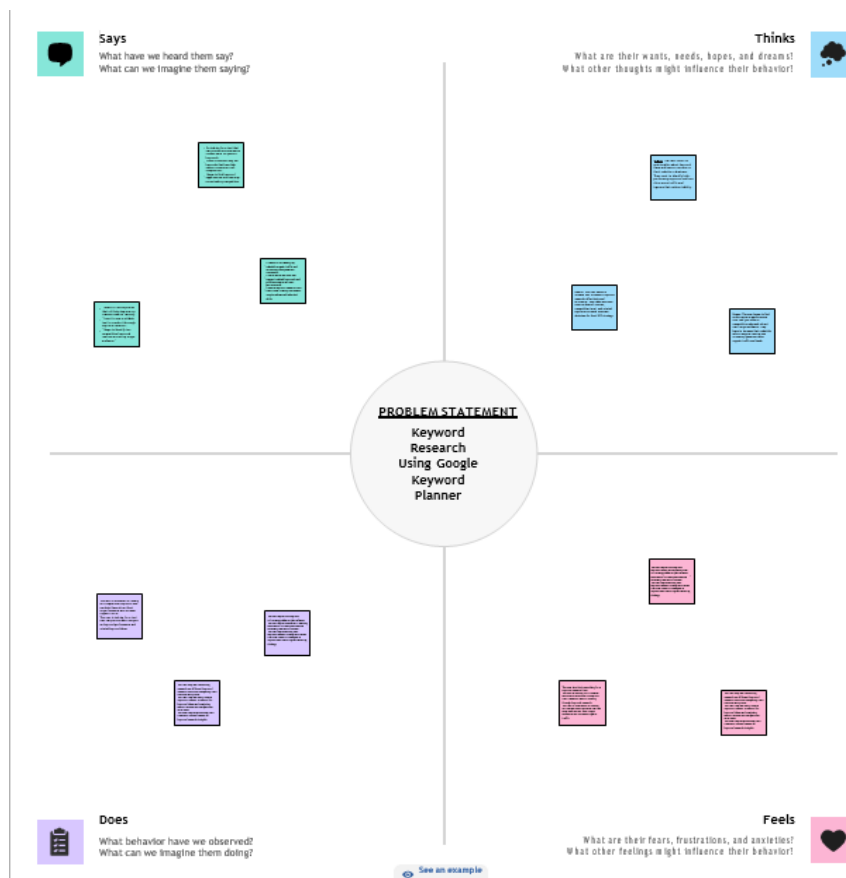
The purpose of Keyword Research using Google Keyword Planner is to help businesses and marketers find relevant keywords for their search campaigns to improve their SEO and PPC. The tool generates a list of related keywords and their search volume data, which can be used to optimize websites and create a content strategy. The project overview includes the steps involved in using Google Keyword Planner, such as entering relevant keywords, analyzing data, and creating a keyword strategy. The non-functional requirements for Keyword Research using Google Keyword Planner include usability, security, and performance. The purpose of the project is to help businesses and marketers conduct effective keyword research using Google Keyword Planner and create search campaigns that meet their business goals. The search results provide various guides and tips on how to use Google Keyword Planner effectively, including finding local keyword search volumes, analyzing keyword trends, and finding long-tail keywords.

2. IDEATION & PROPOSED SOLUTION

2.1 Problem Statement Definition



2.2 Empathy Map Canvas



2.3 Ideation & Brainstorming :

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

100+ stickers to prepare
1 hour to 1.5 hours
2-8 people encouraged

[Share template feedback](#)

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

1. **Time gathering**
Before who should participate in the session and send an invite. Share relevant information or personal feedback.

2. **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

3. **Let's brainstorm**
Use the Facilitation 3 components to ease a happy and productive session.

[Open sidebar](#)

1 Define your problem statement

What problems are you trying to solve? Frame your problem as a few right? No answers. This will be the focus of your brainstorm.

[100 stickers](#)

Problem
My friend is having trouble finding a way to get to school faster.

2 Key rules of brainstorming
To use **agreement** and **productive** session.

- 1. No negative feedback
- 2. No criticism
- 3. No judgement
- 4. No evaluation
- 5. No discussion
- 6. No debate
- 7. No argument
- 8. No conflict
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1 Brainstorm

Write down why ideas that come to mind that address your problem statement.

[100 stickers](#)

2 Group ideas

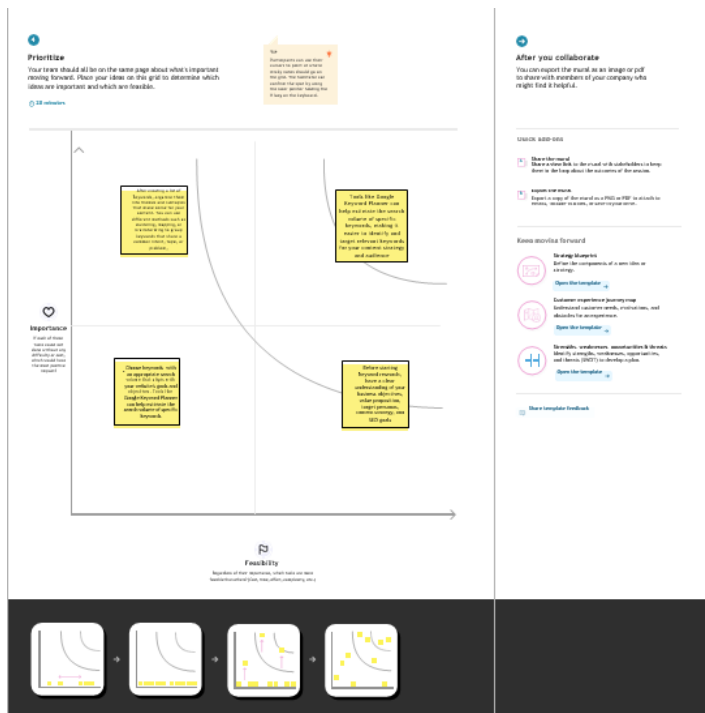
Take turns sharing your ideas while clustering similar or related ones as you go. Once all sticky notes have been grouped, give each cluster a sentence that best describes it. If a cluster is bigger than six sticky notes, try and use it if you need break it up into smaller sub-groups.

[100 stickers](#)

3 Final notes

Take a final review of the session and write down your final thoughts.

[100 stickers](#)



2.4 Proposed Solution :

| S.No. | Parameter | Description |
|-------|--|---|
| 1. | Problem Statement (Problem to be solved) | To Discover new keywords |
| 2. | Idea / Solution description | Develop a standalone keyword research tool. |
| 3. | Novelty / Uniqueness | It allows you to filter and sort keyword ideas based on various criteria, such as search volume, competition, and relevance |
| 4. | Social Impact / Customer Satisfaction | By using Google Keyword Planner, businesses can stay up-to-date with the latest keyword trends and identify new keyword opportunities |
| 5. | Business Model (Revenue Model) | Google Keyword Planner is primarily designed for PPC advertisers, it can also be used for SEO keyword research. |
| 6. | Scalability of the Solution | |

3. REQUIREMENT ANALYSIS

Functional Requirements for the Remote Gas Pipeline Tunnel Temperature Monitoring System:

3.1 Functional Requirements:

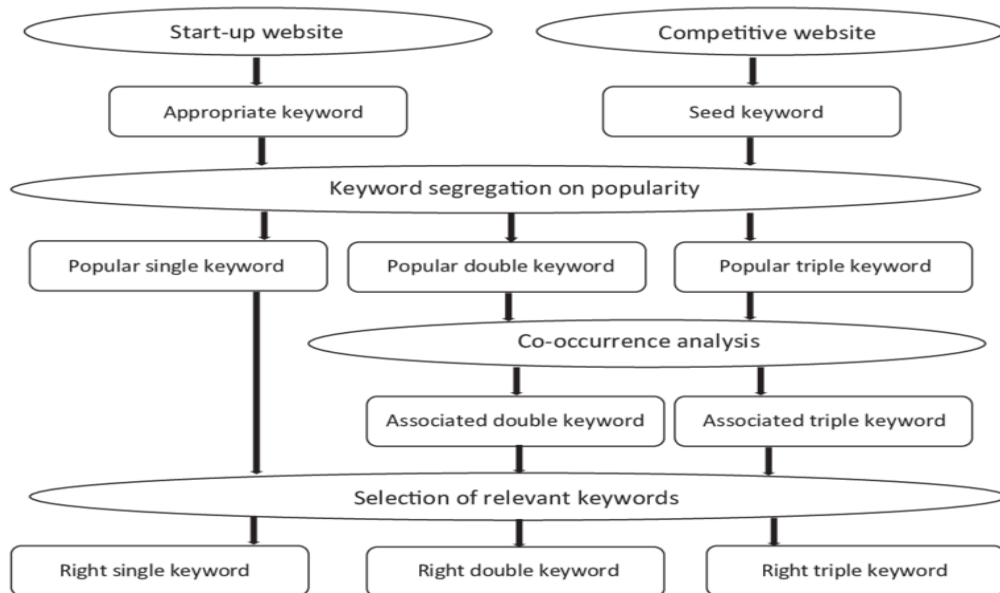
| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|------------------------------------|
| FR-1 | Google Ads account | Keyboard search volume |
| FR-2 | Keyword Planner | long-tail keywords |

3.2 Non-functional Requirements:

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | It should be easy to use, with a user-friendly interface that allows users to enter keywords, analyze data, and create a keyword strategy without difficulty. |
| NFR-2 | Security | Google Keyword Planner should ensure the privacy of user data and protect it from unauthorized access or use. |
| NFR-3 | Reliability | Google Keyword Planner should be reliable, with accurate data that users can trust to inform their keyword strategy |
| NFR-4 | Performance | Google Keyword Planner should be compatible with different devices and browsers, allowing users to access the tool from their preferred device and browser. |
| NFR-5 | Availability | Google Keyword Planner should be available to users at all times, with minimal downtime or maintenance periods. |
| NFR-6 | Scalability | It should be able to handle large amounts of data and provide accurate results even when dealing with a large number of keywords. |

4. PROJECT DESIGN

4.1 Data Flow Diagrams



4.2 Solution & Technical Architecture

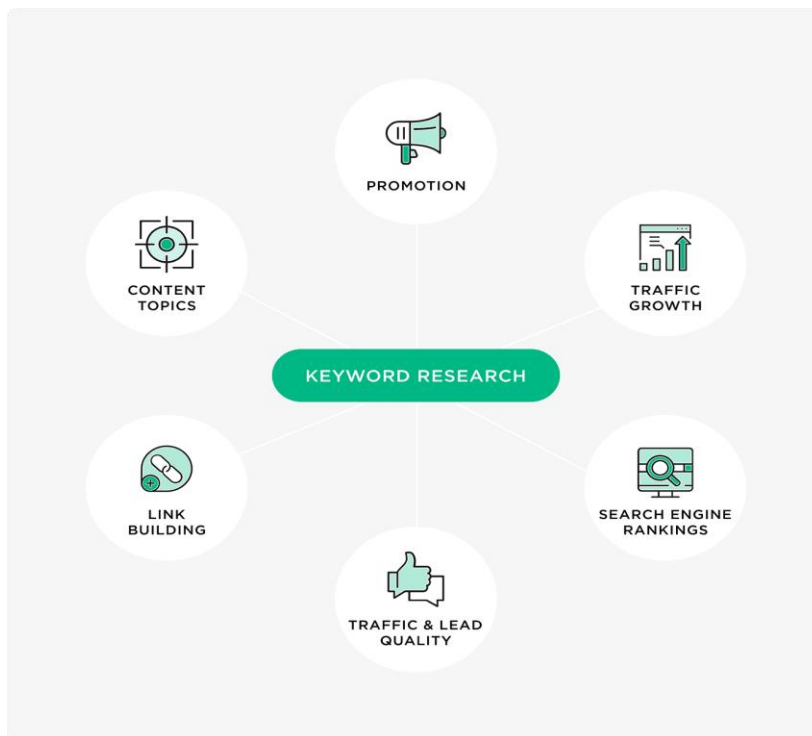


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|---|
| 1. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript, Angular Js, React Js. |
| 2. | Application Logic-1 | Logic for a process in the application | Java / Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL, NoSQL. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant. |
| 7. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem. |
| 8. | External API-1 | Purpose of External API used in the application | IBM Weather API. |
| 9. | External API-2 | Purpose of External API used in the application | Aadhar API. |
| 10. | Machine Learning Model | Purpose of Machine Learning Model | Object Recognition Model. |
| 11. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes. |

Table-2: Application Characteristics:

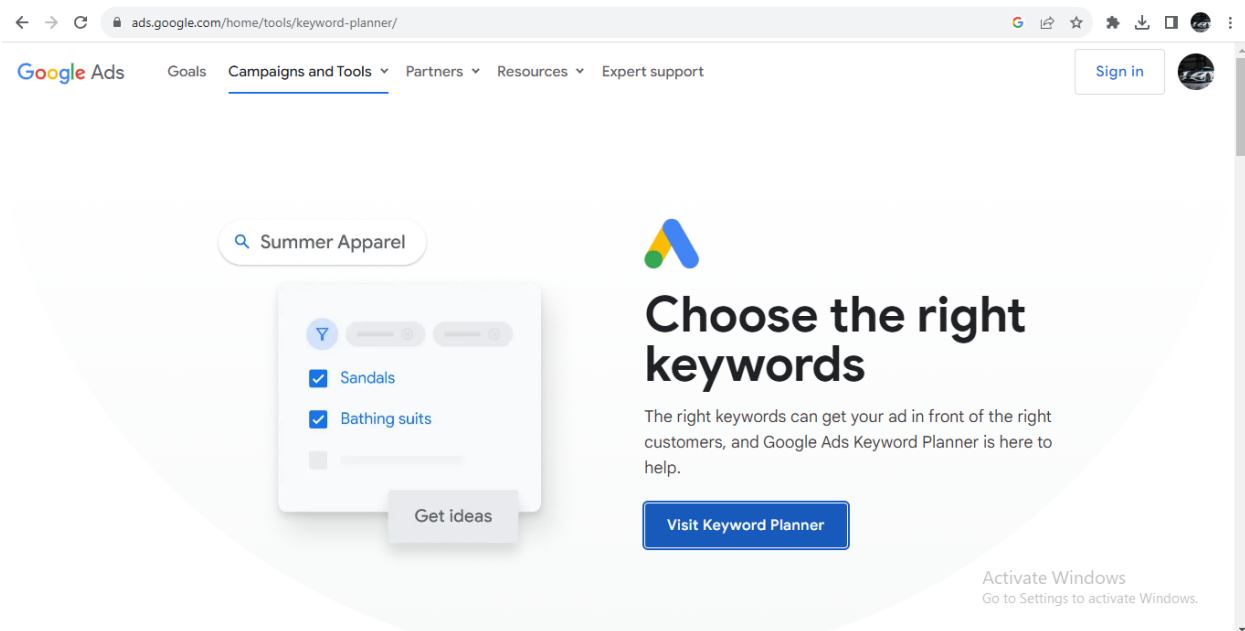
| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|---|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python, JavaScript, Node.js, React. |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | SHA-256, Encryptions, IAM Controls, OWASP. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Microservices Architecture, Load balancing. |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Master-slave, NGINX. |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Redis, Celery, Apache kafka. |

4.3 User Stories:

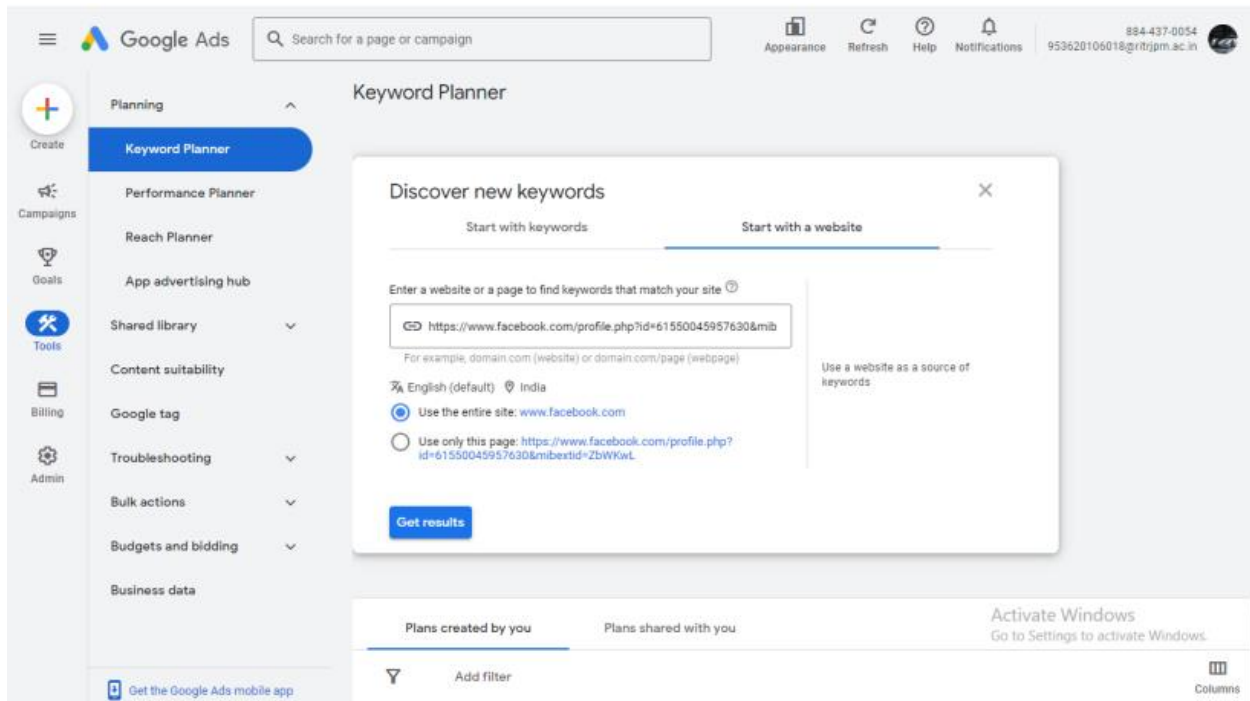
| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Team Member |
|-------------------------|-------------------------------|-------------------|--|--|----------|-------------------|
| Customer (Mobile user) | Dashboard | USN-1 | The right keywords can get your ad in front of the right customers, and Google Ads Keyword Planner is here to help. Search for words or phrases related to your products or services. Our keyword research tool will help you find the keywords that are most relevant for your business | The keywords should be relevant to the customer's business and the products or services they offer. The customer should ensure that the keywords they target are related to their business and are likely to be used by their target audience. | High | Ashokkumar.R |
| Customer (Web user) | | USN-1 | When conducting keyword research, use the language that your customers use. This means using the same words and phrases that your customers use when they search for your products or services. | The keywords should have a sufficient search volume to justify targeting them. The customer should ensure that the keywords they target have a high enough search volume to generate traffic to their website. | High | Azhaan, Sunder.M. |
| Customer Care Executive | | USN-1 | The customer can enter relevant keywords related to their business or industry into Keyword Planner. The tool will then generate a list of related keywords and their search volume data. | The keywords should have a reasonable level of competition. The customer should ensure that the keywords they target are not too competitive, as this can make it difficult to rank for them. | High | Gokul.R |
| Administrator | | USN-1 | Ensure that the users have access to Google Keyword Planner by providing them with a Google Ads account. If they don't have one, they can create one for free. | The user should have a basic understanding of keyword research and how it can be used to improve their search campaigns. | High | Kizhore Kumar.S S |

5.RESULTS

Step 1:



Step 2:



Step 3:

Plan from Nov 3, 2023, 10 PM, GMT+05:30

Keyword Ideas Forecast Saved keywords Negative keywords

Search: coffee corner Location: India Language: English Search engine: Google Date range: Oct 2022 - Sep 2023

Broaden your search: + coffee + food corner + tea corner + chocolate corner + milk corner + cotton corner + apple corner [Refine keywords](#)

Exclude adult ideas X Add filter 131 keyword ideas available Columns Keyword view

| Keyword (by relevance) | Avg. monthly searches | Three month change | YoY change | Competition | Ad impression share | Top of page bid (low range) | Top of page bid (high range) | Account status |
|------------------------|-----------------------|--------------------|------------|-------------|---------------------|-----------------------------|------------------------------|----------------|
| Keywords you provided | | | | | | | | |
| coffee corner | 100 - 1K | 0% | 0% | Low | - | - | - | |
| Keyword ideas | | | | | | | | |
| tamper mat | 10 - 100 | +900% | +900% | Medium | - | ₹0.94 | ₹16.65 | |
| coffee corner (k... | 10 - 100 | 0% | 0% | Low | - | - | - | |

Step 4:

Keyword Stats 2023-10-30 at 00_08_41

October 1, 2022 - September 30, 2023

| Keyword | Currency | Avg. monthly se | Three month ch | YoY change | Competition | Competition (in |
|-------------------|----------|-----------------|----------------|------------|-------------|-----------------|
| coffee corner | INR | 500 | 0% | 0% | Low | 1 |
| v60 dripper | INR | 50 | 0% | 0% | High | 100 |
| corner coffee | INR | 50 | 0% | 0% | Low | 0 |
| the coffee corner | INR | 50 | 0% | 0% | Low | 1 |
| coffee at the co | INR | 50 | 0% | -100% | Unknown | |
| co ff ee | INR | 5000000 | 0% | 0% | Low | 3 |
| coffee corner fa | INR | 0 | 0% | 0% | Unknown | |
| mocha drink | INR | 500 | 0% | 0% | Low | 0 |
| facebook coffee | INR | 50 | 0% | 0% | Low | 0 |
| cornerhouse co | INR | 50 | 0% | 0% | Low | 0 |
| the corner coffe | INR | 50 | ∞ | 0% | Low | 0 |
| barista coffee c | INR | 50 | 0% | 0% | Unknown | |
| barista's corner | INR | 50 | 0% | ∞ | Low | 4 |
| cafe coffee corn | INR | 500 | 0% | 900% | Low | 0 |

Activate Win
Go to Settings to

6. ADVANTAGES AND DISADVANTAGE:

Advantages:

1. **Free tool:** Google Keyword Planner is a free tool that can be accessed through a Google Ads account, making it an affordable option for businesses and marketers.
2. **Keyword suggestions:** Google Keyword Planner provides a wide range of keyword suggestions related to a business or topic of interest. It uses data from actual Google searches to generate these suggestions, helping users discover new keywords and ideas that they may not have considered.
3. **Search volume data:** Google Keyword Planner provides search volume data for each keyword, allowing users to determine which keywords are most relevant to their business and industry.
4. **Competition analysis:** Google Keyword Planner provides an estimate of the competition level for each keyword, indicating how many advertisers are bidding on a particular keyword. This can give users an idea of how difficult it may be to rank for that keyword or run effective paid campaigns.

Disadvantages:

1. **Limited data:** Google Keyword Planner only provides data for Google search, not other search engines or platforms. This means that users may miss out on relevant keywords or audiences that use different channels.
2. **Broad and generic keywords:** Google Keyword Planner tends to show broad and generic keywords, rather than specific and long-tail ones. This can make it harder to target niche markets or intent-based queries.
3. **Requires Google Ads account:** Users need to have a Google Ads account to access Google Keyword Planner, which may be a barrier for some businesses or marketers.
4. **Competition analysis may not be accurate:** The competition level provided by Google Keyword Planner is an estimate and may not accurately reflect the actual competition level for a particular keyword.
5. **Limited geographic targeting:** While Google Keyword Planner allows users to target specific geographic regions, the level of granularity is limited to individual zip codes in some cases.

7.Application:

The application of Keyword Research using Google Keyword Planner is to help businesses and marketers find relevant keywords for their search campaigns to improve their SEO and PPC. The tool generates a list of related keywords and their search volume data, which can be used to optimize websites and create a content strategy. The tool can be used to analyze search volume data for a specific date range to inform content strategy and target the keywords that are most relevant to the business and industry. The search results provide various guides and tips on how to use Google Keyword Planner effectively, including finding local keyword search volumes, analyzing keyword trends, and finding long-tail keywords. The tool is primarily designed for PPC advertisers, but it can also be used for SEO-focused keyword research. While there are some limitations to the tool, such as limited data and broad and generic keywords, it remains a valuable tool for keyword research and planning in digital marketing.

8. Conclusion:

Keyword Research using Google Keyword Planner is a valuable tool for businesses and marketers to find relevant keywords for their search campaigns to improve their SEO and PPC. The tool generates a list of related keywords and their search volume data, which can be used to optimize websites and create a content strategy. The non-functional requirements for Keyword Research using Google Keyword Planner include usability, security, and performance. The advantages of using Google Keyword Planner include free access, keyword suggestions, search volume data, competition analysis, historical data, and integration with Google Ads. The disadvantages of using Google Keyword Planner include limited data, broad and generic keywords, the need for a Google Ads account, inaccurate competition analysis, and limited geographic targeting. Overall, Keyword Research using Google Keyword Planner is a powerful tool for businesses and marketers to conduct effective keyword research and create search campaigns that meet their business goals.

Github Link: <https://github.com/Ashokkumar-46/Keyword-Research-Planner>

Demo Link :

https://drive.google.com/file/d/1InEeGR4Wgug_oyJyhi0Z36RtEpvTAgk5/view?usp=sharing