A Project Report on

"Maps Scraper"

Submitted by

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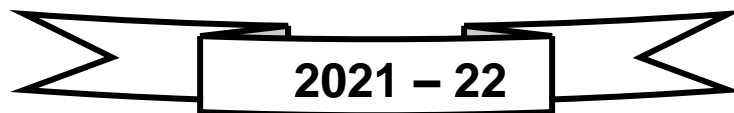
Department of Information Technology

(NBA Accredited)

Vidyalankar Polytechnic

Wadala (e), Mumbai – 400 037

Maharashtra State Board of Technical Education, Mumbai

2021 – 22

Institute Vision

To achieve excellence in imparting **Technical Education** so as to meet the **Professional and Societalneeds**.

Institute Mission

- Developing **technical skills** by imparting knowledge and providing hands on experience.
- Creating an environment that nurtures **ethics, leadership and team building**.
- Providing **industrial exposure** for minimizing the gap between academics & industry.

Program Vision

To become a leading center in the domain of Information Technology where learners are introduced to the concepts and implementation of technologies.

Program Mission

M1:Encouraging academic excellence and a passion for learning through the use of learner-oriented teaching methodologies.

M2:Providing an environment that inculcates ethics and effective soft-skills and focuses on the development of learners.

M3:Establishing and reinforcing a symbiotic institute-industry interface so that learners can gain exposure to real-life applications of Information Technology.

Program Education Objectives

PEO 1: Provide socially responsible, environment friendly solutions to Information technology related broad-based problems adapting professional ethics.

PEO 2: Adapt state-of-the-art Information Technology broad-based techniques to work in multi-disciplinary work environments.

PEO 3: Solve broad-based problems individually and as a team member communicating effectively in the world of work.

Program Outcomes

Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes

Modern Information Technology: Use latest technologies for operation and application of information.

Information Technology Process: Maintain the information processes using modern information and communication technologies.

VP Vidyalankar Polytechnic

Certificate

This is to certify that the following students

19202A0047– Shourish Kothawale

19202A0011 – Shubham Jadhav

19202A0054 – Shishir Nath

19202A0006 – Piyush Nirbhavane

Have completed the Project on
Maps Scraper

A partial fulfillment of the requirement of Third Year Diploma in Information Technology affiliated to Maharashtra State Board of Technical Education, Mumbai for the Academic Year 2021-22.

Internal Examiner   External Examiner

Project Guide   Head of Department   Principal

Acknowledgement

We would like to thank all those who helped in all ways possible to complete this project. We would like to show special gratitude to our final year project guide, Mrs. Sridevi Taradi, whose contribution in stimulating suggestions and words of encouragement helped us to coordinate our project especially in writing reports, aiding us and correcting our mistakes along with being a strong support throughout this entire journey.

We are thankful to Mr. Ashish Ukidve, Principal of Vidyalankar Polytechnic, and Miss Yogita Jore, Head of Information Technology for all the support rendered to us during the entirety of this project and its processes. We also like to give a special thanks to Sahu Technologies to work on this project, which helped us test an improve our skills to the fullest.

Furthermore, we would like to acknowledge with much appreciation the crucial role of all those who gave permission to use all required equipment and necessary material to complete the task. A very special thanks to us as a team who invested their valuable time and efforts into this project. With only unity and coordination were we able to complete this project, and were always understanding and helpful to each other since the commencement. Without the support and the unity of each one of us we would have not been able to achieve of our task today.

Abstract

Information is paramount nowadays and is seemingly growing day by day. If correct information is delivered quickly, it can be a highly effective in situations. New technology is being discovered daily to deliver data as quickly and efficiently as possible. To provide a solution to this problem we will create a data/web scraper for Google Maps for providing different kinds of data like name, phone, website etc. Web Scrapers allow to find specific data on the internet and then export them into spreadsheets like Microsoft Excel sheet or a CSV file. Web Scrapers are created to extract personalised data hence this project will focus on extracting data through the Google Maps website. Most of the times these scrapers are used to extract data from HTML documents, but sometimes they can even extract data through CSS and JavaScript. Web Scrapers are of many types from self-built to pre-built, and can be available in Software, and Browser extension formats. These web scrapers are built in many different programming languages, but python seems to be the most popular of them all as it has many different libraries that are perfect for the job. Scrapers not only have many functions, but they also have many applications. They can be used in business analytics as it can help analyse competition. Market Research is one of the major uses of the scrapers as the data is specific and can be used to identify various trends in the market.

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List of Tables and Figures

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

Data Scraping is also known as web scraping. It is the process to import information from a website to a spreadsheet or local file. It can help get data easily, and also help to channel data to other websites. Data Scraping can be used in many places in the modern day, from price monitoring, market research to even Sentiment Analysis. Web Scraping has many applications and has a wide variety of usage. Google Maps is a website full of information. It contains the location of a place and even pinpoints it, and it has many different attributes for places like contact numbers, websites, contact number, rating, review count, timings etc. It is a place which contains a lot of data, and efficient scraping of the website can be done helping many causes.

The main aim of the application is to extract the data as quickly and efficiently as possible. Since getting information is important for many reasons this app will be very helpful in doing so. The app will help with this as it with be able to pick out the appropriate data from a page with unstructured data and then will do it way quicker than someone sitting and manually noting down the data in an excel sheet which might take hours.

The application will have an array of functionalities, which starts off with searching for the place using an URL. This URL has to be specific to that of the place they want to search so they can do this by providing the google maps URL for their preferred place. The next feature that will be available in the application is the use of keywords. The user can simply enter a keyword like "Pizza places Mumbai" and get the attributes such as the address (location), review count, rating, timings, contact number, and website of the places that show in the result of the place. This can help gather data quickly from the google maps page as it will be able to scan all the relevant data on the place. Another way to search will be simply through providing the location name, like "Mumbai", "Paris" to search for places related to it. The next functionality that will be in the application is the filter option. Users will have an option to either keep the data with a blank phone number field or to remove the data. This helps get more personalised results. After searching all the data this data has to be saved. To do this we will eb allowing the user to import the data into two formats. The first format which will be used is Microsoft Excel spreadsheet which has a .xlsx extension. The second import format will be CSV with a .csv extension. The only prerequisite for the user will be that they have to prepare the excel sheet with its name beforehand. There will be buttons to execute the import.

With data increasing daily it is becoming more and more difficult to extract the appropriate data online. Since information is so important nowadays this project will surely play its part to accomplish its main goal. Sites with abundant unstructured data can be easily broken down extracting the appropriate data within a matter of seconds. With Google maps being online for so many years accumulating a lot of data, it will be a website that will help in

extracting data online. This data can then be used for many purposes, and the use of the application is limitless.

Problem Statement:

In today's world information plays a very important part. Practically, everything we do requires information. With the world advancing information is growing and expanding at an extraordinary pace. With this comes the problem of unstructured data everywhere, along with redundant data. Every second new data is being created, for example with Google over 40,000 search queries are made every second, that's a whopping 1.2 trillion searches per year. Around 44 zettabytes With so much data it is becoming more and more difficult to find data that is appropriate to the cause and in turn is making it difficult to find it. This can cause a major crisis for many people as the world works on data, from businesses to science data is integral. To perform appropriate searches data scrapers can be used. Data scrapers help to find only the appropriate data in a website so that you don't have to search for the data on your own manually.

After looking through various data scraper one common thing was, they were subscription based, and they only had one option to search by that was using keywords. But with our Google Maps Web Scraper we will be provided to search for places using location, URL, Keyword and even a special search option for restaurants since they have different attributes compared to other types of location with generic characteristics.

Google maps contains a lot of data about a place from location to opening times, popular hours etc. These types of data can be used by businesses to analyze and formulate the correct strategy. Not only businesses but many other people who like to travel can search for data on famous places to plan out their next trip. Data Scrappers are not limited to a specific group of people, they can be used by everyone to find information about their liking.

CHAPTER 2

REVIEW OF LITERATURE

2. REVIEW OF LITERATURE

For Market research we looked through the internet for different data scrapers and also looked for specific Google Maps data scrapers. We looked at the features of each app and noted them down along with their obvious disadvantages. We looked through web scrapers both paid and unpaid. We downloaded all the apps and tested each of them.

Apps we looked through:

- Web Scraper- Free Web Scraping
- DigLead: Business Lead Scraper
- Google Map Business Scrapper
- Google Map Scrapper Listing
- Leads Extractor - Google Maps Scraper

Logo	App Name	Features	Disadvantages
	Web Scraper - Free Web Scraping	* Data scraping from multiple pages; * Multiple data extraction types (text, images, URLs, and more); * Scraping data from dynamic pages (JavaScript + AJAX, infinite scroll); * Browsing scraped data; * Exporting scraped data from a website to Excel	The GUI for this web extension is not user friendly, and it is difficult to use for the layman.

	DigLead: Business Lead Scraper	Main Features: -Targeted List Generator -Webpage or Website Email Scraper -Google My Business Listings Scraper (Google Maps/GMB Scraper) -Yelp Lead Extractor -Export/Download all scraped leads in Excel Spreadsheet which can be share via email or open with spreadsheet viewer.	Even if installing the app is free it contains a subscription fee to use it. Also, it has limited functionality.
	Google Map Business Scrapper	instantly generate a ton of leads, anywhere in the world. This Google maps extractor tool extracts **name, address, phone number, website, social media links, reviews, current marketing pixels** and more from companies.	This app is paid so not everyone will afford it.
No Image	Google Map Scrapper Listing	Software Extract All Detail from Google Business Name Phone Email – if email available on website for particular Business Website Website Rating Review Images – with Live Link and Also Download images into Local	This app is paid at a high price of $22

		Computer	
		Business Closing Hours	
		Software Download Business images into Local Computer with Business Name Folder separately	
		Software Search Google Business Contact Location Wise Filter.	
		100% Real Time Extract Business Contact with Advance Export into Excel, CSV and Text Format.	
	Leads Extractor - Google Maps Scraper	* Find leads for your business in any industry across all countries * Qualify leads faster than ever before * Increase productivity by reducing hours spent looking for leads	Limited number of options as they are only limited to a combo box.

Table 1: Market Survey

The observations from this research were that the results from the applications generated many blank fields. The reason for this was the data that was requested was never present in the structure of the data. Hence, we decided to add unique personalized tabs for each type of points of interests, like location, restaurants, which contain different attributes in its structure.

CHAPTER 3

PLAN OF WORK

3. PLAN OF WORK
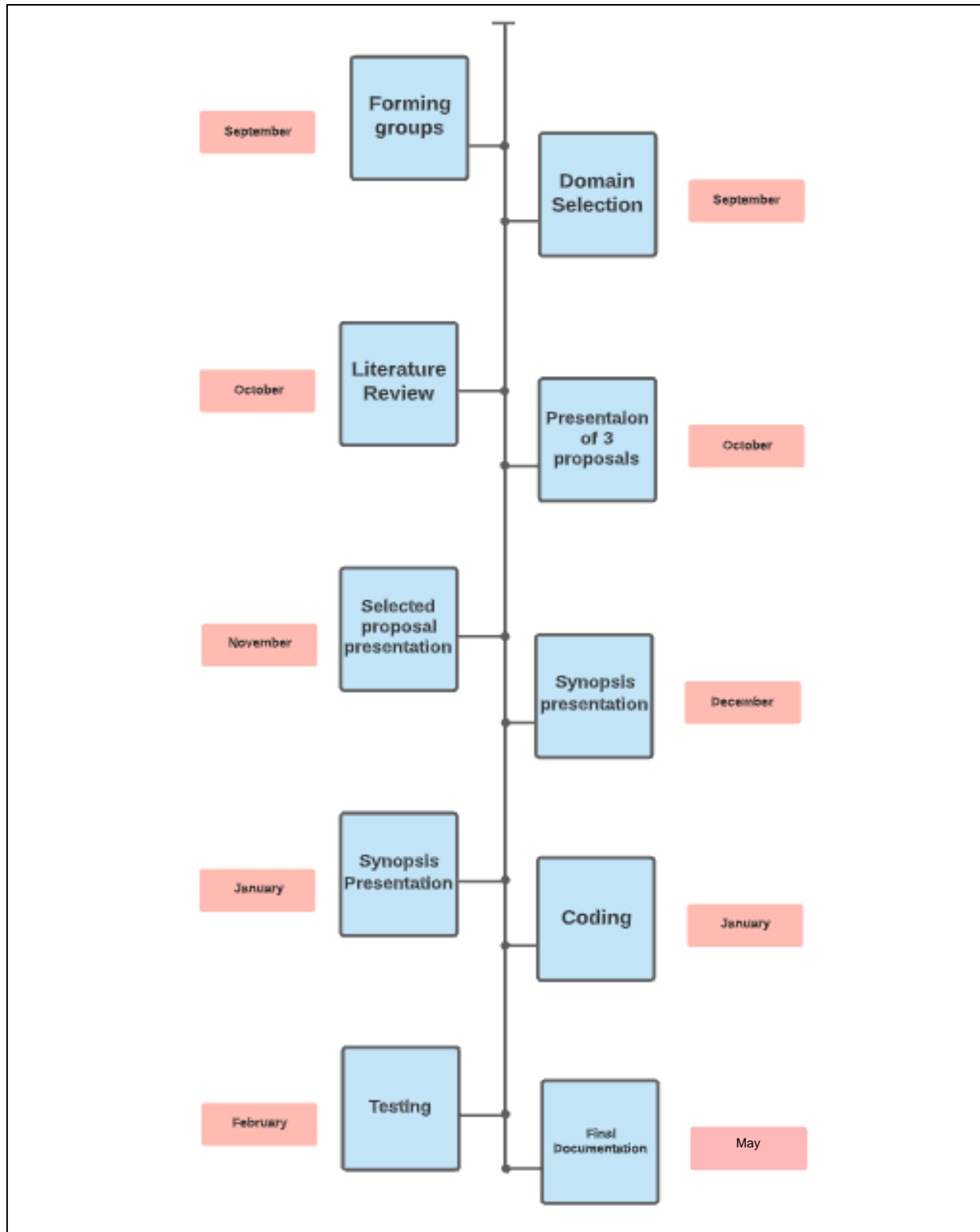
Figure 1: Plan of Work

CHAPTER 4

SYSTEM REQUIREMENTS

4.1 HARDWARE REQUIREMENTS

System: Windows 11

Hard Disk: 1TB

RAM: 8GB

4.2 SOFTWARE REQUIREMENTS

Operating system: Windows

Database: SQLite

Programming Language: Python, JavaScript ES6

IDE Used for Coding: PyCharm IDE

CHAPTER 5

DESIGNING

5.1 USECASE DIAGRAM
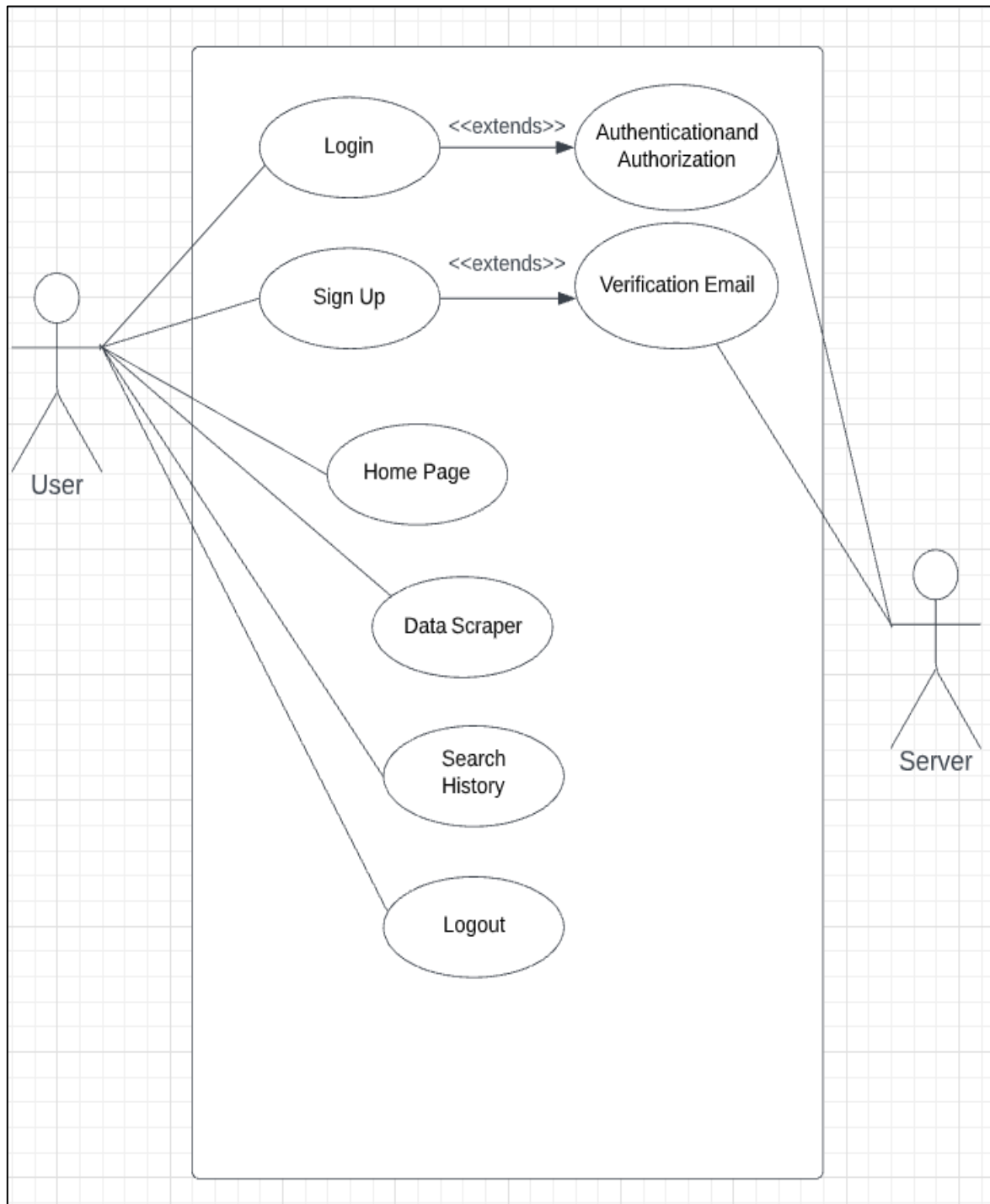
Figure 2: Use Case Diagram

5.2 SEQUENCE DIAGRAM
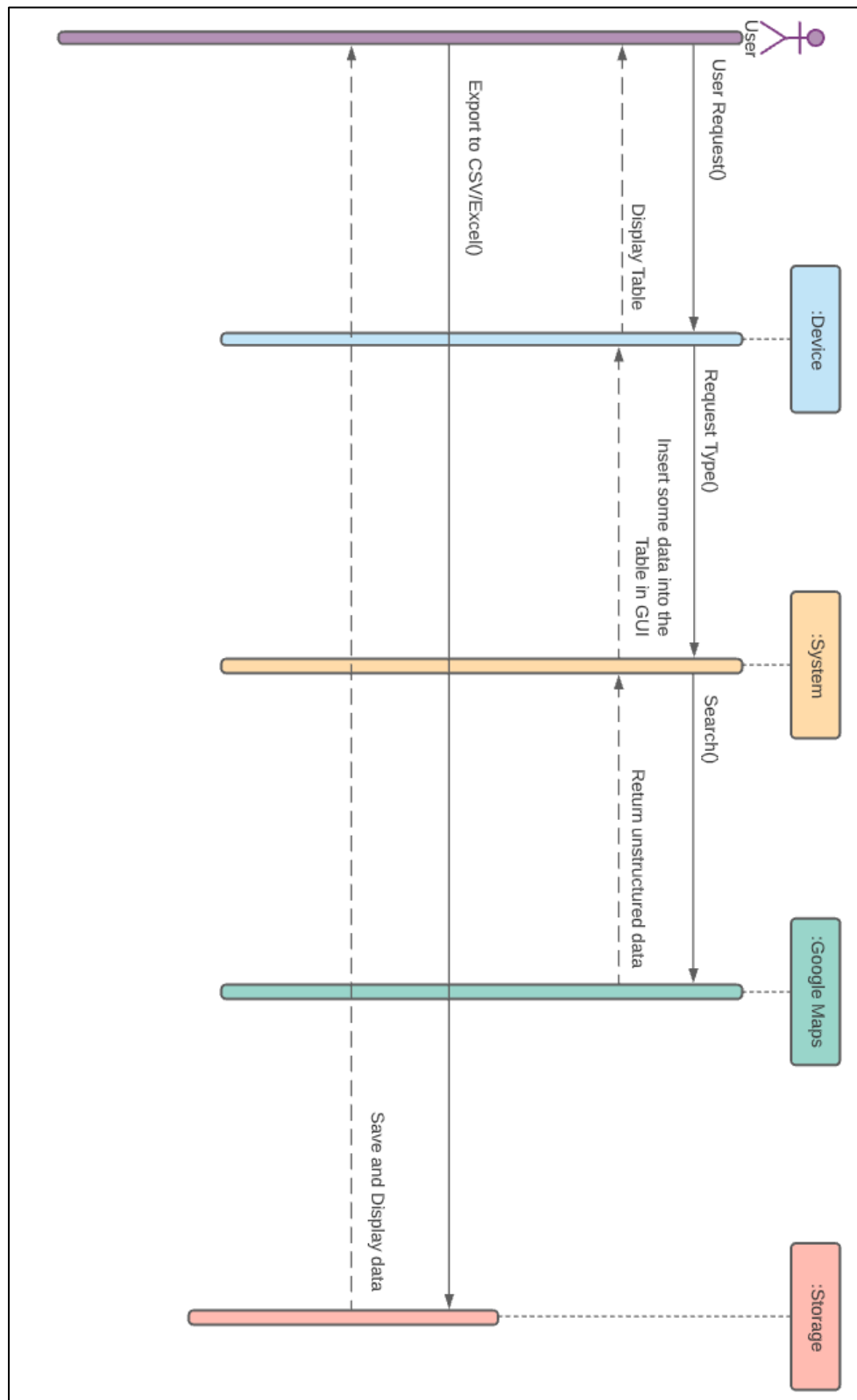
Figure 3: Sequence Diagram

5.3 DATA FLOW DIAGRAM (LEVEL 0,1,2)
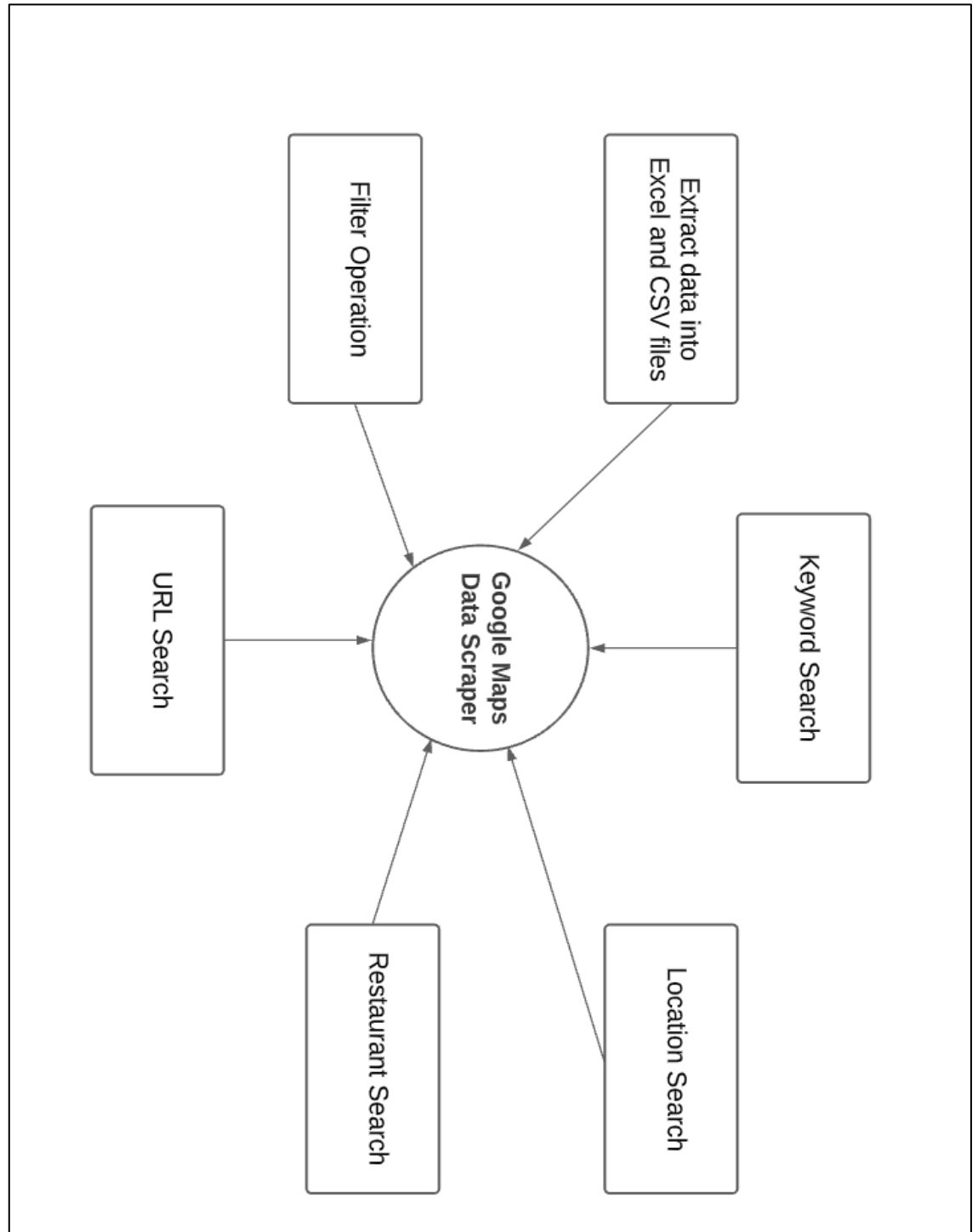
Figure 4: DFD Level 0
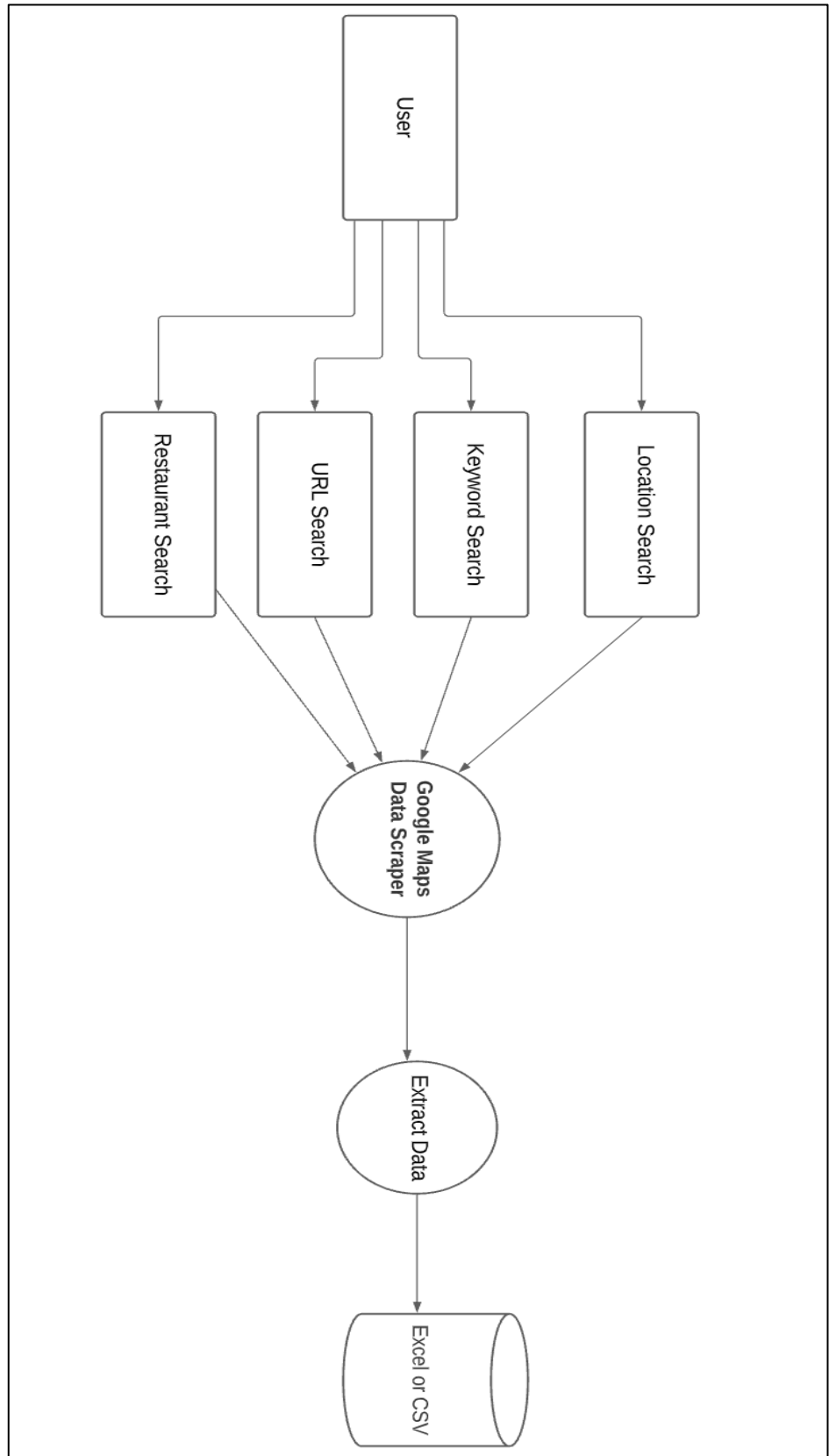
Figure 5: DFD Level 1
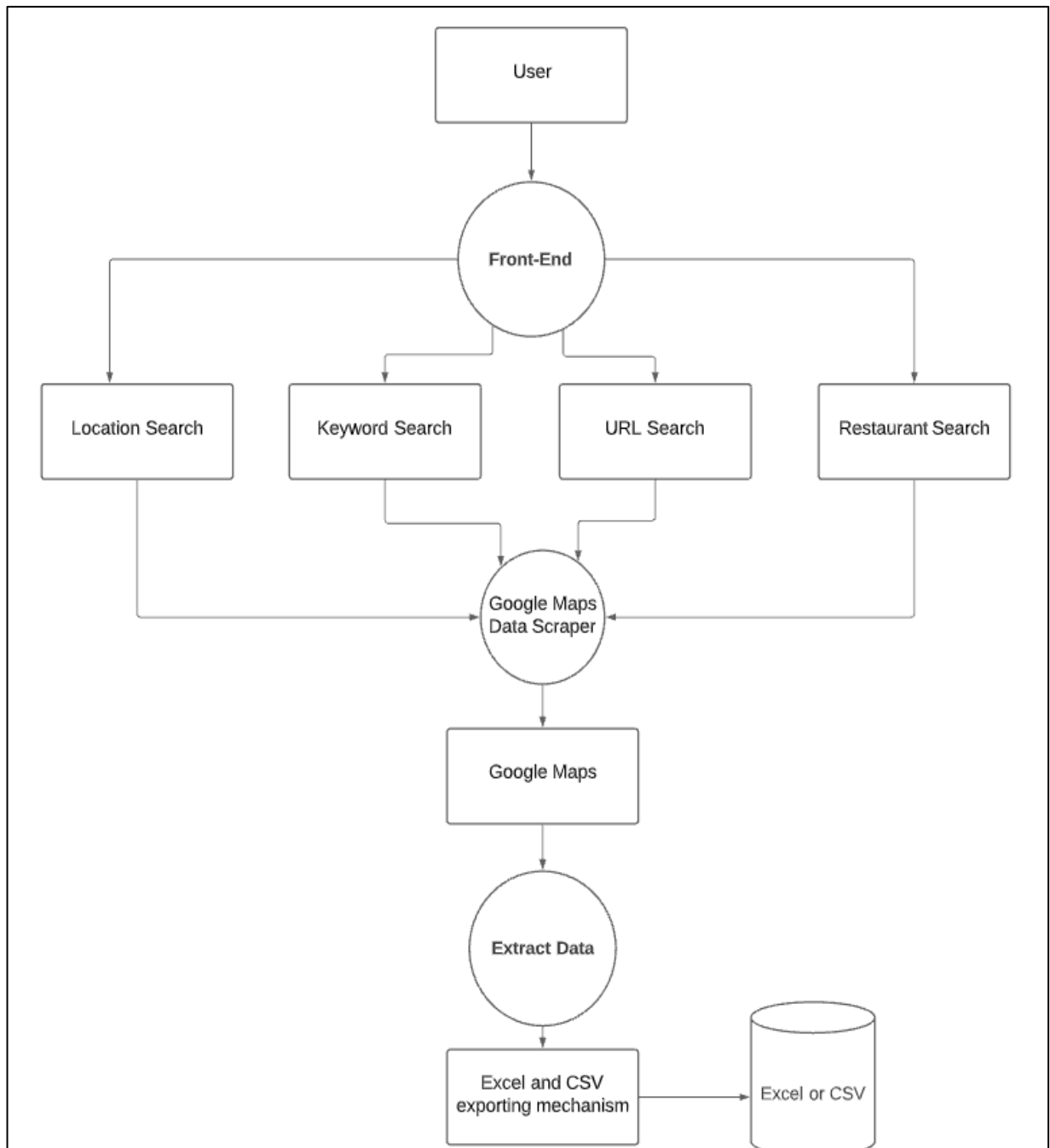
Figure 6: DFD Level 2

5.4 FLOWCHART

Figure 8: Flowchart

Figure 7: Flowchart

5.5 ER DIAGRAM
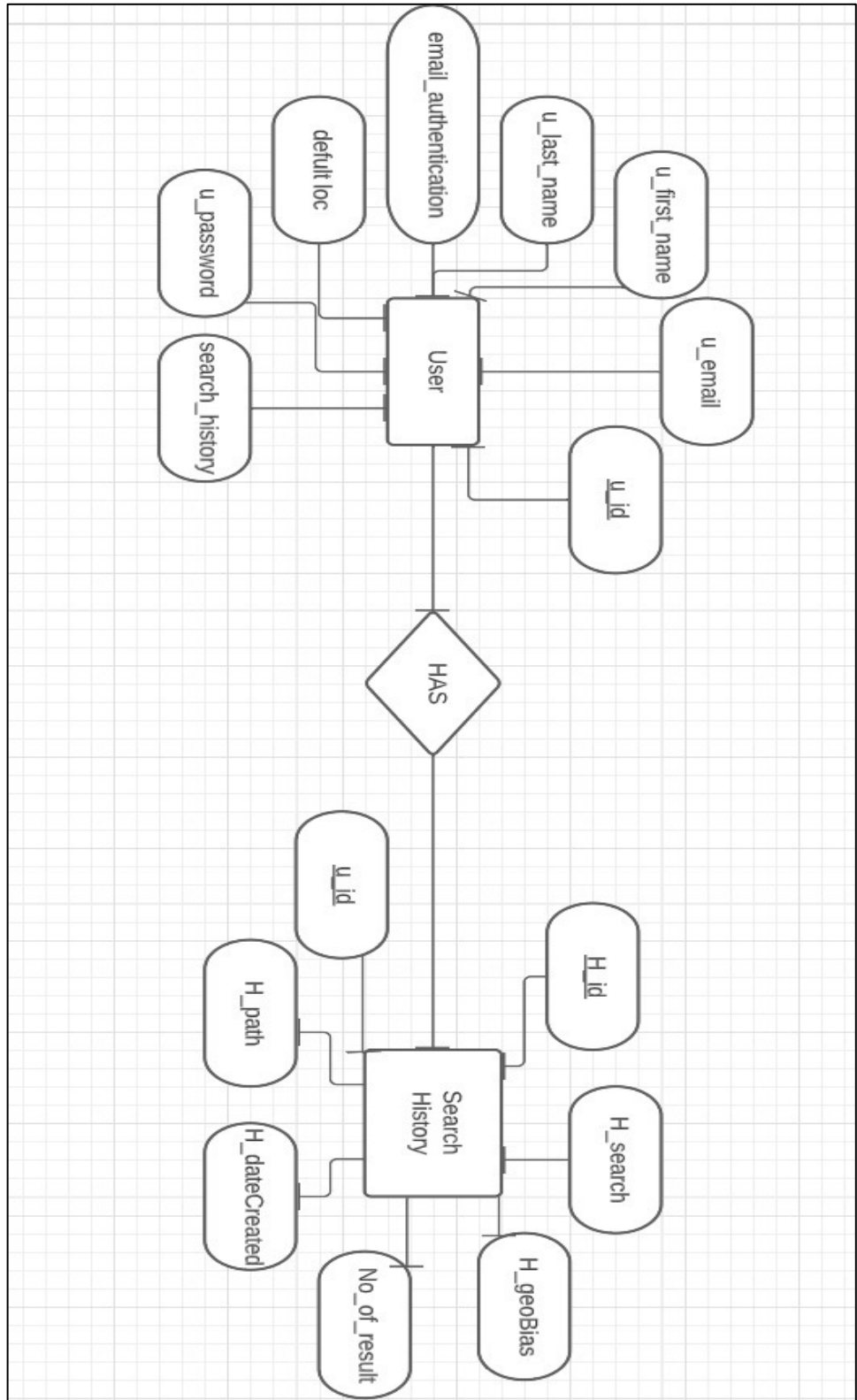
Figure 8: ER Diagram

CHAPTER 6
MODULE DESCRIPTION

6. MODULE DESCRIPTION

- **LOGIN**
- **LOGOUT**
- **HOME PAGE**
- **DATA SCRAPER**
- **SEARCH HISTORY**
- **SIGN UP**

SIGN UP:

The Signup module allows users to sign up (or register, as in register for a class)

We have used a registration confirmation mechanism that forces the user to respond to a "Confirm Registration" email sent after successful registration to verify his email address and activate his account. The user does this by clicking a unique activation link sent to them over email.

LOGIN:

The Login Module is a portal module that allows users to type a username and password to log in

LOGOUT:

Logging out means to end access to a website. Logging out will inform our website that the current user wishes to end the login session.

HOME PAGE:

A home page is the main web page of a website.

Our home page provides search history and our map data scrapper.

DATA SCRAPER:

A seamless tools which provides easy map scrapping solutions. Provides data in excel and csv format.

SEARCH HISTORY:

Logs all the data searched and stored the data files. Easy download with a single click.

CHAPTER 7

TESTING

7. TESTING

Software testing is a process, to evaluate the functionality of a software application with an intent to find whether the developed software met the specified requirements or not and to identify the defects to ensure that the product is defect free in order to produce the quality product.

7.1 TEST CASES

Login Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Login (valid)	1.Enter E-mail ="abc123@domain.com" 2.Enter Password="*******" 3.click on login button	It should accept the Username and Password	It accepts the Username	Pass
2	Login (Invalid)	1.Enter E-mail ="abc123@domain.com" 2.Enter Password="*******" 3.click on login button	It should prompt wrong username Password	It is prompting wrong username Password	Pass
3	Login (Invalid User not registered)	1.Enter E-mail ="abc123@domain.com" 2.Enter Password="*******" 3.click on login button	It should prompt User not registered and redirect to sign-up page.	It is prompting user not registered, and redirecting to sign-up page.	Pass

| 4 | Login (Invalid) | 1. Enter Email="   " 2.Enter Password="   " 3.click on login button | It should prompt please fillout this field | It is prompting please fillout this field | Pass |
| 5 | Login (Invalid Email) | 1. Enter Email="xyz" 2.Enter Password="*******" 3.click on login button | It should prompt email doesn't exist. | It prompts email doesn't exist. | Pass |

Sign Up Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Sign-up (valid)	1. Enter E-mail ="abc123@domain.com" 2.Enter First Name="abc" 3. Enter Last Name="xyz" 4. Password= "******" 5. Confirm Password= "******" 6. Default Location= "Mumbai"	It should accept the Details and send a verification mail.	It accepts the Details and sends a verification mail.	Pass
2	Sign-up (Invalid)	1. Enter E-mail ="abc123@domain.com" 2.Enter First Name="abc" 3. Enter Last Name="xyz" 4. Password= "***" 5. Confirm Password= "******" 6. Default Location= "Mumbai"	It should prompt passwords dson't match.	It prompts passwords don't match.	Pass

3	Sign-up (Invalid)	1. Enter E-mail =" " 2.Enter First Name=" " 3. Enter Last Name=" " 4. Password= " " 5. Confirm Password= " " 6. Default Location= " "	It should prompt please don't leave any fields blank.	It prompts please don't leave fields blank.	Pass
4	Sign-up (Sending Verification Mail)	1. Enter E-mail ="abc123@domain.com" 2.Enter First Name="abc" 3. Enter Last Name="xyz" 4. Password= "***" 5. Confirm Password= "******" 6. Default Location= "Mumbai"	It should send a verification mail.	It sends a verification mail.	Pass
5	Sign-up (Verification Mail completes sign-up)	1. Enter E-mail ="abc123@domain.com" 2.Enter First Name="abc" 3. Enter Last Name="xyz" 4. Password= "***" 5. Confirm Password= "******" 6. Default Location= "Mumbai"	It should prompt user registered successfully after clicking the link in the mail redirecting to the login page.	It prompts user rgistered successfully after clicking the link in the mail redirecting to the login page.	Pass
6	Sign-up (Invalid)	1. Enter E-mail ="ab" 2.Enter First Name="a" 3. Enter Last Name="x" 4. Password= "***" 5. Confirm Password= "*" 6. Default Location= "Mu"	It should prompt input invalid and say the minimum number for the invalid entity.	It prompts input invalid and says the minimum number for the invalid entity.	Pass

HOME PAGE Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Home Page	Visit Page	All links and animations should work.	All links and animations work.	Pass

Data Scraper Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Data Scraper (valid)	1. Enter Query ="pizza" 2.Enter Location="Mumbai,India" 3. Enter Radius="10" 4. Limit= "100" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	Data scraped successfully should be prompted along with redirection to the search history page	Page redirected along with prompt	Pass
2	Data Scraper (Blank Location)	1. Enter Query ="pizza" 2.Enter Location=" " 3. Enter Radius="10" 4. Limit= "100" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	Should use the current users default location for nearby search.	Succefully scrapes data using default location.	Pass

3	Data Scraper (Blank Radius)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="" 4. Limit= "100" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	It should take default radius as 10 and scrape data.	Successfully scraped data.	Pass
4	Data Scraper (Blank Limit)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="10 4. Limit= "" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	It should take default limit as 100 and scrape data.	Successfully scraped data.	Pass
5	Data Scraper (Blank Inputs)	1. Enter Query ="" 2.Enter Location="" 3. Enter Radius="" 4. Limit= "" 5. File name= "" 6. File type= ""	Should prompt blank record error for appropriate entity.	Prompts the errors.	Pass
6	Data Scraper (No Results)	1. Enter Query ="sahfgfsgfsd" 2.Enter Location="ijiotjreo" 3. Enter Radius="10 4. Limit= "100" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	Should prompt no results found error message.	Prompts the error.	Pass
7	Data Scraper (Invalid Data types for inputs)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="abc" 4. Limit= "xyz" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	Should prompt datatype error for appropriate input.	Prompts the error.	Pass

8	Data Scraper (Invalid file format selection)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="abc" 4. Limit= "xyz" 5. File name= "pizza-mumbai" 6. File type= "Please choose a file format"	Should prompt an error instructing to select a file format.	Prompts error.	Pass
9	Data Scraper (Invalid file name)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="abc" 4. Limit= "xyz" 5. File name= "pizza-mumbai" 6. File type= "Please choose a file format"	Should prompt that the file name already exists please choose another name.	Prompts the file name exists.	Pass
10	Data Scraper (File scraping in the appropriate format)	1. Enter Query ="pizza" 2.Enter Location="Mumbai" 3. Enter Radius="" 4. Limit= "100" 5. File name= "pizza-mumbai" 6. File type= "Excel/CSV"	Should scrape data for either format	The Data is scraped successfully.	Pass

Search History Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Search History (download)	Click download	Should download data into the download folder of the device.	Downloads data into the download folder.	Pass

| 2 | Search History (display of data) | View Page | All old and new data scraped along with it's meta data must be present in table format. | Data is present correctly and in a table. | Pass |

Logout Test Case

SR.NO	ACTION	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
1	Logout	Click the logout button	Should logout the user.	User logged out	Pass
2	Logout	Click the logout button	The user musn't be able to use other services after logout	User logged out	Pass

Table 2: Test Cases

CHAPTER 8

ADVANTAGES AND

DRAWBACKS

8. ADVANTAGES AND DRAWBACKS

8.1 ADVANTAGES

- Sorting out data. The data displayed on the screen on Google Maps is an elaborate mix match of people, addresses, sites and names. ...

- Scraping professional listings. ...

- Speed and accuracy. ...

- Collection of valuable geographical info. ...

- Operational benefits. ...

- Wide range of data can be collected.

- Inexpensive

- Easy to implement

- Low maintenance and speed

- Accuracy

8.2 DISADVANTAGES

- Difficult to analyze – For anybody who is not an expert, the scraping processes are confusing to understand. Although this is not a major problem, but some errors could be fixed faster if it was easier to understand for more software developers.

- Data analysis – The data that has been extracted will first need to be treated so that they can be easily understood. In certain cases, this might take a long time and a lot of energy to complete.

- Time – It is common for new data extraction applications to take some time in the beginning as the software often has a learning curve. Sometimes web scraping services take time to become familiar with the core application and need to adjust to the scrapping language. This means that such services can take some days before they are up and running at full speed.

- Speed and protection policies – Most web scrapping services are slower than API calls and another problem is the websites that do not allow screen scrapping. In such cases web scrapping services are rendered useless. Also, if the developer of the website decides to introduce some changes in the code, the scrapping service might stop working.

CHAPTER 9

APPLICATIONS

9. APPLICATIONS

- ## <u>Lead Generation</u>

One incredibly popular use of web scraping is lead generation. In short, web scraping is used by many companies to collect contact information about potential customers or clients. This is incredibly common in the business-to-business space, where potential customers will post their business information publicly online.

- ## <u>Real Estate Listing Scraping</u>

Many real estate agents use web scraping to populate their database of available properties for sale or for rent.

- ## <u>Data Analysis</u>

You might want to collect and analyse data related to a specific category from multiple websites. The category might be real estate, automobiles, electronic gadgets, industrial equipment, business contacts, marketing etc.

- ## <u>Academic Research</u>

Data is an integral part of any research, be it academic, marketing or scientific. A Web Scraper will help you gather structured data from multiple sources in the Internet with ease.
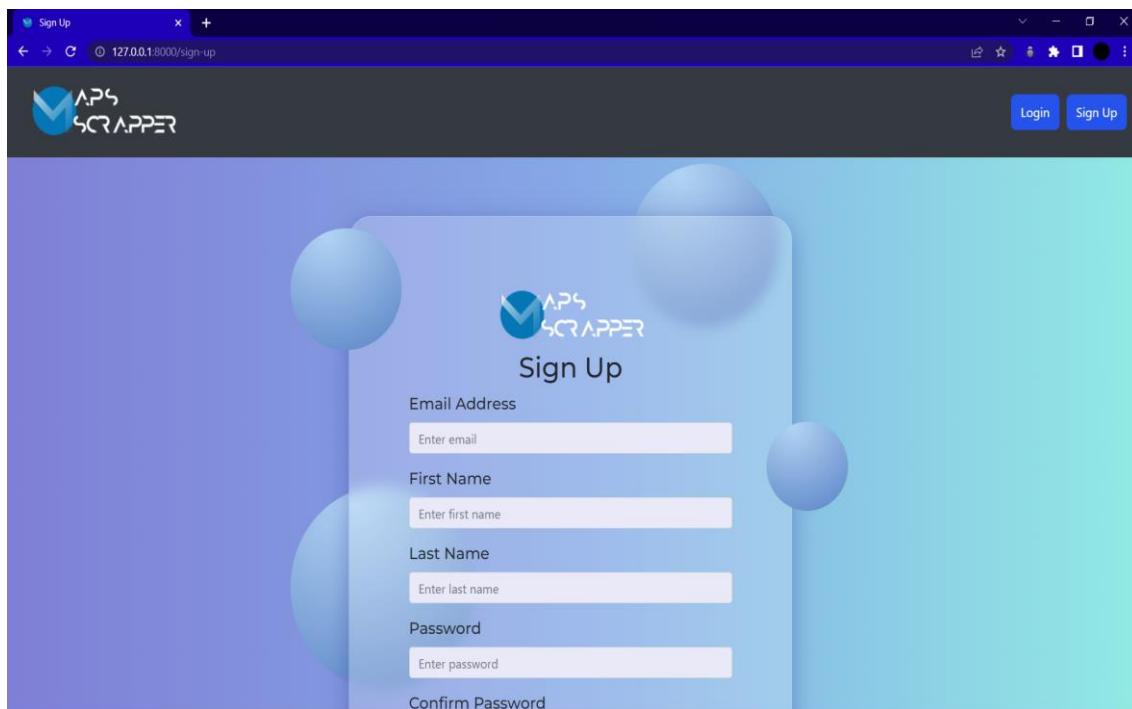
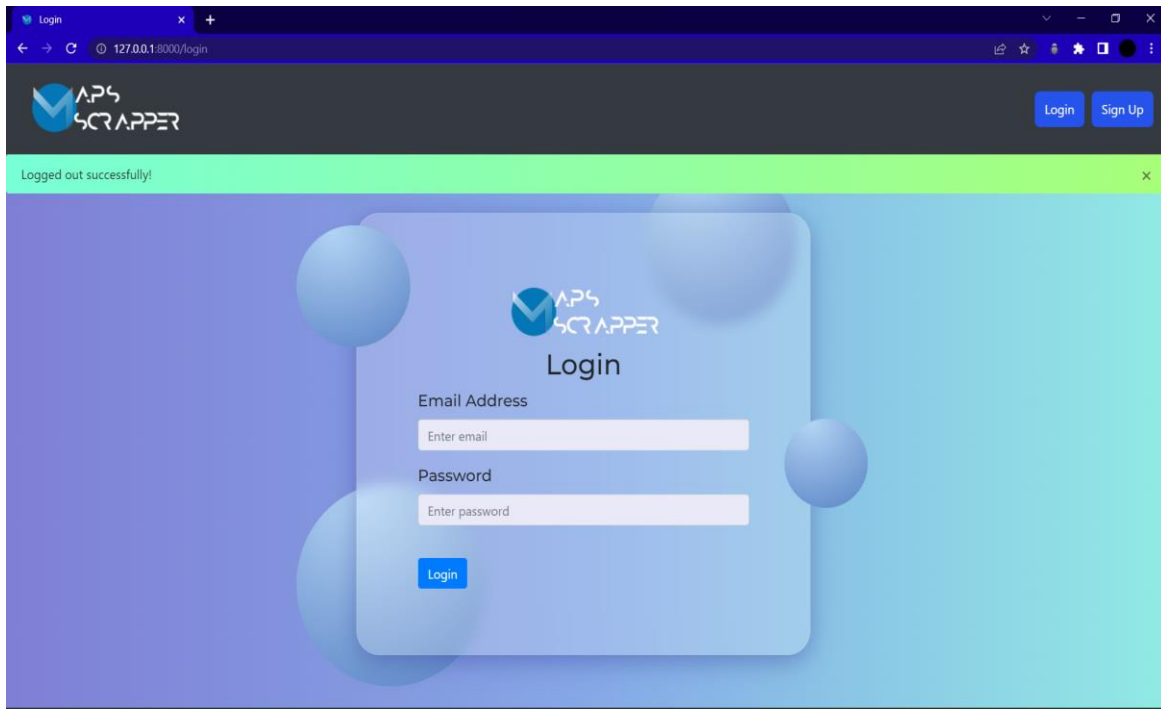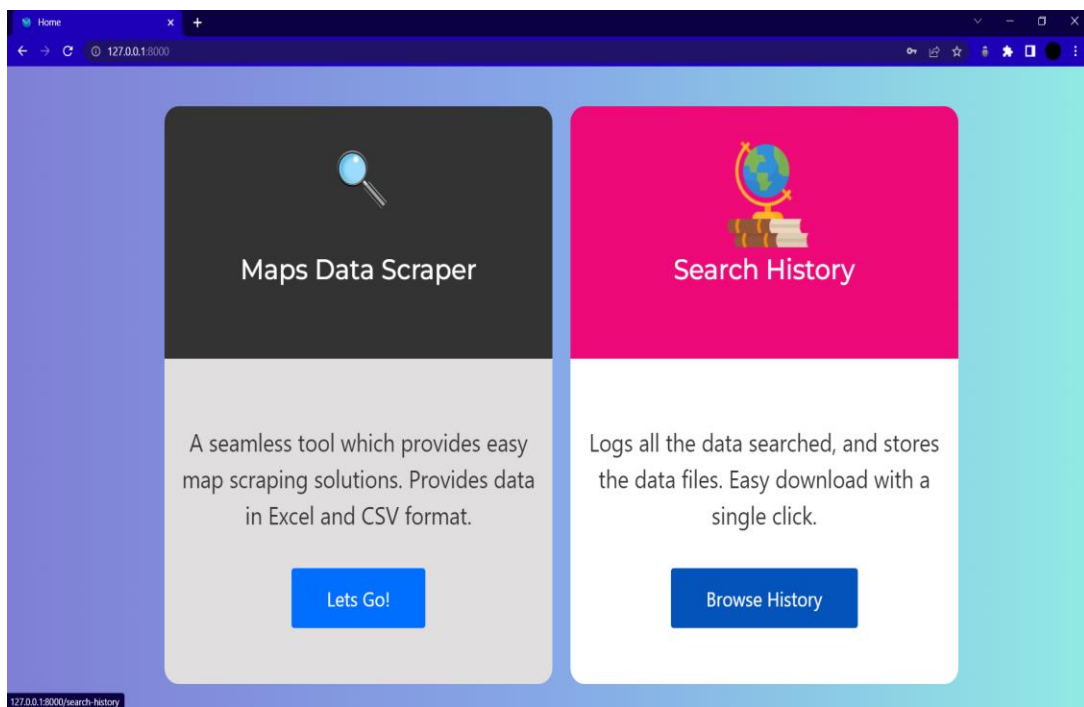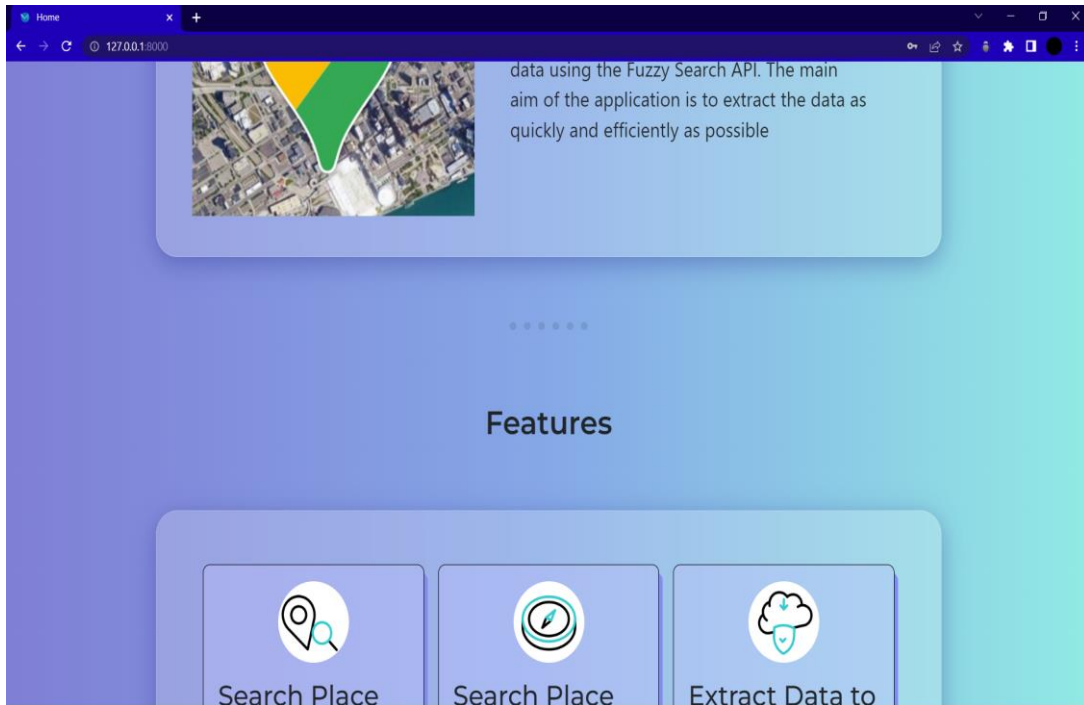- ## <u>Training and Testing Data for Machine Learning Projects</u>

Web Scraping helps you to gather data for testing / training your Machine Learning models. Quality of your machine learning models depends on the quality of training data used and when the data is not readily available you can employ web scraping to collect it from various websites.
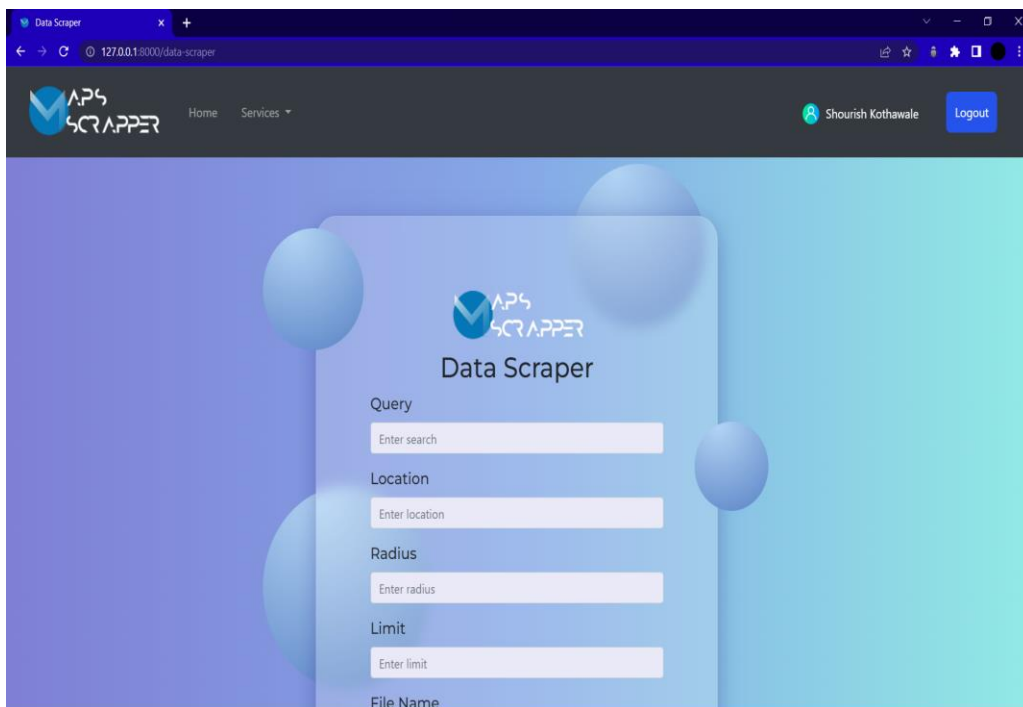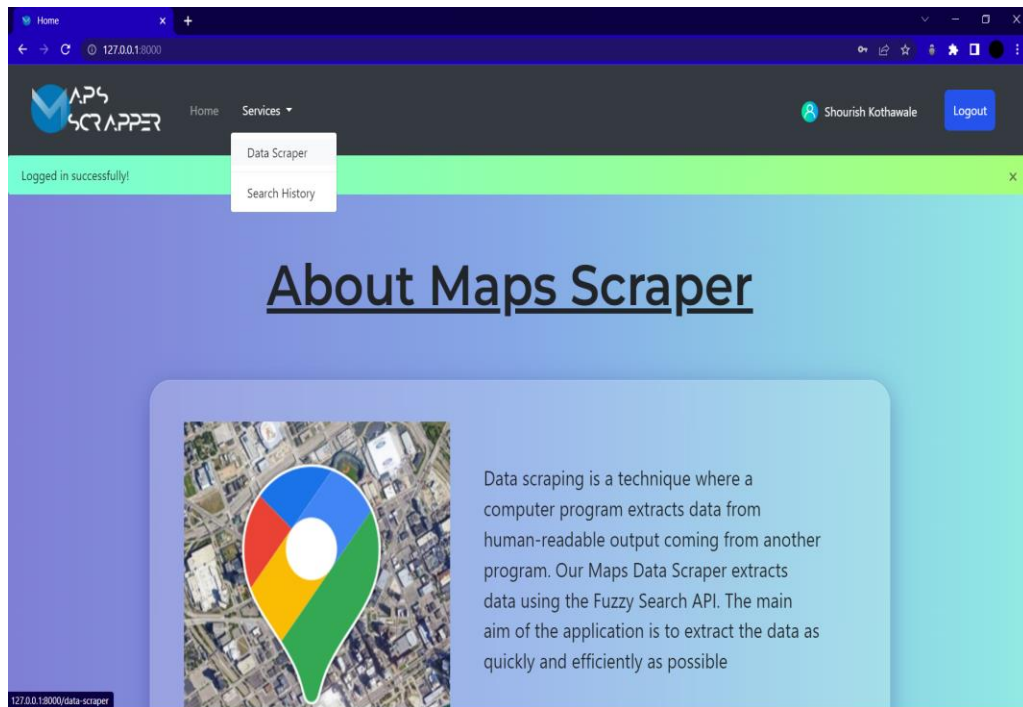
CHAPTER 10

SCREENSHOTS

10. SCREENSHOTS

Movie [Protected View] - Excel

Shounish Kothawale

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View. Enable Editing

A1   fx   resultType

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	resultType	tanceFron	poiName	phone	website	category	geoPosition	address	description	priceLabel	totalRating	minRating	maxRating	rating	socialMedi	icialMediaUrl
2	POI	1400.94	Deepak Ci	+91 22 24	www.dee	cinema	(19.00603,	Deepak Ci A Boutique Cinema at			14	0	10	6.75	twitter	https://twitter.com/dpakcinema
3	POI	1401.1	Matterden Centre			cinema	(19.00607,	Matterden Centre N M Joshi Mai			6	0	10	7.58		
4	POI	1443.73	CARNIVAL CINEMAS			cinema	(19.00565,	CARNIVAL CINEMAS N M Joshi Marg Lower Parel West Mumbai India 400012								
5	POI	1456.63	Star City Cinema			cinema	(19.02859,	Star City Cinema Manmala Tank Road Joshi Wadi Mumbai India 400016								
6	POI	2282.3	Paradise C	+91 22 2445 3786		cinema	(19.03723,	Paradise Cinema Lady Jamshedji Road Mahim New Area Mumbai India 400016								
7	POI	2501.6	BharatMata Theater			cinema	(18.99526,	BharatMata Theater Doctor Babasaheb Ambedkar Road Gundecha Garden Mumbai India 400012								
8	POI	2841.28	PVR Phoer	+91 22 42	www.pvrc	cinema	(18.9946, :	PVR Phoenix Senapati Bapat Marg Upper Worli Mumbai India 400013								
9	POI	3531.63	Jai Hind Cinema			cinema	(18.98599,	Jai Hind Cinema Doctor Babasah			3	0	10	6.21		
10	POI	3560.47	Jaihind Mukta Cinema			cinema	(18.98573,	Jaihind Mukta Cinema Doctor Ambedkar Road Ghodap Deo Mumbai India 400012								
11	POI	4000.58	PVR Cinemas			cinema	(19.0414, :	PVR Cinemas Namdev G Koli Road Agarwada Colony Mumbai India 400022								
12	POI	4009.55	Cinemax			cinema	(19.04163,	Cinemax Namdev G Koli Road Ag			34	0	10	5.11		
13	POI	4182.28	Nandi Cine	+91 22 2640 0928		cinema	(19.05526,	Nandi Cinema Guru Nanak Marg Bandra Talav Mumbai India 400050								
14	POI	4195.57	New Shirin Talkies			cinema	(18.98115,	New Shirin Talkies Keshavrao Khadye Marg RTO Colony Mumbai India 400011								
15	POI	4282.14	PVR Cinema			cinema	(19.05622,	PVR Cinema Ramchandra K. Patkar Marg Pali Hill Mumbai India 400050								
16	POI	4667.15	Palace Talkies			cinema	(18.97585,	Palace Talkies Namdev Umaji Marg Byculla Mumbai India 400027								
17	POI	4800.52	Movie Times Theater	www.mov		cinema	(19.06091,	Movie Times Theater SV Road Khar West Mumbai India 400050								
18	POI	4881.12	Galaxy			cinema	(19.06156,	Galaxy Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
19	POI	4881.12	Gemini Cinema			cinema	(19.06156,	Gemini Cinema Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
20	POI	4881.12	Gem			cinema	(19.06156,	Gem Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
21	POI	4881.12	Gossip			cinema	(19.06156,	Gossip Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
22	POI	4881.12	Glamour Cinema			cinema	(19.06156,	Glamour Cinema Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
23	POI	4881.12	Grace			cinema	(19.06156,	Grace Doctor Keshav Baliram Hedgewar Marg Khar West Mumbai India 400050								
24	POI	6315.95	Nishant Ta	+91 22 2307 1371		cinema	(18.962, 7.	Nishant Talkies M. Shaukat Ali Road Daulat Complex Mumbai India 400008								
25	POI	6386.75	Royal Talkies			cinema	(18.96142,	Royal Talkies M. Shaukat Ali Road Timber Market Mumbai India 400008								
26	POI	6412.64	Alfred Talkies			cinema	(18.96135,	Alfred Talkies Patthe Bapurao Marg Khetwadi Mumbai India 400004								
27	POI	6417.05	Gulshan Talkies			cinema	(18.96118,	Gulshan Talkies Patthe Bapurao Marg Timber Market Mumbai India 400008								
28	POI	6436.14	New Roshan Talkies			cinema	(18.9611, :	New Roshan Talkies Patthe Bapurao Marg Khetwadi Mumbai India 400004								
29	POI	6658.52	Silver Theater			cinema	(18.95868,	Silver Theater Khetwadi Back Road Khetwadi Mumbai India 400004								
30	POI	6673.09	Moti Talkies			cinema	(18.95837,	Moti Talkies Prabhu Shriram Mandir Marg Chor Bazar Mumbai India 400004								
31	POI	6705.67	Alankaar Chitrapatgruh			cinema	(18.95798,	Alankaar Chitrapatgruh S V Patel Marg Cawasji Patel Tank Mumbai India 400003								
32	POI	6734.38	Alankar Cinema			cinema	(18.95797,	Alankar Cinema S V Patel Marg Jitekarwadi Mumbai India 400004								
33	POI	6849.25	Imperial Cinema			cinema	(18.95862,	Imperial Cinema SVP Road Shapur Baug Mumbai India 400007								

Sheet1

Ready   100%

CHAPTER 11

CONCLUSION

11. CONCLUSION

 To conclude, the Google Maps data scraper will offer a variety of personalised search features, at a free cost. Since information is vital nowadays it will help in the cause. It will contain various search parameters from, keywords, location, to even URLs. Due to restaurants having different structures we will be providing a unique feature only known to our app that provides special searches for restaurants. The users will later also be able to export the data in to Excel or CSV formats in their prepared sheets. Use of Python and it's libraries will be vital for the completion of the project.

The main aim of this project is to make it easier and quicker to find data. Hence this we scraper helps as it can save time and even makes it easier to view data. This data scraper can not only be useful in business fields but can be used for various other analytical and statistical reasons.

CHAPTER 12

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