A REPORT

ON

SEARCH ENGINE AND APP STORE OPTIMISATION IN DIGITAL MARKETING

BY

Names of the Student(s)   ID. No. (s)

AT

Healthcare Pvt. Lmt.

A Practice School-I Station of

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Prepared in partial fulfilment of the

Practice School- I Course Nos.

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A PRACTICE SCHOOL STATION OF

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1.3 What is App Store Optimization?

App Store Optimization (ASO) is the process of increasing an app or game's visibility in an app store, with the objective of increasing organic app downloads. Apps are more visible when they rank highly on a wide variety of search terms (keyword optimization), maintain a high position in the top charts, or get featured in the store. Additionally, app store optimization encompasses activities that aim to increase the conversion rates of app impressions into downloads.

1.4 Problem statement and goal of the project

The project was assigned by MASTH, a start-up that aims towards breaking the stigma around the emotional wellness of teenagers and providing adolescents with a certain skill set as well as professional guidance on regulating their mental and emotional health. Through this project, we attempted to ensure that the MASTH website that contains relevant information regarding myriad teen-specific topics, gain greater visibility through SEO techniques. Another part of the project was to provide guidelines for the MASTH app for teens and the MASTH GURU app for teachers using ASO to increase their installation rates.

The main challenge of this project was understanding the information consumption patterns of teenagers to fabricate better methods of ensuring the information reaches them. We also had to delve deep into the psyche of modern-day students to understand their troubles that could be addressed by MASTH. The content had to be designed such that it was appealing to the target demographic and thereby had greater retentivity. The MASTH GURU app seeks to connect teachers to counsellors directly so that there can be faster identification of at-risk teens. For this, we had to strive to create a secure and trustworthy environment that would be appealing to schools concerned with the well-being of its students. All this had to be done keeping in sight the primary objective of creating a nurturing community where students could achieve their full potential and not be held back by the shackles of outdated stigmas which is what we have attempted through various means in this project.
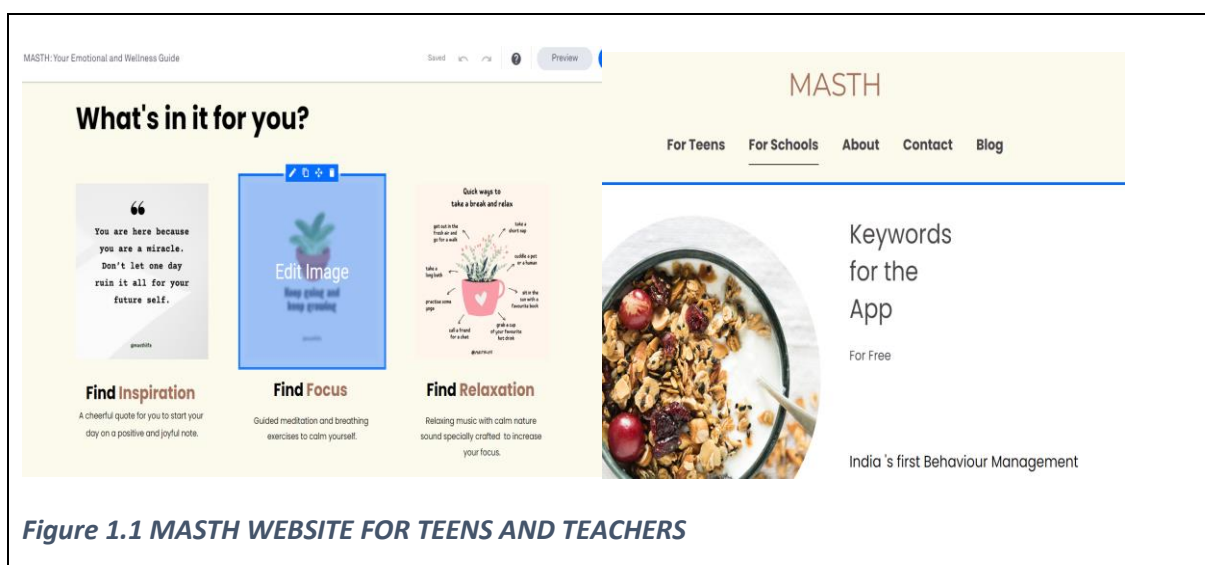

Figure 1.1 MASTH WEBSITE FOR TEENS AND TEACHERS

Chapter 2 SEARCH ENGINE OPTIMIZATION

The task of optimizing the website to rank better on a Search engine results page was performed by breaking up the entire process into three steps. Each of these steps was further subdivided in a manner that nothing was left out and all the problems were adequately addressed. The structured problem solving helped in identifying minor issues that could hugely impact the overall performance of the website and finally integrate all the incremental changes in a harmonious fashion.

2.1 Research

Research forms one of the most integral parts of search engine optimization. It is the base on which all the subsequent methods rely. The information gathered in the research phase of the project formed the basis of any action taken later as the process was designed to be objective and data-driven. All kinds of guess works were eliminated by gathering information that could dictate the decisions that were necessary to properly adapt the website to meet SEO standards. For this purpose, online resources were used extensively and a 9-hour long course by Simplilearn alongside a course on digital marketing from HubSpot were completed to gain insights into the best industry practices and optimal techniques recommended by experts in this field.

2.1.1 How do search engines work?

Search engines work through three primary functions:

1. Crawling: A spider bot or web crawler scours the internet looking for content, looking over the code/content for each URL they find.

2. Indexing: The content found during the crawling process is stored in a huge database and organized. The organization is done with the aid of natural language processing (NLP). Based on this organization each page is provided with a certain index that signifies its relevance and thereby the chance of it appearing at the top of a search engine results page based on a multitude of factors. Once the page is indexed, it is in the running to be displayed as a result to relevant queries.

3. Ranking: The final part of this mechanism is the ranking of web pages based on the queries entered in a search engine based on the index and an algorithm that varies from search engine to search engine. The search engine algorithm is fabricated in a manner that it presents a hierarchical order of pages that will fulfil the user's query as quickly as possible.

2.1.2 What are the parameters that determine the ranking of a website in a Search Engine algorithm?

Some of the factors on which the ranking of a page depends on are:

- ☐ The keywords found in the page content especially the title tag and headings
- ☐ The relevancy of the content with respect the keywords entered by the user
- ☐ The timeframe between the latest updates done on the webpage and the time of search
- ☐ Previous interaction of the user with the aforementioned website
- ☐ Location of the search especially regarding queries having the words 'near me'
- ☐ Language used in the queries
- ☐ Device used in making the query

2.1.3 <u>Keyword Research</u>

Keyword Research is the starting point and crux of any SEO procedure. The ranking of any webpage depends largely on the keywords being used in not only its title and headers but also in the content, URL, and meta-description. Therefore, it a crucial that anyone aiming to optimize a webpage has a comprehensive idea about the specific keywords that would help the site rank higher on the SERPs. Thorough knowledge of the tools necessary for this process as well as information on how to properly use these tools to gather data in an organized fashion is essential to ensure getting higher indexing by the algorithm. The resulting page should appear with respect to a wide range of queries like voice search, locations, image search, and also for incomplete searches.

Keywords are a certain combination of words or characters which when entered by a user on a search engine provides results based on their relevancy and the concentration of its usage on a webpage. Keywords can be categorized into two major categories:

- Short tail keywords: short tail keywords are non-specific keywords that contain less than 3 words. These keywords generally have very high search volume and high competition. Overall, it has been observed that short tail keywords result in a lower conversion rate.
- Long tail keywords: long tail keywords are generally highly specific in nature and can have between 3 to thirty words. These keywords have relatively lower competition but the search volume might vary. These keywords have been shown to typically result in higher conversion rates.

Keyword research requires a set of specific tools to enable a data driven approach when it comes to gathering and organizing keywords. Some of the most popular tools are:

- ☐ Google Keyword Planner
- ☐ MOZ
- ☐ SEMRUSH
- ☐ Ahref
- ☐ Frase.io

These tools provide the organic traffic per month (Search volume) and the relative difficulty when it comes to marketing these keywords. Most of the tools also provide a list of related keywords and their search volumes respectively. To find the competition faced by the keywords it is advisable to

look at those websites that has the selected keyword as a part of its title tag. For this purpose, the following format is entered in the desired search engine- "allintitle: keyword". At the top of the SERP obtained by typing the aforementioned statement a number denoting the actual competition for the given keyword is measured.

	Theme	Keyword	Volume	competition	KEI	close variants
			(Upper limit)	(title)		
BLOG 1	Mental health and teenagers	Mental health & teenagers	50	151000	0.03%	
		Mental health in adolescents	1000	161000	0.62%	
		teenage mental health	1000	156000	0.64%	mental health issues in teenagers
		mental health and adolescence	1000	152000	0.66%	
		psychological problems in adolescence	1000	233	429.18%	
		mental health in youths	1000	150000	0.67%	
		teenage psychologist	1000	1400	71.43%	
	Emotional wellness	emotional wellness	1000	45800	2.18%	
		emotional health	10000	175000	5.71%	
		emotional wellbeing	1000	34100	2.93%	
		emotional health meaning	1000	298	335.57%	
		physical emotional mental spiritual	1000	3230	30.96%	
		emotional physical mental	1000	15200	6.58%	
		what is mental health	10000	17600	56.82%	
		what is mental illness	10000	76100	13.14%	
		what is mental health definition	100000	10	1000000.00%	
		what is mental disorder	1000	70000	1.43%	
		what is mental health awareness	1000	8	12500.00%	

Table 2.1 Keyword Research

The most effective keywords are those having high search volume and relatively low competition. The gathered keywords are selected such that they are relevant to the business and inputted in an excel sheet with their respective search volume and competition. The Keyword Effective Index of these keywords are then obtained by dividing the search volume with competition and converting the result into a percentage. The keywords with highest KEI indices generally perform better and is therefore generally included in the website depending on other parameters.

What remains is the analysis of the keywords obtained and their categorization into primary and secondary keywords.

- ☐ Primary keywords – Primary keywords are those keywords that most closely describe the business or the principal theme of a particular website.
- ☐ Secondary keywords- Secondary keywords are those keywords that add a bit more detail to those initial keywords and are often related more to the search intent. Secondary keywords add more context and potentially helps the website to rank quicker.

|		KEI
Primary Keyword	emotional	
Question based	what is mental health definition	
	what is mental health awareness	
	what is mental hygiene	
	how to help a teenager with mental health issues	9500
Secondary keywords	emotional health meaning	
	teen psychologist	
	anxiety attack	
	mental health articles	
	mental health importance	
	anxiety attack symptoms	4854.37
	stress buster	326

Table 2.2 Keyword Sorting

Sorting keywords is a quintessential part of the implementation process and as an alternative to keywords latent semantic keywords or LSI keywords can be included in the content or as secondary keywords to enhance the ranking significantly and improve the overall quality of content deliverance.

LSI keywords are words related to the main keyword and are seen semantically relevant. There are several ways to obtain LSI keywords that would act as content boosters. Some of the methods are:

☐ Google keyword planner: Google Keyword planner provides a list of alternatives for a searched keyword which not only provide alternatives but also helps us judge those alternatives from an SEO point of view but calculating its respective KEI.


Figure 2.1 GOOGLE KEYWORD PLANNER
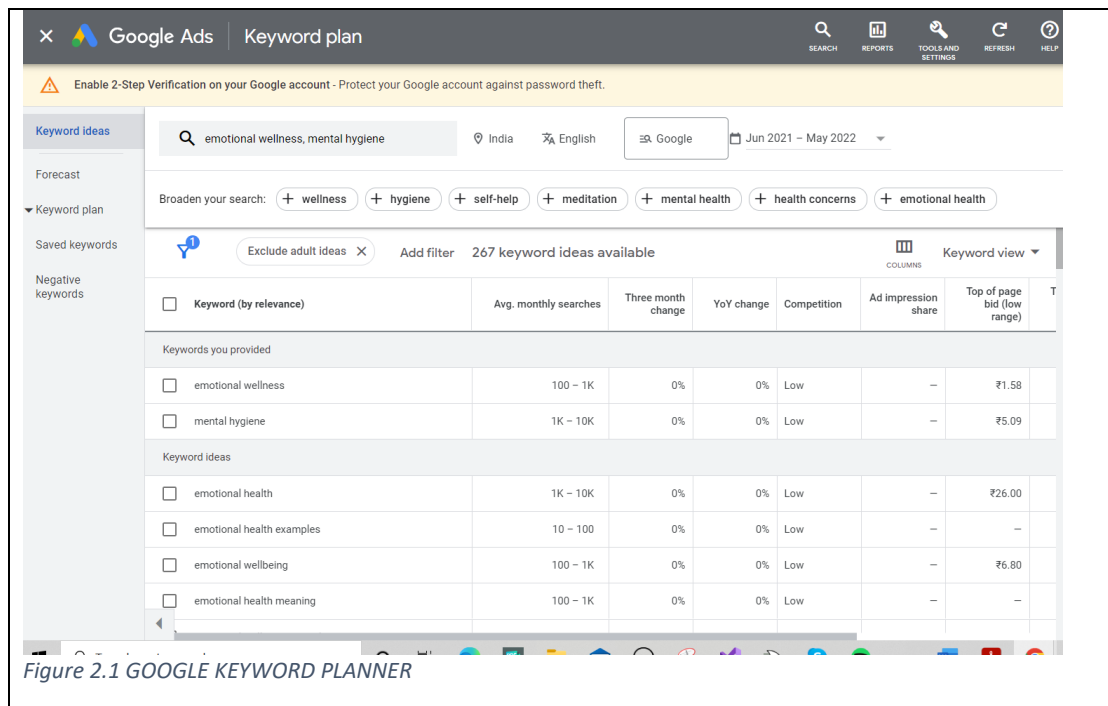
☐ Google Autocomplete: When a user types an incomplete enquiry into the search bar, Google autocompletes the enquiry based on the most popular phrases that real people have used in that context. Therefore, if one types in the primary keyword, a corresponding list of secondary keywords can be obtained using this method.

Figure 2.2 GOOGLE AUTOCOMPLETE
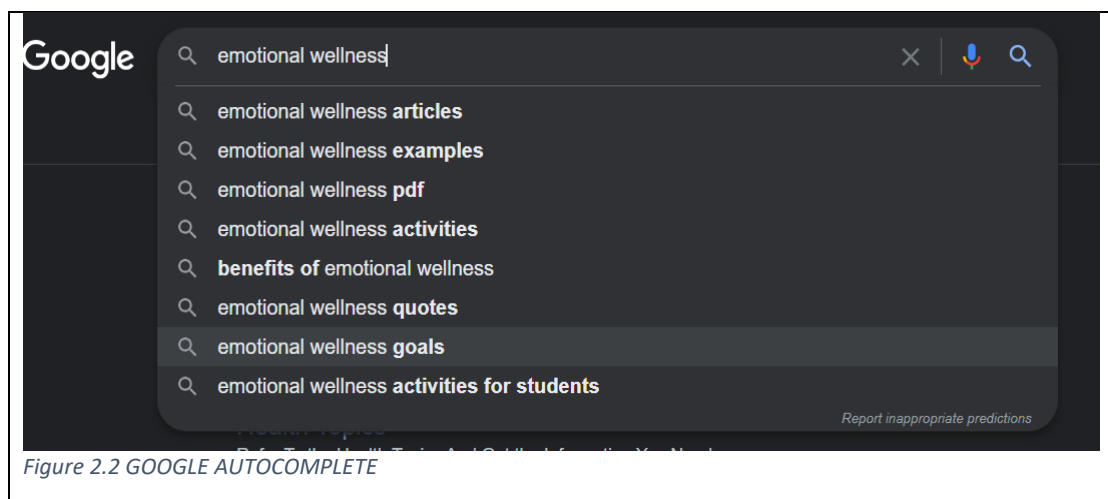
☐ Google suggest using synonyms and semantics: LSI keywords can also be obtained from the 'people also searched for' section at the bottom of an SERP. On can also try describing the primary keyword or using synonyms to obtain greater number of variants.

Figure 2.3 GOOGLE SUGGEST
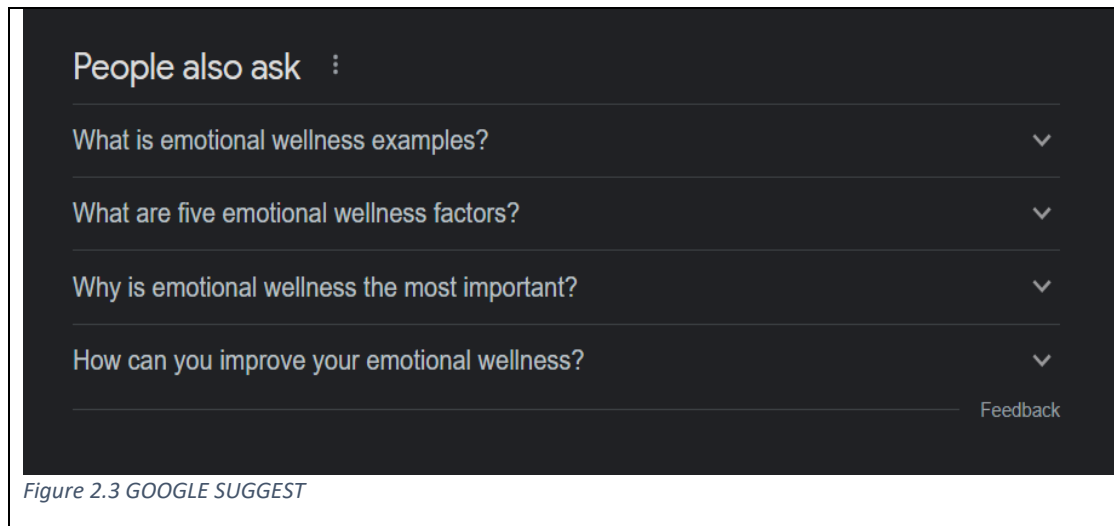
☐ Wikipedia: Wikipedia is perhaps the most read website on the internet and therefore stands at the position to provide suitable suggestions The first paragraph of the Wikipedia page that appears on searching for the primary keyword contains links to other pages with related topics. These keywords can serve the function of LSI keywords. The references section also has suitable suggestions for the same which can serve to be incredibly helpful in designing comprehensive and well researched content.

Figure 2.4 WIKI SUGGEST
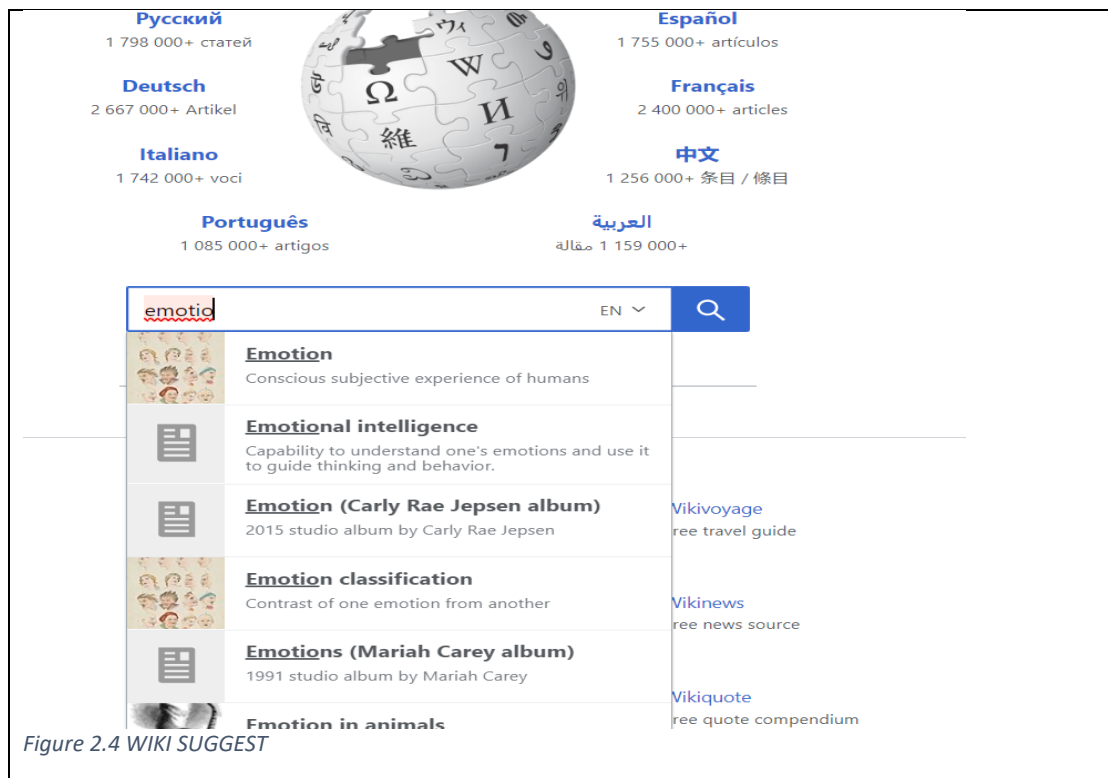
These LSI keywords obtained are further analyzed and categorized in order of relevance to enhance effectiveness of content, cater to the demands of the customer, encourage conversion rates and ensure that the question asked through the primary keyword is properly addressed. Overall keyword research is the primary influencing point in encouraging consumer engagement and ranking and is the building block to the optimization procedure. It improves the depth of a page and with help of third-party tools one not only has the provision to choose the keywords relevant to their own business but also the ones that their competitors have ranked for, thus giving them an edge over the competition.

2.1.4 Market Research and Competitor Analysis

Market research is an organized effort to gather information about target markets and customer: know about them, starting with who they are. It is an important component of business strategy and a major factor in maintaining competitiveness. Market research helps to identify and analyze the needs of the market, the market size and the competition.

Competitor research in marketing and strategic management is an assessment of the strengths and weaknesses of the current and potential competitors. The analysis provides both offensive and defensive strategic context to identify opportunities and threats. For the market research a quantitative as well as qualitative approach was adopted whereas the competitor profiling was principally qualitative research.

For performing the market research, the target demographic for the information disseminated was determined to be teenagers, school administration as well as teachers. The messaging as well as the facilities to be provided however were widely different. Therefore, the challenge was to appeal to both the customer base and understand what would potentially attract them to our products and services. For teenagers the business model was mainly B2C. They were being provided independent access to an app that would help them with regulating their emotional health and boost their productivity. There was also provision to access contact with trained therapists provided by the company alongside free resources like podcasts, blogs, journals to help them deal with their mental health issues effectively.

The second section of the website that was designed to catered to schools was designed to provide them with a one -stop counselling solution. The business would provide the school with counsellors and also connect the teachers directly to the counselors so that a database of at-risk teens could be maintained and the teacher could refer students with erratic behavior for receiving therapeutic help. This part of the business was principally B2B. In order to cater to this purpose, we had to perform research on the factors that would persuade a school to apply for our services and also examine a list of features already being provided by our competitors so that we could supersede them.

The market research was done primarily using the following tools:

- ☐ Google trends: Google trends provides a list of trending topics that can provide an insight into the current consumption pattern. It also provides the relative popularity charts with respect to a particular keyword as well as the search trends over a period of time. Thus, through inputting various keywords related to the business one can gain insights into the popularity of that particular keyword and thereby predict consumer reaction.

Figure 2.5 GOOGLE TRENDS OVER TIME

Figure 2.6 gOOGLE TRENDS OVER REGION
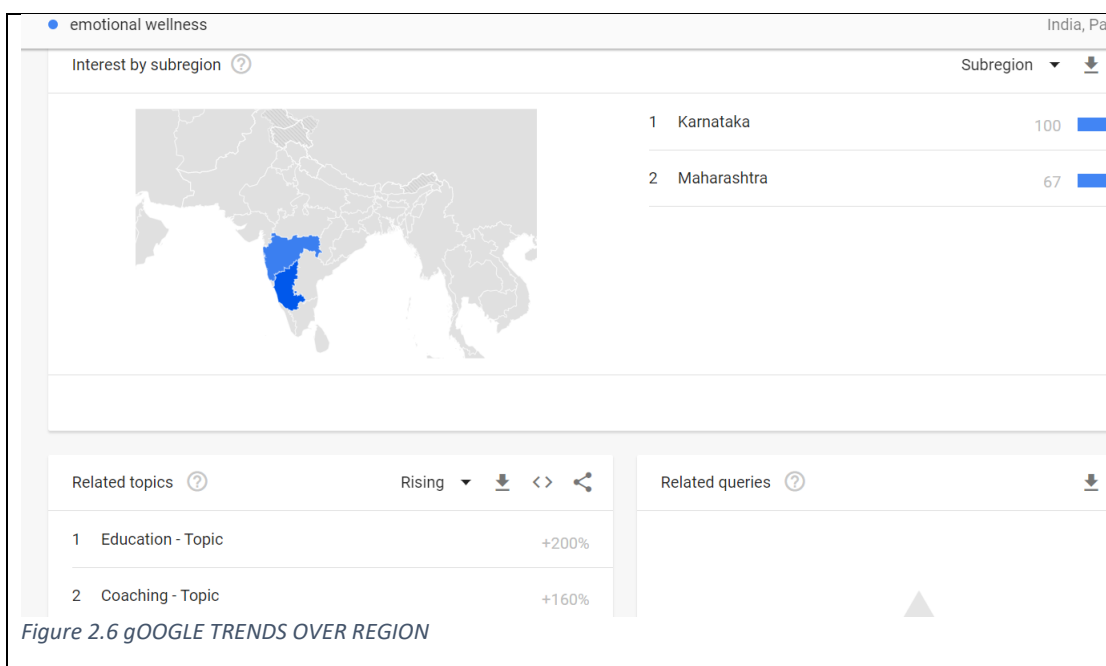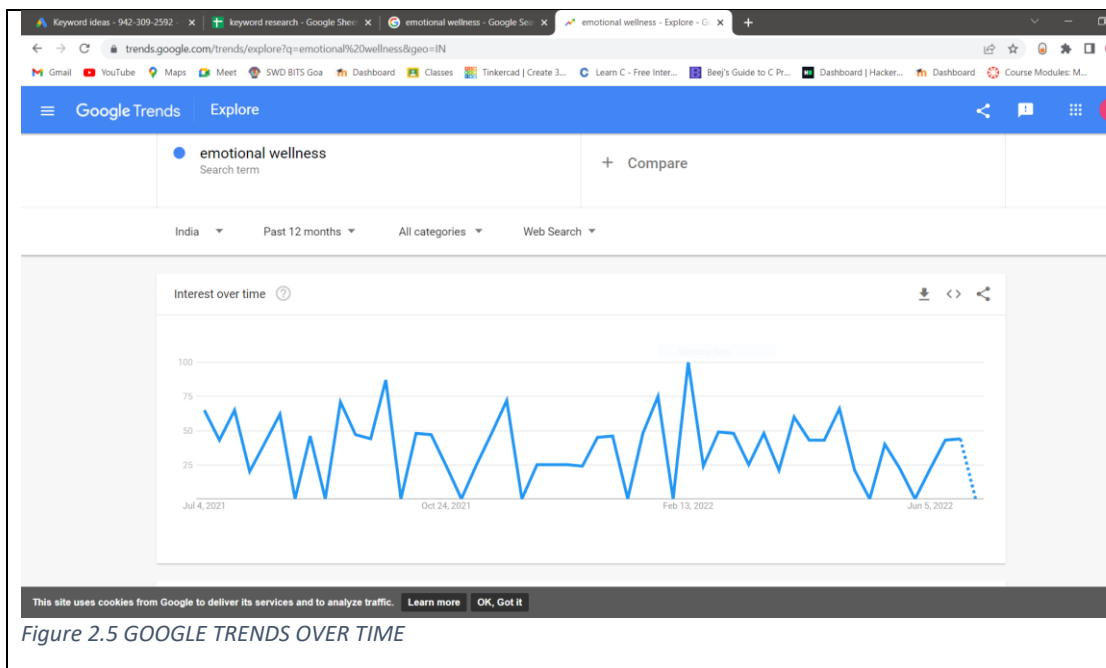
☐ Wiki Suggest: Wikipedia is widely used educational platform and is therefore used extensively by students as well as teacher. Using the list of suggested keywords as well as references one can gather further information about the market especially with respect to the education sector.
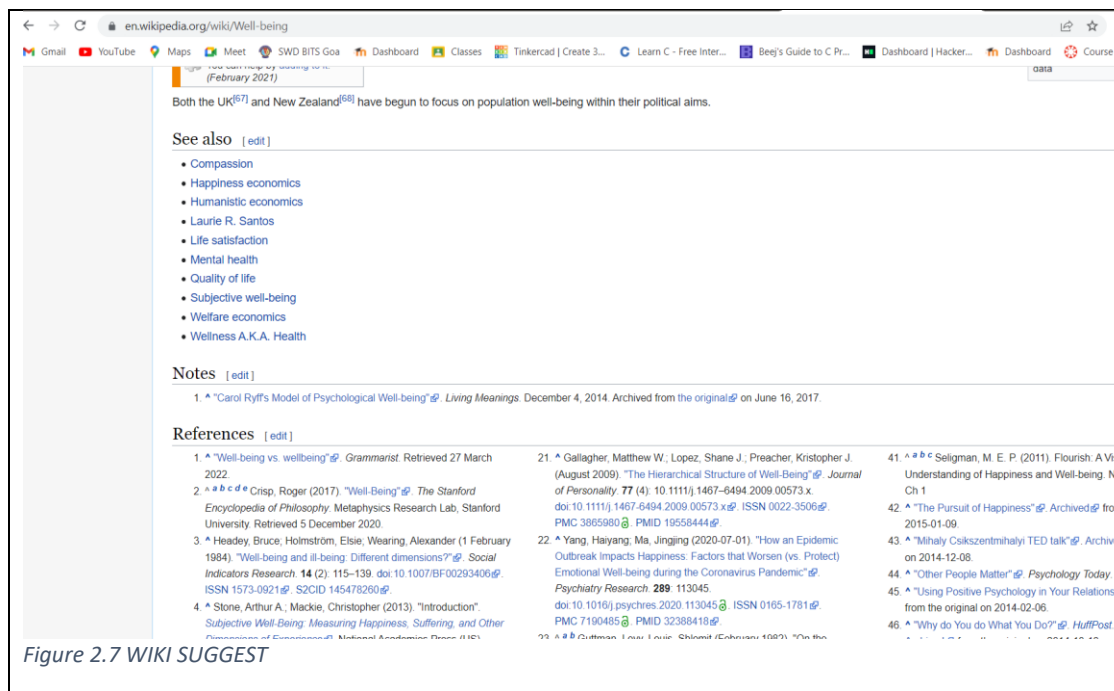
Figure 2.7 WIKI SUGGEST

☐ Quora: Quora is a question-and-answer platform that teens as well as adults use. The most searched questions as well as spaces provides a lot of information about the problem that the consumer base is facing thereby opening up opportunities for the company to provide effective solutions for the same. The search bar in Quora also provides questions and discussions pertaining to a particular keyword which can be especially helpful in understanding the scope of services and highlight the features in popular demand.

Figure 2.8 QUORA SPACES
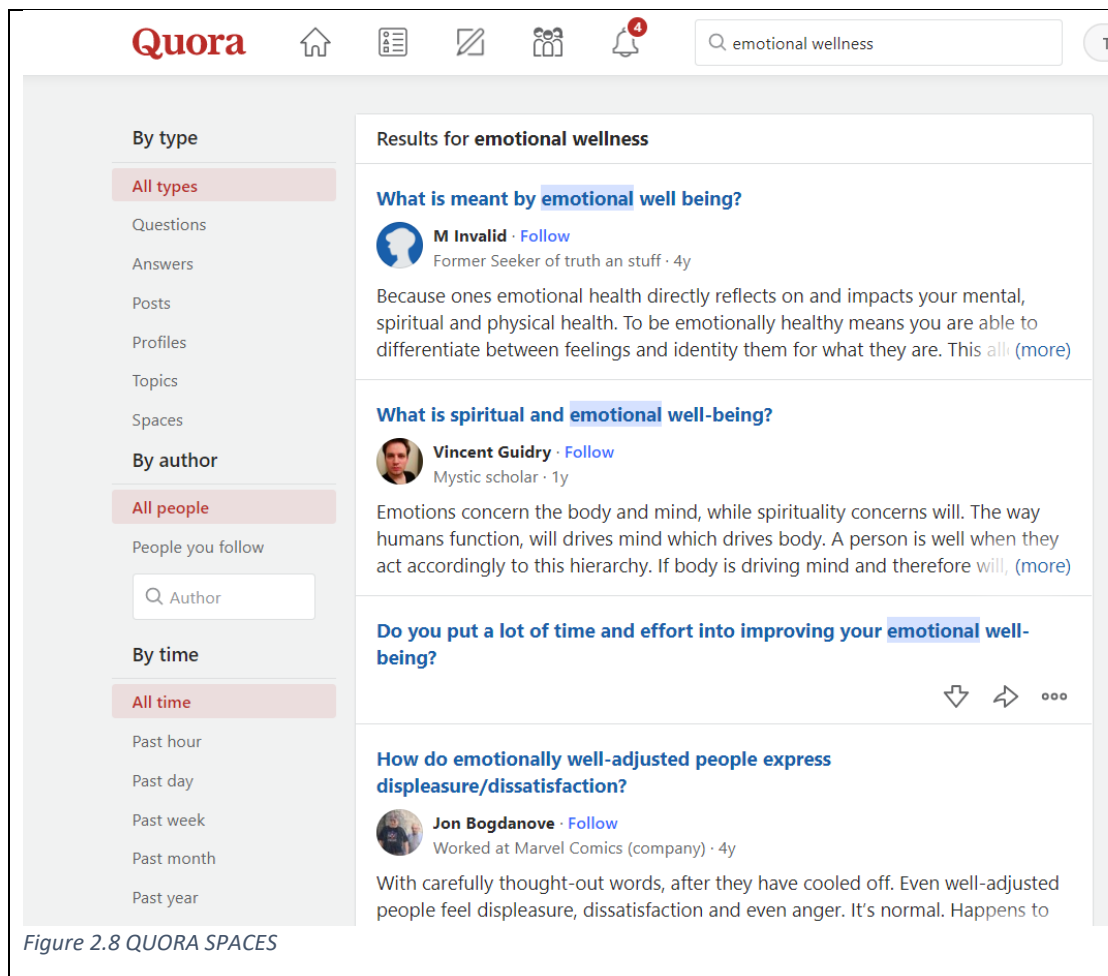
☐ Reddit: Teenagers spend a lot of their time on social media. Hence social media platforms like reddit, Instagram and twitter can provide a detailed look into the minds of these teens, thus helping us in designing products that would be tailor made for their needs. Reddit was specifically chosen because of the tool KeyWordit, a feature that looks through the subreddits and returns trending searches and topics of interest based on a primary input keyword.

Figure 2.9 KEYWORDDIT CHARTS

Quora	reddit	emotional wellness
	whole new world	
What are the best educational institutes for emotional and mental wellbeing for autistic teens	Michael Scott quotes	
What are emotional wellbeing and life skill leaning apps for teens	captain America quotes	
How can a teenage boy on the spectrum reduce the severity and duration of shutdowns	stop making excuses	
How as a parent you can make-up for areas you may not have handled well in the emotional wellbeing of your kids	badass quotes	
Emotional draining by parents (emotionally unavailable or absentee parents)	good short story	
How is emotional wellbeing related to psychological wellbeing	growth and change	
How do emotional well-adjusted people express displeasure or dissatisfaction	real world examples	
Emotional wellbeing tests	Ashton Kutcher quotes	
Unable to express emotions to family and friends	success or failure	
How does food affect emotional wellbeing of a teenager	favourite movie quote	
What is the impact of risky teenage behaviour on emotional well being	positive news story	
Parental neglect on emotional wellbeing of teenagers	small things matter	

Table 2.3 LSI keywords

For competitor analysis, a detailed SWOT analysis was performed on several competitors or potential competitors. Based on the research a database of these companies was created which contained all the information required to truly understand our own standing in the niche. Companies belonging to not only the health and fitness niche in India but also renowned global organizations and charitable institutions dealing with mental health were thoroughly examined. The database contained information on the type of customer base, the type of business operations carried out (B2B or B2C), main offering as well as the strength and weaknesses of these companies. Each of these categories were researched in great detail that submitted for further evaluation to another digital marketing team specializing in competitor profiling.

Company	Target Geography	B2B or B2C	Target Customers	Main Offering	Strength	Weakness	Pricing Model
Felicity	Recent Indian start-up	B2C	anyone facing mental issues	Video sessions and chat access with counsellors, free mental health assessments and they have guided exercises, journal, mood tracker and unlimited wellness content.	Attractive and interactive website which also has a chatbot.	They don't provide any free sessions thus have only 200 registered users and only 500+ downloads on play store.	999 Rs. for first session
Jack.org	Its a great Canadian charitable organisation	B2C	young people with mental disorders	Jack Talks-Youth talking to youth about mental health, Jack chapters are groups of young people working year-round to identify and dismantle barriers to positive mental health in their communities and Jack Summits-Youth-led conferences of all shapes and sizes which varies from a small meeting to very big sessions.	They have reach all over Canada, they can get huge funds through fundraisers. Users can initiate movements spreading awareness through Jack talks, chapters and summits.	They don't have a dedicated app on play store.	free
Psych central	Founded in Florida, users are spread	B2C	anyone facing	One can ask question from certified	It has a very big team and its users can	There is no source to verify the credibility of	free

worldwide. The site was named as one of the Internet's 50 Best Websites in 2008 by Time.	mental issues	therapists and your questions can also be answered by other users. They have different symptom quizzes to identify the disorders along with other mental health resources.	be both, consumers with mental health issues and professionals who want to solve other's issues. It is there on every social media platform and posts helpful content for users.	authors writing on the site. Also, moderators and admin don't listen to members so members are not happy, so now its credibility is gradually decreasing.

Table 2.4 Competitor analysis

2.1.5 Questions answered
1. How to rank higher in a SERP
2. How to appear on more SERPs
3. How to appear in case of incomplete searches
4. How to enhance visibility
5. What keywords are to be added on a webpage
6. How to increase relevance
7. How to supersede competition
8. Why are the type of searches to be targeted?

2.2 Implementation
The next step in the SEO ladder is implementation of the data obtained from the research phase.

2.2.1 What are some desirable traits of a webpage?

☐ Site content: The content should have title tags multiple headers and meta description. If meta description is used it should be formatted correctly. The content should be relevant and engaging. There should not be logical gaps and should be simple and easy to understand.

☐ Loading speed of the page: If a site loads in 5 seconds, it is faster than approximately 25% of the web. If it loads in 1,7 seconds, it Is faster than approximately 75% of the internet. Faster sites provide good visitor experience and studies have shown that boosting site speed by just a few seconds can provide a huge change in its ranking

☐ User experience: There should ideally be no spam, popups or overbearing ads

☐ Design: A suitable title tag should be used alongside multiple headers to enforce a logical hierarchical structure. A suitable synopsis should be provided in the form of the meta

description so as to appear in Google featured blocks. The overall content should be neat and readable

- [ ] Including navigation: Navigation between pages should be allowed by including internal links. External links to renowned website is another desirable feature
- [ ] Bounce rate: the bounce rate should be minimal which can be created by improving content engagement and interactive elements. Infographics, pictures and videos can be use to bait the user to spend more time on the page

### 2.2.2 **What are some undesirable traits?**

- [ ] Keyword stuffing
- [ ] Bad linking: No internal links or external links provides or if broken links have not been fixed or redirected
- [ ] Poor user experience
- [ ] Domain naming: When subdirectory of root domain is not used. Usually, the subdomain and keyword should be present in the keyword and should not be independent of the main landing page to maintain a proper structure
- [ ] Device compatibility
- [ ] Improper usage of keywords
- [ ] Poor link building
- [ ] Website deindexed

2.2.3 **On-Page SEO**

On- page SEO (also known as on-site SEO) refers to the practice of optimizing webpages to improve a website's search engine rankings and earn organic traffic. Basically, it deals with optimizing elements on the web page. On page SEO has the potential to make or break one's SEO success. There are several components to on-page SEO and one has to strategize a process to make all those individual elements work together. The keywords previously obtained in the research phase is sorted into primary or secondary keywords and subsequently used in different part of the web page.

- Title: Needed to have the primary keyword. The title tag explained the page's context within the site and was ensured to have keywords that fulfilled the searcher's intent through the content. All titles were chosen in a manner that they clearly conveyed topical intent and were unique.
- Meta-description: Had secondary keywords. These were chosen after a thorough analysis of the keywords that competitors were using and mapping the customer's journey.
- Header tag: H1 had the primary keyword whereas secondary keywords were placed in the h2 and h3 tags. The header tags were used to provide structure to the pages. Blocks of text were broken up with subheadings. Although keywords were used plentifully, keyword stuffing was particularly avoided to eliminate chances of spamming. The headers were also used to optimize the content for featured snippets that would drive additional traffic. The header tags were made consistent with the page and often designed to include lists which is observed to drive greater traffic.
- URL: URLs made the use of primary keywords with relevance to the query. The URL was made SEO friendly and broken URLs were fixed.

- The content of the blogs used a lot of secondary keywords. The content was audited for better user experience. It was ensured through proper editing that the content was achieving its goals and was not stale or outdated. The fresh content was then checked for logistical accuracy to prevent spread of any misinformation.
- The blog was arranged in a hierarchical fashion to improve the presentation. There was also an effort to improve overall website architecture
- Highly researched and relevant content was used to decrease bounce rate.
- The content was written by an expert in the field to provide it with credibility.
- Beautiful infographics were used to make the site appealing.
- Using internal linking to relevant pages were connected together. This was done keeping in mind the ease of navigation throughout the website. The end of each page had a link to a connected blog post
- The site was made easily navigable with interactive options for chats.
- A call to action was implemented that asked for the consumer's email that enabled them to join the community and receive regular newsletter, thus opening the pathway for email marketing
- An 80/20 rule was followed whereby 20% of the work was designed to yield 80% of the results
- A Site map was designed and incorporated to enable google to index the website properly. The sitemap contained a list of all URLs on the website to help Google as well as the user understand the structure of the website.

Figure 2.10 MASTH BLOG :HEADERS OPTIMIZED
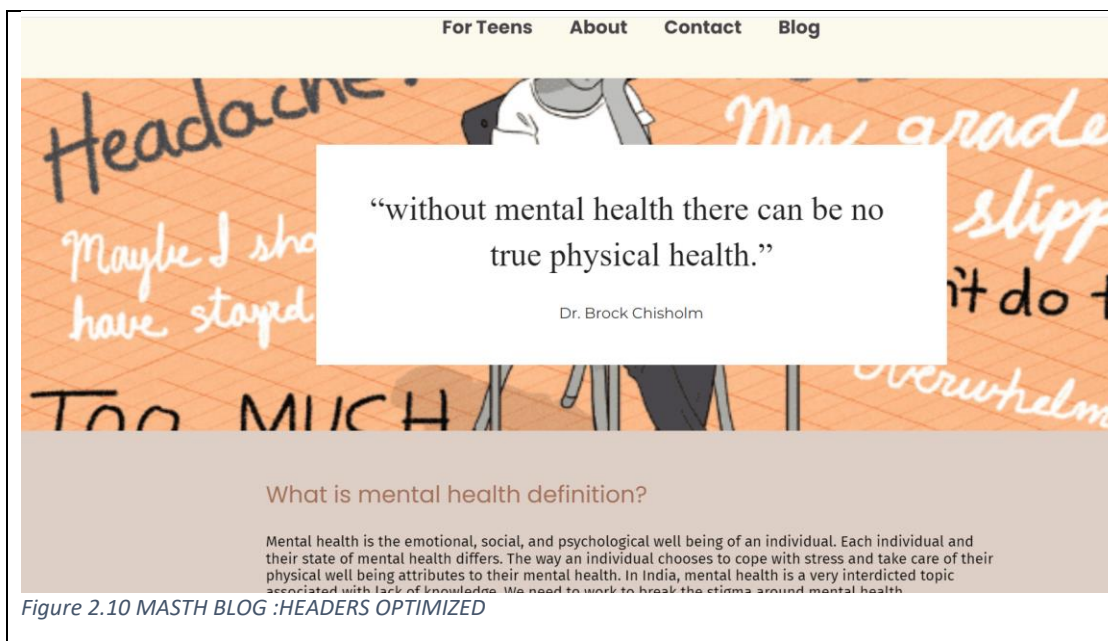
Mental health is important and pertinent at every stage of an individual's life. It is essential for us to bring awareness of it at teenage in order to ensure a person is able to self reflect and analyze their issues. As students face constant pressure in their daily lives with the highly competitive educational environment of India, it sometimes takes a toll on their mental and emotional health. As stress builds on and accumulates, due to the lack of understanding of the relevance of mental well being, it sometimes results in gruesome endings with their life being taken as the last resort. Students are at a young and tender age with raging hormones, mood swings and emotional vulnerability, therefore, it is very essential to be empathetic with them.
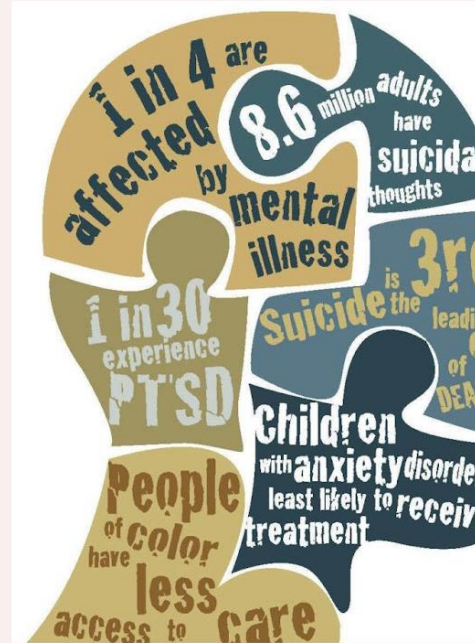
Figure 2.11 BLOG CONTENT OPTIMIZED

2.2.4 <u>Off-page SEO</u>

Off -page SEO (also called 'off-site SEO') refers to actions taken outside of your own website to impact the rankings within the search engine results page (SERPs). It involves tactics that don't involving updating or publishing content to your website. In the past off -page SEO and link building were almost used interchangeably, but in reality, there are many off-page SEO tactics one can use including: brand building, citation building and content marketing.

1. Backlinking: A list of websites accepting articles from guest bloggers were collected. For this we used the format niche: "Write for us". For example, we used healthcare: "write for us" in our searches and collected a list of sites for blogs as well as infographics. This list will enable us to collaborate with the reputed website and by publishing content there would in turn increase our visibility. We would be providing backlinks to all these contributions which would redirect back to our website or app and in this manner, we would be able to direct grater traffic through indirect means. A number of blogs were submitted to these blogs following the guidelines alongside the backlinks to lead back to our website

backlinks
for app and
websites

Category	Websites	Description	Published
Emotional wellness	https://digitalhealthbuzz.com/write-for-us/	digital health world-	same day
	https://www.nuayurveda.com/write-for-us/	wellness or health enthusiast- ayurveda, diet, healthy lifestyle	within 1 week
	https://worldofmedicalsaviours.com/write-for-us/	medical facts - does not need to be professional-no advertising	
	https://www.voquent.com/write-for-us/	anything relevant	not specified
	https://www.ayurvedichomeremedies.net/write-for-us/	wellness related- anything related to naturopathy -paid	24-48 hrs
	https://www.healthgrad.com/write-for-us/	anything related to healthcare	3 days
	https://www.edutopia.org/about/your-turn-write-us	anything relevant	not specified
	https://swhelper.org/write-for-us/	anything relevant	not specified
	https://jungleworks.com/juggernaut/write-for-us/	beauty and wellness	not specified
	https://healthgardeners.com/write-for-us/	beauty, health, fitness	not specified

Table 2.5 Backlinks

2. Social Media: We have been trying to collaborate with the social media marketing team to publish SEO optimizes content. We have provided them with a list of keywords and plan to continue doing so. There is also an active effect to look for collaborators who might be interested in publicizing for us like an influencer. There has been offers on social media posts for collaboration. Other than that, there is regular posting to keep users engaged.

Figure 2.12 SOCIAL MEDIA POST ON INSTAGRAM

3. Usage of Q &A platforms and reddit for widening consumer base:As Q&A platforms like Quora and others like reddit have a wonderful list of recent trends and opportunities for backlinking we have collected a list of trending questions and keywords that can be used to market the product to the target audience.

2.2.5 Other integrations

1. Google search console: Google Search console is a free tracking tool for tracking your site's organic search performance. Using search console one can search for keywords that they rank for, check ranking positions, fid website errors and submit sitemaps. Google search console was integrated to the MASTH website by verifying the site URL with the domain GoDaddy. Afte the site authorization was verified; an account was created which was used to identify that the website was not being indexed. Consequently, a high priority indexing request was sent to Google.

2. Sitemap: A sitemap was created using xml generator. This sitemap was then updated to the sitemap section of Google Search Console. In order to verify the design of the sitemap a hierarchy chart containing all the URLs present in the website alongside their hierarchy was created.

Figure 2.13 XML FILE OF SITEMAP

Figure 2.14 SITEMAP INTEGRATED TO SEARCH CONSOLE
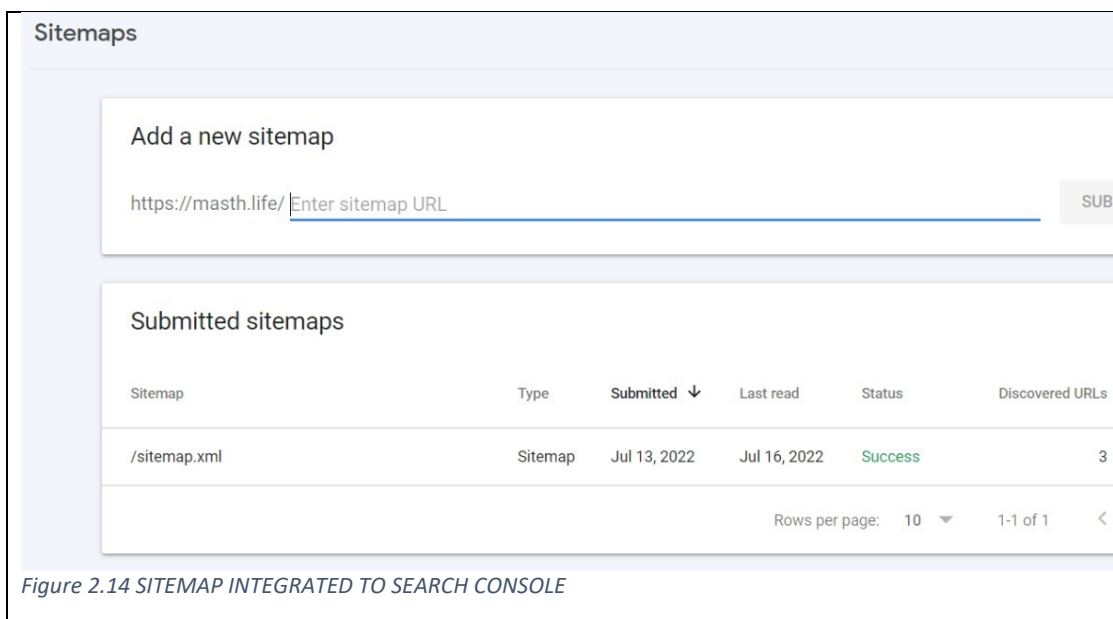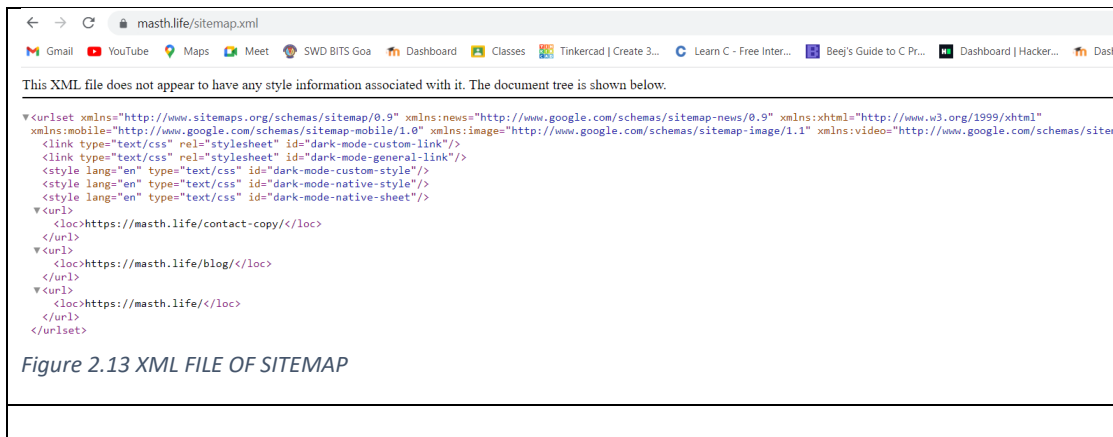
3. Https status: The https status of URLS were made sure and checked to ensure that the webpages are accessible at multiple locations.

*Figure 2.15 URL STATUS CHECKED*

4. Speed optimization: Page speed has been a raking factor in desktops since 2010 and mobile since 2018. The probability of bounce increases as page speed decreases. Therefore, using PageSpeed Insights the loading speed of the pages were checked. The site also displayed a list of probable causes causing an increase in load time. Insights as to optimizing the speed was also provided. These suggestions were implemented and images as well as other elements were optimized in size to improve the speed criteria.

Figure 2.16 PAGE SPEED INSIGHTS
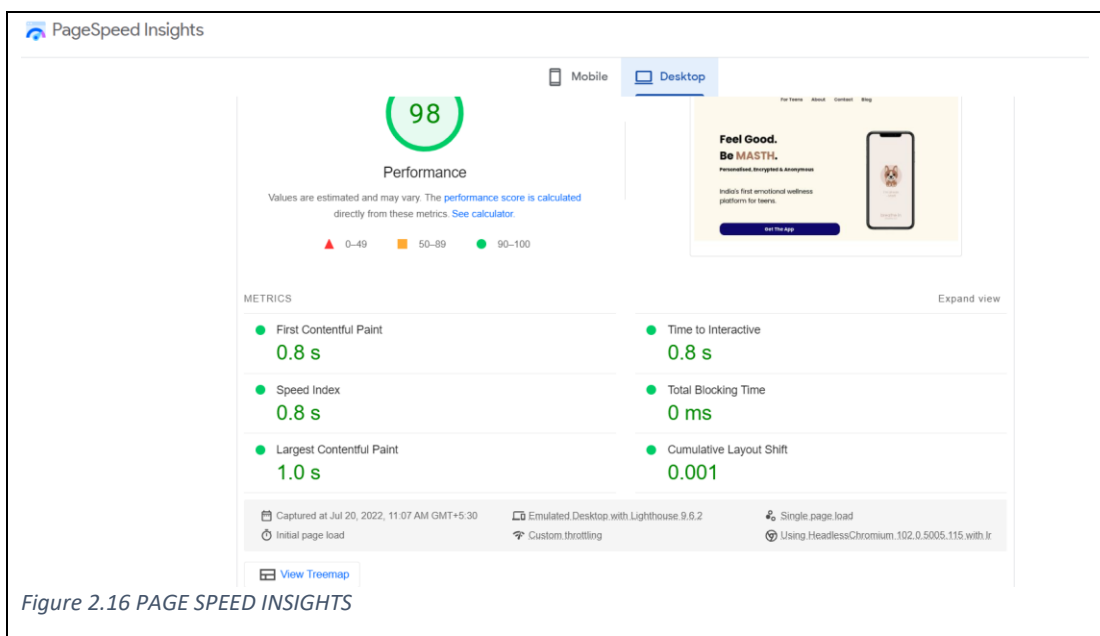
5. Device compatibility check: Checks were performed using Google's Mobile-Friendly Test tool to show whether the content appears properly on mobile devices.

Figure 2.17 CONTENT MADE DEVICE FRIENDLY
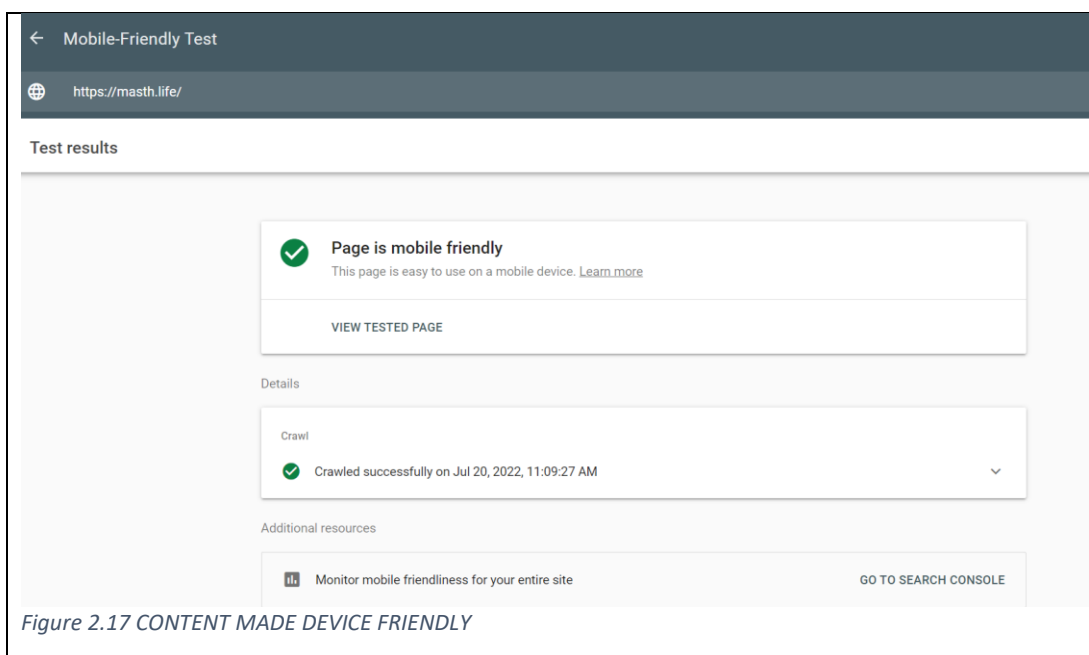
6. Content optimization: Readability of the content was enhanced using the Hemingway app.

2.3 Analytics

The final rung in the process of search engine optimization is analysis and evaluation of the results obtained. It is important to judge the factors on which the website is ranking so as to design future elements based on the highly ranked modules and also optimize the content of the content not driving enough traffic. Analysis of the consumer base using various tools also helps one gain valuable insights and allows them to test whether the content is having its required reach. Using analytics, one can also compare the performance of one's company with that of other and perform suitable competitor analysis. Overall, it is an essential part of the optimization process and leads to the creation of a feedback loop with the help of which any further alterations in the website are made.

2.3.1 Google tag manager

This free tool is used to examine how people interact with the website. Tags are specific events on a website that are created using a piece of java code and added to the webpage to collect data like page views, clicks, file downloads etc and finally send it to third party tools. Google tag manager helps to update tags quickly and easily. It tracks all tags in a website with help of a by-pass webmaster like Google Analytics, Facebook Pixels or Google AdWords.

There are several benefits to using Google tag manager. Some of them are

- ☐ Fast testing and deployment of code
- ☐ All tags are managed at the same place
- ☐ Simple version control system
- ☐ Auto event tracking feature
- ☐ Free of cost
- ☐ High security

Information from the website is shared with another data source through tag manager.

GTM can be set up and integrated into the website by creating an account and then obtaining a source HTML code. This code is then included at the top of every page on the website. The tags were integrated with Google analytics by setting up a new variable with the tracking ID of the analytics account

In our case Google Analytics was exclusively used as a third-party source. The analytics Id was put into a container that contained tags, triggers and variables. The trigger was principally chosen as page views. As the website was new the variables were kept limited.

Figure 2.18 GOOGLE TAG MANAGER INTEGRATED

Figure 2.19 TRACKING CODE INCLUDED IN WEBSITE
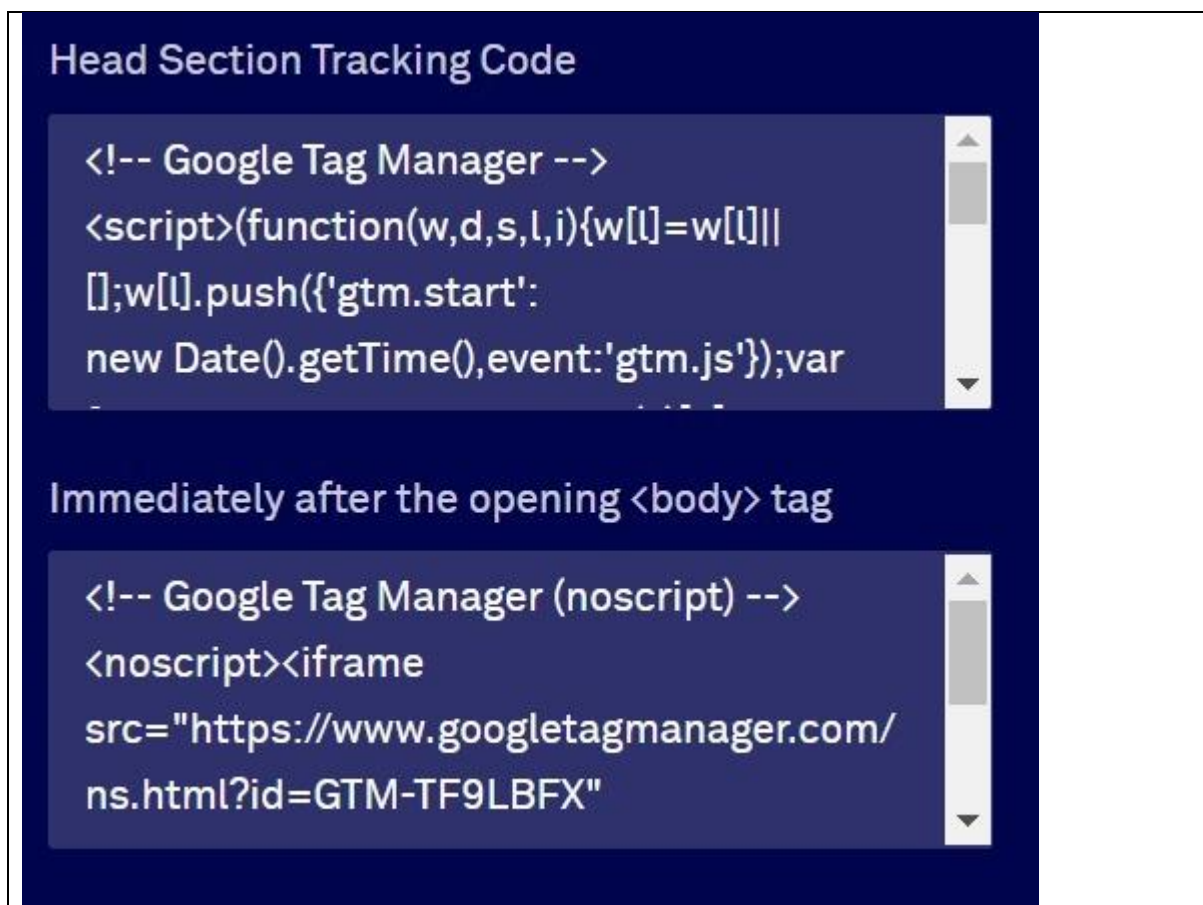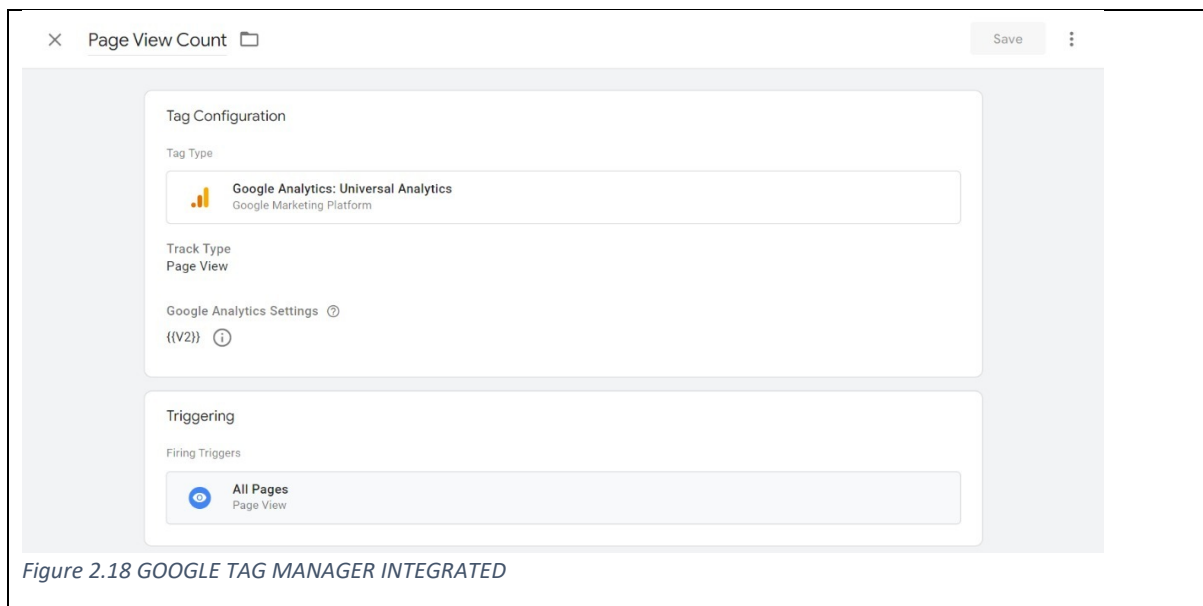
2.3.2 **Google Analytics**

Google analytics is another free tool that provides the user with several detailed reports on not only user engagement with the content but also with regards to the type of user accessing the content. It is a very useful tool and when integrated with tag manager can provide valuable insights into the effect that the content has on the target demographic. It also enables benchmarking where anonymous data is shared with others in the same industry to gauge one's performance with respect to one's competitors.

Some of the reports created by Google Analytics are:

- ☐ Audience overview: Audience overview is perhaps the most important report in the Analytics because it provides an overall snapshot of the traffic going to the website. It helps one to gin insights on the impact of their respective content. It can create audience segments so that one can narrow the scope and look at different types of traffic like organic, ads and social media traffic. It also shows the activities of different people and how many average sessions per user are there as well as the average duration. This report provides crucial information about the country, city of the user, their age and respect topics of interest.
- ☐ Demographics: Demographic data helps the company segment the audience into group of users that are most likely to convert.
- ☐ Acquisition overview: This report provides information on the general traffic trends on the site, understand where the traffic is coming from as well as make notations on traffic dips and increases.
- ☐ Landing pages: This helps analyse the pages that are driving the most traffic as well as identify underperforming pages on the site. The pages with higher bounce rates can be examined for errors and the ones with less bounce rate can be used as models to base any further pages to be designed.
- ☐ Behaviour report: This is one of the most useful reports as it helps to understand what new users and returning users are interested in. It tracks the actions of the user and helps clearly show which pages need to be reworked. It shows the number of unique page views per session, engagement and bounce rate. It also helps to examine the landing pages that drive greatest conversion rate.

Figure 2.20 ANALYTICS REPORT 1

Figure 2.21 ANALYTICS REPORT 2
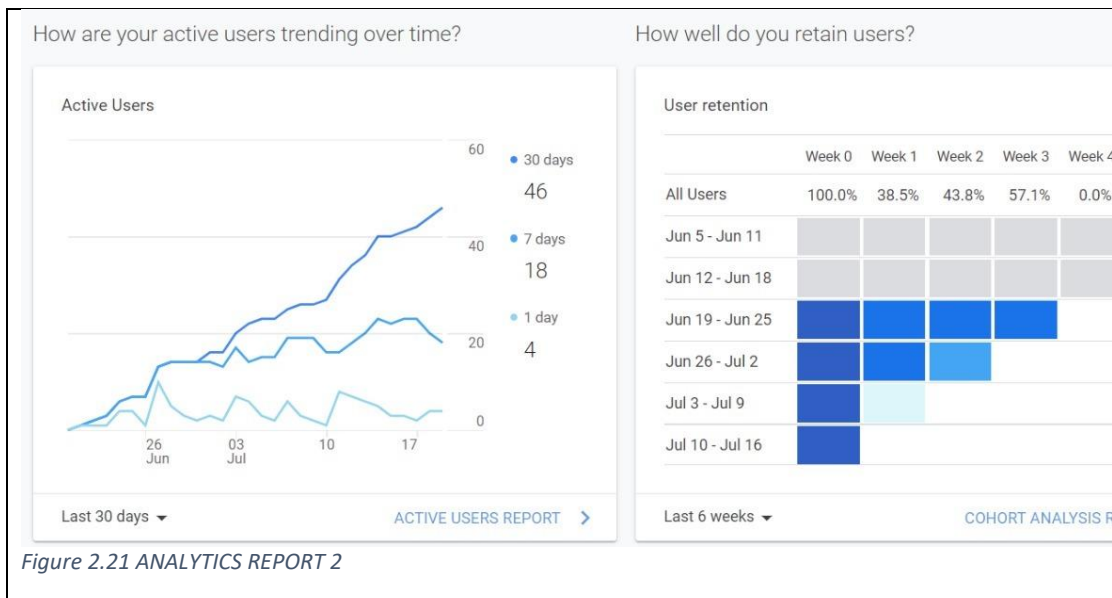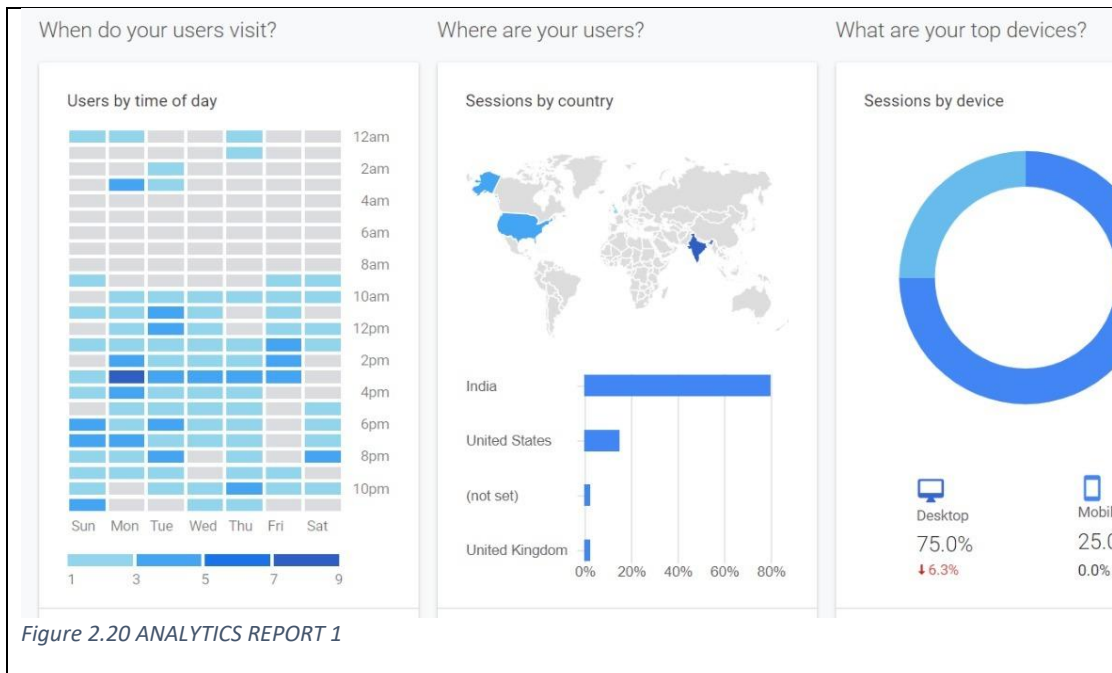
2.4 Content writing checklist:

- Perform research on chosen keywords
- Create content that fulfills user's requirements
- Make your content readable
- Add resources from well-known sites to your site
- opt for white hat techniques (naturally written)
- Use infographics in your posts
- Use videos or images
- Longer and engaging content rank higher on search engine results
- Have a comprehensive introduction
- Create a click-worthy title
- Use LSI keywords in your content
- Headings and subheadings should contain keywords and variants
- There should be comprehensive internal linking
- Use suitable images
- Incorporate call to action
- Update content regularly
- Add images from public domains like free pile or Shutterstock
- Be relatable and clarify all your points
- Simplify complex words and sentences
- Use bullet points

2.5 SEO CHECKLIST

Figure 2.22 SEO CHECKLIST

Chapter 3 App Store Optimization

App Store Optimization includes optimizing several features on the app to improve its installation rates. As the app was still in development the chances of detailing a lot of ASO techniques was limited. However, the following tasks were done:

1. **Title**: The title is the most important part of an app. If often decides the installation chances of an app. For this the title need to perfectly encapsulate the needs of the user. We looked through a lot of competitor app to analyse which key words were performing better when it came to the emotional well ness domain and then decided on a list of title.

2. **Short description**: short description is the next thing that attract the most installers. We thereby created a list of short descriptions with the best performing features as highlights so as to increase the attractiveness of the app.

3. **Long description**: long description is the part of an app that decides how much better a particular app performs with respect to its competitors. It was thereby made deliberately as length as possible with each feature highlighted in bullet points and sufficient usage of keywords as obtained from high performing apps in the niche.

A wide variety of options were provided for each of the above features so as to enable A/B testing before finalization by changing one of the contents and keeping the rest constant. This would help gauge the best variant for the final model. As of now the app is skill in the process of making and will be soon launched on app stores.

To have successful marketing campaign it is not only crucial to cater to the audience but it is also necessary that one outsmarts one's competitor. For this competitor research is quintessential. It helps one to gauge the strengths and weaknesses of one's competitors. The strength can serve as a source of inspiration and the weaknesses an opportunity to overtake them in the market. For this project a data base of all emotional wellness app or other apps have features that provide similar amenities like meditation and mindfulness apps were gathered. The strengths and weaknesses of those websites and apps alike were evaluated and documented along with their pricing strategy and target demographic. The keywords used in the short and long description of these apps and the content of the website was also noted and transformed into an excel sheet.

category	app	keywords	part used	niche
emotional wellbeing	Being	mental health	title, Sd	health and fitness
		friend	title, sd, ld	
		self therapy app	sd,ld	
		anxiety	sd	
		depression	sd	
		stress	sd	
		mental support	ld	
		meditation*	ld	
		work stress	ld	

Table 3.1 App store research

```
ASO
Title:MASTH: your emotional wellness friend and guide
      MASTH: a teenager's guide to emotional wellness
      MASTH: a solution to teenage emotional wellness
      MASTH: emotional health and wellness app for teens
      MASTH:emotional and mental wellness app for teens
      MASTH:exam stress, anxiety relief app for teens

SD: emotional wellness for teens: therapy, chatbot, meditation, affirmations & more
    tips, guide, therapy, AI chatbot, meditation and more for emotional wellbeing
    Self-care, therapy, mental health & emotional wellness guide for teens in stress
    emotional wellness, exam stress, anxiety management & productivity for teens
    science-based teen wellness guide & friend for exam stress, anxiety & more
    self-care app for teens to cope with exam stress, anxiety, be productive & more
    boost mental health, emotional wellness, be productive, overcome exam stress
    one-stop solution to teen issues like stress, anxiety, exam pressure and more
    expert guidance to help teens cope with exam stress, anxiety and be productive
This is an emotional wellness & well-being app that aids teen stress management

LD:
1.An emotional health & well-being app that will be your friend and guide for teen problems and help you
cope with exam stress, anxiety, depression & boost your productivity. Are the teenage years taking a toll
on your mental health? Do you find it difficult to open up to your parents & teachers? Are you constantly
stressed and anxious about exams & feel helpless to cope with physical, mental and emotional changes?
Masth is a one-stop solution to all your mental wellbeing problems. A unique self-help app that will guide
you on your self-care journey through a compendium of scientific techniques & resources, expert
guidance and positive and motivating community will assist you to cope with feeling, become self-aware
and use your mental and emotional struggles to grow as an individual. Exams can be extremely stress
inducing and leave you anxious and panicky. We provide relief techniques like mindfulness, meditation,
```

Chapter 4 Conclusion

- As a conclusion I would like to re iterate the importance of SEO as a digital marketing tool. It was a wonderful starting point as an introduction to digital marketing. SEO alongside Aso are such powerful tools that it can change the fate of companies especially in this age of the digitally globalized population.
- The recommendations if followed can help enhance the performance of websites and apps alike
- SEO and ASO are however time-consuming processes and do not show results overnight
- It requires a minimum of 2 months to properly evaluate the effect of the changes made
- Evaluation and analysis however is extremely important as it might indicate where we are falling short which would lead to restarting the cycle of optimization
- It is also a continuous process and the app and website should be continually updated for better reception.
- This being my first major official project was an educational feat and would help me a long way and aid me in furthering my pursuits in the field of Digital Marketing

Chapter 5 Recommendations

5.1 On-page changes:

5.1.1 <u>Website:</u>

5.1.1.1 Title tag and meta tag:
- Title tag should be ideally between 60-65 characters
- the meta tags up to 160 characters.
- Keyword Repetition should be minimized.
- Meta tag must use keyword used in the title tag.
- The title tag should be unique.
- Keyword stuffing in title tag should be avoided.
- Title tags with a number is shown to increase the CTR.
- Meta tags with a question can also increase CTR.

5.1.1.2 Header tag:
- Header tags should have a hierarchical structure with one H1 tag and multiple H2 and H3 tags to improve the organization of the website.
- The H1 tag should contain a primary keyword and the H2 tags should contain other secondary keywords.
- There should be no hidden tags.
- Answer the user intent in the H1 tag
- Use hyphens and avoid underscore
- Optimize header tags for featured snippets.
- The featured snippets should contain a list of sorts to drive greater traffic

5.1.1.3 URL:
- Canonical URLs are preferred
- Use Favicons in URLs
- Include Mobile URLs in site maps
- Avoid Capital letters in URLs
- Use readable URLs
- Short URLs are preferred (around 80 characters)

5.1.1.4 Website Architecture:
- Create logical hierarchy structure
- Balance amount of sub categories within each category
- Code the website in CSS or HTML
- Use comprehensive structure for internal linking
- Use extensive content auditing

5.1.1.5 Secure Website:

- Scan site for vulnerability
- Protect domain by enabling DNSSEC protocol
- Enable SSL certificate
- HSTS can add an extra layer of security
- HTTPS sites can prevent cookie high jacking

5.1.1.6 Sitemaps:

Use Xml generator to create sitemaps for a website and alert google on the update frequency

5.1.1.7 Page Speed:

- Optimize images that are larger than 150 bytes
- Use simple website design
- Leverage browser usage for files
- Update server response for speed suggestion
- Minimize redirection
- Optimize errors

5.1.1.8 Content:

- The content should not be outdated.
- It should achieve its goals
- There should be no misinformation
- Use analytics to understand what is working
- Track content details on a spread sheet- like URL, author, total time, title, date, content type, content goal, word count, comments and shares
- Track comment and social media shares
- Check the bounce rate and organic traffic for the content regularly
- Provide extensive backlinks

5.1.2 <u>Apps:</u>

5.1.2.1 Title:

- App title should be less than 50 characters
- It should be easy to understand and unique
- Bench mark the competitors
- Avoid using special characters

- Keywords from the first half of the app name are displayed for the user don't truncate

5.1.2.2 Short Description:

- Short description can be up to 80 characters
- Use very strong, descriptive words
- Highlight the best features of the app

5.1.2.3 Long description:

- This has a character limit of 4000 characters
- It is recommended to uses as many characters as possible and write a very long and detailed description of every single feature offered by the app
- Include primary keywords a few times especially in the first and last lines
- Use short paragraphs
- Use bullet points
- Keep it structured
- Use subtitles for every feature
- Mention awards
- Provide link to social media pages
- Include a call to action

5.1.2.4 Architecture: Use Promo Graphic, Promo video, Featured graphics in the description. Debug the app regularly

5.2 Off- page changes:

5.2.1 <u>External Linking:</u>

Publish articles and blogs in well reputed websites in your niche. Search for website accepting material and make a submission following their guidelines. Include several links to your own website or app in the blog. Avoid making it look like a promotional article and make it seem more organic. Contact sites like SlideShare that accept infographics and publish infographics from your website there. Make sure to include links to your website or app attached to the infographic

5.2.2 <u>Social Media Marketing:</u>

Search for content creators in your niche and collaborate with them. Instead of just

using infographics try using more interactive contents like videos or reels. Post regularly on these media and include a brand logo or watermark in most of the content.

Try joining as many communities as possible. Be active on Q &A platforms like Quora and link your product in the answers.

1. Analyze your competitor profile
2. Conduct a link Intersect analysis
3. Target competitors' broken backlinks
4. Implement Sky scraper technique
5. Turn unlinked mentions into links
6. Set up and optimize Google Business Profile

5.2.3 <u>Ratings and reviews:</u>

- Create prompts with the website as well as app to ask to ratings from the users.
- Target the lowest ratings (ideally below 3)
- Answer all the reviews
- Use revie analysis to solve the reason for lower rating
- Communicate the changes made to the low rater and request for reconsideration of the reviews
- Never answer any review negatively

5.3 App features trending:

- Guided Meditation/deep breathing/daily spiritual meditation/guided sleep meditations/mindfulness exercises/thought observation techniques/gratitude meditation/library of goal -based meditation/quick meditations/meditation timer/chant count/personalized meditation goals
- Mini-therapy/Personalized therapy
- Music therapy/Nature sounds/ Meditation music/ambient 3d sounds for immersive experience
- Chatroom/emotional log room
- Journal prompts/gratitude journaling/dream journal/visions journal/exclusive guided emotional journal/mindfulness journal
- Affirmations/daily affirmations journey
- Complete anonymity
- Cognitive Behavioral Therapy
- Goal tracker/mental wellness targets/end-to end progress tracker
- Scientific mood tracker/wellbeing tracker
- Resources/self-help content/daily inspirational quote and article/comics/interactive stories/videos
- Emotional wellness plan/ mindfulness courses
- Daily planner
- Wellness evaluation/quizzes

- Cheer me up buddy/ ai chatbot
- Conversational skills
- Morning Zen

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Chapter 7 Glossary

Crawling: The process by which search engines discover your web pages.

De-indexed: Refers to a page or group of pages being removed from Google's index.

Featured snippets: Organic answer boxes that appear at the top of SERPs for certain queries.

Google My Business listing: A free listing available to local businesses.

Image carousels: Image results in some SERPs that are scrollable from left to right.

Indexing: The storing and organizing of content found during crawling.

Intent: In the context of SEO, intent refers to what users really want from the words they typed into the search bar.

KPI: A "key performance indicator" is a measurable value that indicates how well an activity is achieving a goal.

Organic: Earned placement in search results, as opposed to paid advertisements.

People Also Ask boxes: A box in some SERPs featuring a list of questions related to the query and their answers.

Query: Words typed into the search bar.

Ranking: Ordering search results by relevance to the query.

Search engine: An information retrieval program that searches for items in a database that match the request input by the user. Examples: Google, Bing, and Yahoo.

SERP features: Results displayed in a non-standard format.

SERP: Stands for "search engine results page" — the page you see after conducting a search.

Traffic: Visits to a website.

URL: Uniform Resource Locators are the locations or addresses for individual pieces of content on the web.

White hat: Search engine optimization practices that comply with Google's quality guidelines.