



Personal Travelling Assistance Using Python

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PERSONAL TRAVELLING ASSISTANCE USING PYTHON

A Project Report

Submitted By

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in Partial Fulfilment For the Award of

the Degree of

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COMPUTER SCIENCE AND ENGINEERING

Under the Guidance of

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PARUL UNIVERSITY

VADODARA

October - 2023



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CERTIFICATE

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“The single greatest cause of happiness is gratitude.”

-Auliq-Ice

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Abstract

In this study, This personal traveling assistance (PTA) maintains list of all the tourist places and a short description about the place and it shows the live weather of that particular place.

The User should select the starting point and ending point ,the PTA makes the tour plan of all the tourist places in between starting point and ending point in sequence. After visiting the suggested place PTA marks it as visited and starts the location to the next tourist spot.

This PTA saves our time of planning and we doesn't need any travel guide on our trip

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Chapter 1

INTRODUCTION

1.1 INTRODUCTION

This project aims at maintaining all information about the tourism places and the weather regarding particular place And suggest all the accommodation near tourist place. Now a days traveling is the is the most common hobby for everyone. Travel takes us out of our comfort zones and inspires us to see, taste and try new things. But lack of awareness about tourist places, many people may face difficulties during trip, that leads to booking a travel guide. Despite of good weather while traveling there may be chances of climatic changes in destination leads us to unexpected halts during trip. In this study, Machine learning involves learning from various sorts of data in order to create precise predictions. It is important to take note of the tourism industry because it contributes significantly to the economy and can be predicted with accuracy. Machine learning can be used to forecast tourism demand, as can smartphone recommender systems to assist travellers while they are out and about. Sentiment analysis can be used to monitor customer feedback to inform future tourism planning. One of the fascinating and constantly developing fields is tourism. Thanks to modern technology, it is now even more fascinating. They may now locate ideal locations and the region's most alluring attractions with such ease. Also, customers can receive recommendations from travel agencies for hotels and modes of transportation based on their preferences. Furthermore, having Such features give users a pleasing experience and keep them interested for longer. Users choose to return to the same website and application as a result, increasing the company's income.

1.2 ABSTRACT

In this study, This personal traveling assistance (PTA) maintains list of all the tourist places and a short description about the place and it shows the live weather of that particular place. The User should select the starting point and ending point ,the PTA makes the tour plan of all the tourist places in between starting point and ending point in sequence. After visiting the suggested place

PTA marks it as visited and starts the location to the next tourist spot. This PTA saves our time of planning and we doesn't need any travel guide on our trip.

1.3 PURPOSE OF PROJECT

Now a days traveling is the is the most common hobby for everyone. Travel takes us out of our comfort zones and inspires us to see, taste and try new things. But lack of awareness about tourist places, many people may face difficulties during trip, that leads to booking a travel guide.

Despite of good weather while traveling there may be chances of climatic changes in destination leads us to unexpected halts during trip.

1.4 TECHNOLOGIES BEING USED IN THIS PROJECT

We have used technologies like:-

Postman for backend

ReactJs

Python

ML for weather prediction

1.5 DESCRIPTION

In order to complete this project, we used REACT JS for front-end development and Python and Postman for back-end development. Additionally used Google Spreadsheets to store data relating to the states, cities, locations, hotels, and location details.

We used machine learning to forecast the weather, making it easier for travelers to plan their trip according to the weather.

Chapter 2

Literature Survey

2.1 The Intelligent Travel Assistant)

Author name: John F. DILLENBURG, Ouri WOLFSON and Peter C. NELSON

Date of publication: 2019

The Intelligent Travel Assistant (ITAUltimate)’s objective is to combine and develop a number of technologies into a gadget that will improve the effectiveness of our transportation system by encouraging more people to use mass transit and ridesharing. Dynamic ridesharing, spatiotemporal database management, wireless communications, and a management framework will all be features of the ITA. The ITA is intended to be a small, portable gadget that may help its user plan multi-modal trips. The ITA will create multiple plans to bring the user to the intended destination after the tourist enters their preferred destination. The ITA will send and receive traffic updates, transport schedules, and make arrangements for fare payments using wireless Internet technology The viability of using neural networks for traffic prediction has been well proven by several research . According to these findings, neural networks are highly accurate (93minutes in the future. More intricate neural network topologies and extra inputs from earlier time periods may be used to further boost model performance. ANNs must be able to process real data in real time in order for them to be useful for online applications. As a result, real data that are automatically gathered and processed must ultimately make up training data.

REFERENCE 1

2.2 Design and Development of Tour Management System using Android

Author name: Aishwarya Bhat

Date of publication: 2017

In the modern world, tour management android applications are a developing technology. For many people, cell phones are now essential tools.folks all across the world. this software provides

the tourists with all the necessary pertinent data, like pictures and weather status and details of the locations they desire to travel. It is very beneficial for the users. to go to locations without knowledge of the place. Users can receive better advice concerning the locations they wish to visit by using the The application includes a Google Maps feature. Users can view different trip and tour destinations. Here, we've shown how the design of a tour management system for Android apps can give users the necessary travel advice whenever and wherever they need it. A combination of Internet and smart phone services make up this application. The tour management Android app offers customers a convenient way to organise their travels by giving them extensive information on the tourist destinations, including a description, photograph, and map. The system offers a variety of features and services, including the ability to create bespoke packages, calculate travel times between two locations, use of Google Maps, and online ticket purchasing, among others. The system uses real-time data to accomplish its core objective. [REFERENCE 2](#).

2.3 Survey for Online Tourist Guide

Author name: Shilpa Jadhoo

Date of publication: May 13th, 2021

This study examines the systems now in use for e-tourism and the creation of a location-based online tourist guide application. This essay discusses some of the drawbacks of these current systems while also providing a synopsis of recent developments in the field of e-tourism. It also makes a few suggestions for improving the functioning of current systems. the key The goal of this survey is to evaluate all e-tourism applications and present a framework. This, in the absence of local knowledge or tourists, will assist tourists in retrieving all information on the location. guide. -We have studied and shown how a user can be recommended locations based on the user's history, the popularity of locations, the location's description, and how close the location is to other locations of interest. By combining the aforementioned elements and algorithms, we have been successful in recommending the finest locations for users. The system is a method for making it easier to discover the top tourist destinations depending on user preferences. In order to incorporate and leverage the benefits of both approaches, we have also attempted to develop a hybrid model employing both content and collaboration models. We discovered during the suggestion process that the popularity model works best and that more users are prone to visiting locations that are more well-liked. [REFERENCE 3](#).

2.4 TOUR BUDDY – VIRTUAL TOUR GUIDE

Author name: Chaitanya Manjrekar , Vishal Dornala

Date of publication: 2021

The Web Application system functions as a virtual guide; it generates information about the

monument for each input image that is provided to it. To ensure that the individual is comfortable travelling to the desired location, this web application gives information about the weather conditions. This system provides information on the best area for a visitor who is unfamiliar with the city or for visitors who want to explore the area at their chosen time. The user/tourists are given suggestions for sites based on their interests and selections. The system will provide information on the landmark and its history after the User selects the location(s) he wishes to visit, such as parks, beaches, monuments, or eateries. common travel Not only does tourism significantly contribute to the nation's economic growth, but it also brings happiness and delight to individuals all over the world. Using our project "Tour Buddy- Virtual tour guide," which is founded on ideas of Artificial Intelligence and Machine Learning, we tried to discuss the approach to virtual tour guide in this paper. Learning, as well as several other features including a live weather report, suggestions for locations to visit, and planning tours and discover different tourist attractions. The strategy of a virtual tour guide can address typical issues linked to tourism, including the price of hiring a guide and not learning about the locations. This device can be expanded to better serve tourist needs.

[REFERENCE 4.](#)

2.5 Tourist Guide

Author name: Kavita Jain, Anuja Anil Kumar

Date of publication:4 April 2020

Travelers may now access information on their tour destinations using a number of different methods and technologies thanks to the advancement of technology. They include search engines, blogs, forums, social networking sites, and websites for tourism. These methods do not use the preferences of the passenger to base the information. Due to a lack of knowledge, many areas that ought to be seen are also overlooked. Several interesting places may be just a few miles from where we live, but most of the time we choose to travel hundreds or even thousands of miles to visit some other famous place. This essay suggests a web application to help with the problems mentioned above. In this essay, we discuss the creation and main characteristics of the Explore Mumbai travel app Our project's goal is to launch a customized computer application that can figure out which Mumbai location a user is most likely to visit on their own. Web scraping from the TripAdvisor website is used to first collect the dataset. These algorithms, which include content-based filtering, nearest neighbor algorithm, collaborative filtering, and popularity model, use this data to suggest locations for users. [REFERENCE 5.](#)

2.6 Traveling using machine learning

Author name: Patterson.D

Date of publication: APRIL 2017

This study examines the use of a machine learning technique to forecast how long it will take a vehicle to go between any two places in an approximation of a space. In order to precisely estimate the time, the prediction is based on a learning process that takes historical data from the movements made by the vehicles into account. The study also describes a real-world data experiment. Although this is preliminary research, the outcomes were acceptable. The solution is complicated because there are many variables involved in estimating trip times for moving vehicles. The projected trip time of the vehicle is significantly influenced by changes in traffic behaviour. In addition to the vehicle identifier, other factors to be taken into account include the driver of the vehicle, the vehicle's attributes, the vehicle's load, and whether the day is close to a holiday. The availability of data to conduct such studies should also be covered. Data from the vehicle monitoring project created for Petro bras made it possible for the tests reported in this study. The methodology created in this research hasn't been thoroughly evaluated with real-time data yet, but preliminary findings have proven rather encouraging. [REFERENCE 6](#).

2.7 SMART TRAVEL GUIDE (STG)

Author name: ANIKET AJAY SHINGH, RAVINDRA SHIVRAM BIND

Date of publication: 2019 March

Travel is without a doubt one of the top three industries being disrupted by technology. Since more and more people use them, travel apps are gaining centre stage in the development of mobile applications. The travel industry is expanding dramatically, as never before, and since new applications are constantly being released, one of the most debated topics is what components make the best travel apps effective. There are numerous travel applications available today, each with a variety of useful functions. Today's market offers a variety of apps with various functions, such as trivago for hotel reservations, google maps for maps and location, etc. Our smart travel guide software can satisfy the requirements of the traveller for a wonderful travelling experience, according to the analysis of the results. As a result, the smart travel guide's design is capable of performing as intended and may be further examined for future enhancement so that new features might be focused to generate a better result by enhancing the effectiveness of the app. It makes use cost-free, safe, quick, and simple. We can also draw the conclusion that using a smart trip guide will undoubtedly be advantageous to the user because it will free up storage space and time, making the app more user- and practice-friendly [REFERENCE 7](#).

2.8 :Intelligent Tourism Management System

Author name: Ernest E. Onuiria, Henry C. Omoroje

Date of publication: 2016

Since tourism depends on having access to reliable information, big data has become a severe problem for individuals looking for the right information in this age of the Internet. On how to improve the effectiveness of information on tourism websites, numerous studies have been conducted. By noting the information that tourists deem pertinent in terms of material relating to tourism items on tourism websites, intelligent tourism management systems attempt to close the gap. This focuses mostly on content because it is thought to be the most important element of a successful website. The design and implementation of an intelligent platform that will help tourists get access to information about popular tourist destinations is the goal of this research.

In conclusion, the management of tourism-related products and information will be greatly improved in Nigeria as a result of this technology. Without physically asking individuals for details or having to travel far to view what the place has to offer, tourists would become familiar with all of Nigeria's tourist attractions and information relevant to them. Users are equipped with up-to-date, pertinent information on tourism in Nigeria thanks to the Internet's accessibility and ITMS application. The app will play a significant role in guiding travellers' choices and serving as a cash generator for the nation. Due to quick access to relevant data, ITMS will facilitate enjoyable and simple travel around the nation. [REFERENCE 8](#).

2.9 Intelligent Tourist Guide System

Author name: N. Kumaran, B. Aakash, M. Vidhyaharini

Date of publication: 2022

The "Intelligent Tourist Guide System" project has that name. Nowadays, smartphones are unavoidable; this project is mostly for travellers who encounter numerous challenges. By addressing the issues that travellers have when visiting numerous new locations, this project will assist in enhancing the smartphone's current navigation system. This mobile application project is very advantageous, user-friendly, rapid, versatile, and full of ideas for the future. This mobile application was created utilising cutting-edge software that can run on multiple operating systems in addition to Android.

The primary goal of this project is to provide tourists with better navigational experiences than the current system does. The current system only includes navigation for a single location and destination, however our mobile application offers a feature to find a solution for several locations. The end users can readily understand the entire system because it is well-documented.

The developed application has been created and implemented to meet the demands and needs of the end-users. An intelligent mobile application platform was created and put into use in this effort to assist travellers in finding accurate and pertinent information about a variety of sites and provide the best possible solution. Hence, the packages' rate of recommendation in the proposed system performed better [REFERENCE 9](#).

2.10 Machine Learning in Tourism

Author name: Fatemeh Afsahhosseini , Yaseen A. Al-Mulla

Date of publication: December 2020

The act of learning from many forms of data in order to generate precise predictions is known as machine learning, which is a subset of artificial intelligence. Tourism data can take various forms, including statistics, photographs, maps, and texts. Moreover, there are three stages in each tourism cycle: Before, During, and After Trip. This study provides a full introduction to the use of machine learning to travel-related data and trip stages. **CONCLUSION:** In order to provide the appropriate interpretations, machine learning is utilised in the tourism industry primarily to use data from sources like statistics, photographs, maps, and texts. It is also employed in three stages: before, during, and after a trip. The conclusions reached suggest that the essential decisions can be used to enhance travel and assist those who make decisions in the tourism sector. For instance, using tourism demand forecasting before a trip to learn about the arrival of tourists in the future, using tourism recommendation systems while on a trip to recommend more focused trips, lessen traffic and air pollution, and achieve the best results in the shortest amount of time possible for tourists, and using sentiment analysis after a trip to learn about tourists' perceptions of tourists are just a few examples. Attractions, as well as knowledge of tourism infrastructure, such as parking spaces, retail establishments, restroom facilities, trail markers, and so forth, can assist tourism managers and planners in making improvements that will increase visitor satisfaction and, in turn, draw more travellers to destinations that are more competitive in the future. [REFERENCE 10](#).

2.11 ROLE OF MACHINE LEARNING IN THE TOURISM SECTOR

Author name: Nazeefa Kazi , Mandar Joshi

Date of publication: August 2021

In the modern world, technology has a big impact on travel and tourism. Artificial intelligence and machine learning are successfully used in this field. The biggest travel businesses in the world spend an amazing amount on recommendation algorithms, which help them draw clients and improve the usability of their services. The algorithms utilised by recommendation systems in the travel industry are examined in this research. The study focuses on how artificial intelligence and machine

learning are being applied to advance the industry. The examination of various recommendation algorithms that can be applied to produce individualised suggestions is also covered in the article.

To the best of our knowledge, this study represents the first attempt to model the demand for tourism to Greece using machine learning techniques. Despite the study's limitations in terms of the number of originating countries, the duration, and the sample sizes, the results should be useful to researchers and practitioners interested in forecasting using machine learning techniques. With the exception of multi-layer perceptron models, machine learning models were not frequently utilised to forecast tourism demand. Our results show that machine learning models other than MLP models can perform similarly when there is a limited amount of data. [REFERENCE 11](#).

2.12 System for Intelligent Tourist Information using Machine Learning Techniques

Author name: B. Chandra Mohan

Date of publication: November 2018

The goal is to create a user-friendly, intuitive information system that continuously learns from user input and offers recommendations that are individualised and unique. Analysis: To determine how responsive the testing platform of GSM arena was to user inputs, an analysis was conducted utilising it. We took data samples from the system's various operating systems. A machine learning approach is used by System for Intelligent Tourist Information (SITI) to intelligently retrieve data.

The use of these travel advisors is made more engaging, intuitive, and enjoyable thanks to a crucial AI component that we introduced in this article. The machine learning algorithm introduces a behaviour that most touches people: the process of knowing and feeling like having a friend or companion that stays and gets to know them and offers tailored advice. [REFERENCE 12](#).

2.13 Machine learning methods in tourism demand forecasting

Author name: Athanasia Karakitsiou

Date of publication: 2017

The importance of tourism to national economies has drawn the attention of many experts in recent decades to forecasting tourism demand. The majority of the forecasting models used in the current research methodologies involve time-series and regression techniques. Although these conventional techniques have shown some promise in predicting visitor demand, other techniques, such as machine learning techniques, can significantly advance this field. In fact, a variety of forecasting applications, including the forecasting of tourism demand, have effectively used machine learning methodologies. The two most frequently employed cutting-edge machine learning techniques for forecasting are artificial neural networks (ANN) and support vector machines (SVM).

Using two well-known machine learning approaches, Support Vector Regression and Artificial Neural Networks, this study has outlined the process of predicting the tourist demand for travel to Greece. Information was gathered from various official authorities and used to create the matching models. With the help of a 10-fold cross validation technique, these data were randomly split into two sets: a training data set for the models to be built and a testing data set to assess the level of forecasting accuracy. As inputs to the models, exogenous variables that influence travellers' demand from five different nations were taken into account. The number of travellers coming from these nations to Greece made up the production. Results from experiments showed how well both models predicted the future. [REFERENCE 13](#).

2.14 MACHINE LEARNING APPLIED TO TOURISM

Author name: Célia M.Q. Ramos

Date of publication: 2018

Innovative technologies have had an impact on tourism in recent decades (Ramos Rodrigues, 2013), and each new technology was immediately embraced after it was developed. ICT is utilised throughout the entire travel process, from planning the trip to returning home, to locate information, order goods, share personal biographies, and store digital memories. ICT is the primary force behind the personalization of the tourism experience during the trip stages (Buhalis Amarangana, 2015). Before to the journey, it can assist the traveller in learning how to get lodging, transportation, and/or local cuisine; while on the trip, it can facilitate real-time access to specialised services and information. You can utilise After to create testimonial content, get promotions, or communicate with other travellers.

The tourism sector has a strong ally in technology. When combined with advanced analysis tools, the growing strength of the business-traveler interaction has generated massive amounts of data that give destination managers a competitive edge. The movement is towards achieving the tenets of a society that is centred on people. 5.0. In order to manage the relationship with the customer and include the tourist consumer—the traveler—digital transformation makes use of emerging technologies, which give access to social communities in the digital environment. Data analysis enables the leveraging of connectivity, automation, and communication between all parties involved. [REFERENCE 14](#).

2.15 Smart Tour Guide using Machine Learning

Author name: Muzammil Khan, Samad Khan

Date of publication: 2021 March

A tourist can feel at ease using an online tourism guide using ML. We have suggestions for all

types of travellers. Any form of traveller operating on an internet booking system, such as a ticket or hotel reservation, regardless of their country, state, or type of travel. In our suggested system, we will employ machine learning as a tool and operate on the Android, Java, and PHP platforms. We will give the tourist many facilities as well as a straightforward, user-friendly online tourist guidance system. In terms of functionality, the mechanism for taking and classifying images is pretty similar to Google Lens. The application is created in Android Studio and written in the programming language JAVA. CONCLUSION: A person who is having placement issues can use the guidance-based placement preparation method since it is more sophisticated and useful for all types of placement situations, including online and offline ones. The utilization of innovative, cutting-edge technologies to guide students is beneficial for teachers as well. We came to the conclusion that our system fits this generation of technology the best [REFERENCE 15](#).

Chapter 3

Flow Chart and Conclusion

3.1 Flow Chart

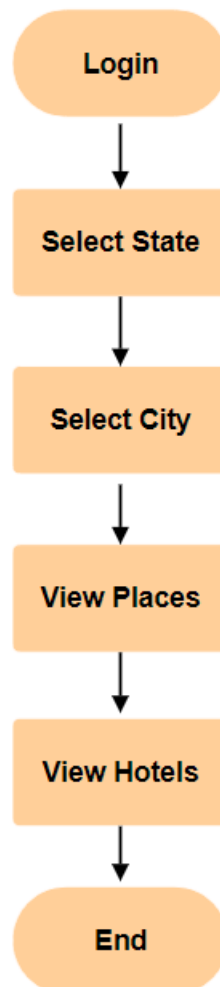


Figure 3.1: Flow of working

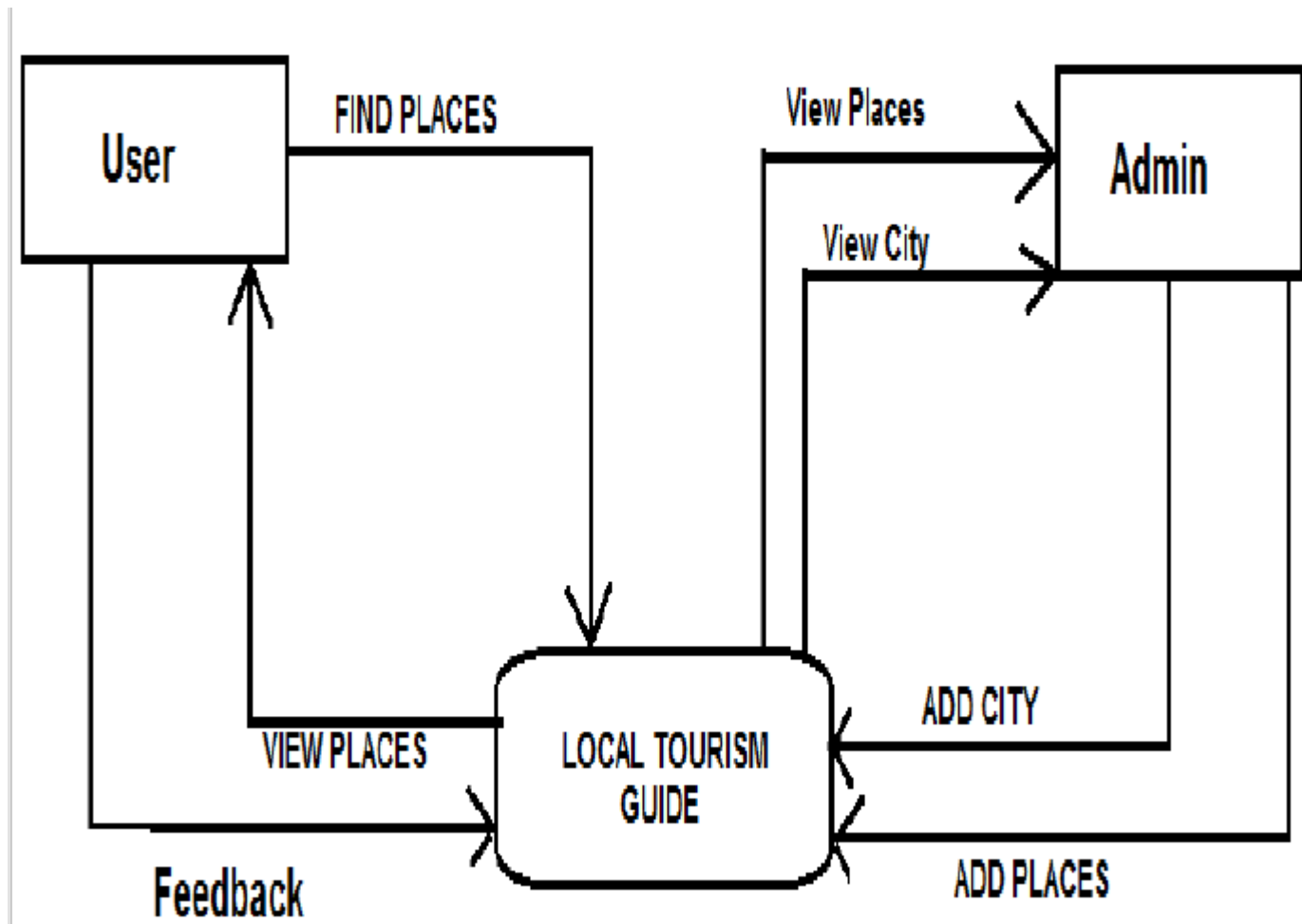


Figure 3.2: Flow of working

3.2 Conclusion

In conclusion, whether a traveller is going on a trip for work or pleasure, a personal travelling assistant can be a useful tool. By delegating the planning of their trip to someone else, travellers can save time and lessen stress with the aid of a personal travelling assistant.

A personal travel assistant can assist with duties including making reservations for transportation, lodging, and activities as well as offering advice and information on the location. They can also assist with travel-related problems like lost luggage, delayed flights, and cancellations. This is especially helpful when travelling to a foreign country where communication difficulties and unfamiliar customs can make these situations more challenging.

In general, a personal travel assistant can offer a practical and unique service that improves the trip.

Chapter 4

Future Work

4.1 Implementation Steps

Basically, in order to develop this project, we need to download the most recent versions of Python [Python 3.12.0](#). and Visual Studio Code, and configure Python in VS Code. [VS code 1.83](#).

4.2 Installing software

Using the command prompt to install the Python and React Native, which are used to launch back-end and also installing werkzeug packages which help back-end, front-end servers.

4.3 Setting up the servers

Starting the back-end and front-end servers at command prompt using PYTHON MAIN.PY command for the back-end, where it takes help of FLASK and NPM START for the front-end.

4.4 Data Storage

Using csv files, we were able to store information about states, cities, destinations, hotels, and other details by connecting the photographs to the csv files and locating them on maps.

4.5 Creating login and sign-up page

We used Python to create the login and sign-up pages, together with Flask for back-end processing, and React Native to create the front-end user interface.

4.6 Connecting APIs

We were able to display the local weather forecast by connecting to the Google API to the website. and suggests the places based on preferences and the user's last visited destinations.

```

C:\Windows\System32\cmd.exe - python main.py
Microsoft Windows [Version 10.0.23531.1001]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main>venv\Scripts\activate

(venv) C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main>python main.py
Traceback (most recent call last):
  File "main.py", line 1, in <module>
    from flask import Flask
  File "C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main\venv\lib\site-packages\flask\_init_.py", line 5, in <module>
    from .app import Flask as Flask
  File "C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main\venv\lib\site-packages\flask\app.py", line 30, in <module>
    from werkzeug.urls import url_quote
ImportError: cannot import name 'url_quote' from 'werkzeug.urls' (C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main\venv\lib\site-packages\werkzeug\urls.py)

(venv) C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main>pip install Werkzeug==2.2.2
Collecting Werkzeug==2.2.2
  Downloading Werkzeug-2.2.2-py3-none-any.whl (232 kB)
    |#####| 232 kB 1.3 MB/s
Requirement already satisfied: MarkupSafe>=2.1.1 in c:\users\devarasetti.kalyan\desktop\trip-advisor-backend-main\venv\lib\site-packages (from Werkzeug==2.2.2) (2.1.3)
Installing collected packages: Werkzeug
  Attempting uninstall: Werkzeug
    Found existing installation: werkzeug 3.0.0
    Uninstalling werkzeug-3.0.0:
      Successfully uninstalled werkzeug-3.0.0
Successfully installed Werkzeug-2.2.2
WARNING: You are using pip version 21.1.1; however, version 23.2.1 is available.
You should consider upgrading via the 'c:\users\devarasetti.kalyan\desktop\trip-advisor-backend-main\venv\scripts\python.exe -m pip install --upgrade pip' command.

(venv) C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main>pip install Werkzeug==2.2.2
Requirement already satisfied: Werkzeug==2.2.2 in c:\users\devarasetti.kalyan\desktop\trip-advisor-backend-main\venv\lib\site-packages (2.2.2)
Requirement already satisfied: MarkupSafe>=2.1.1 in c:\users\devarasetti.kalyan\desktop\trip-advisor-backend-main\venv\lib\site-packages (from Werkzeug==2.2.2) (2.1.3)
WARNING: You are using pip version 21.1.1; however, version 23.2.1 is available.
You should consider upgrading via the 'c:\users\devarasetti.kalyan\desktop\trip-advisor-backend-main\venv\scripts\python.exe -m pip install --upgrade pip' command.

(venv) C:\Users\Devarasetti.kalyan\Desktop\trip-advisor-backEnd-main>python main.py
 * Serving Flask app 'main'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [05/Oct/2023 23:40:07] "POST /user HTTP/1.1" 500 -
127.0.0.1 - - [05/Oct/2023 23:40:24] "POST /user HTTP/1.1" 201 -
127.0.0.1 - - [05/Oct/2023 23:40:55] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [05/Oct/2023 23:40:56] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [05/Oct/2023 23:41:16] "POST /login HTTP/1.1" 401 -
127.0.0.1 - - [05/Oct/2023 23:41:43] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [05/Oct/2023 23:42:04] "GET /states?id=4 HTTP/1.1" 200 -
127.0.0.1 - - [05/Oct/2023 23:42:24] "GET /states?id=100 HTTP/1.1" 200 -

```

Figure 4.1: Installing PYTHON and werkzeug

4.7 Creating homepage

Creating the home page, displaying the states, and providing a view all option that leads to all other pages, such as those for the states, locations, and hotels.

4.8 Displaying Logs

It shows the user activity logs, including successful and unsuccessful logins, new user sign-ups, and other activity records.


```
Windows PowerShell
Starting the development server...

One of your dependencies, babel-preset-react-app, is importing the
"@babel/plugin-proposal-private-property-in-object" package without
declaring it in its dependencies. This is currently working because
"@babel/plugin-proposal-private-property-in-object" is already in your
node_modules folder for unrelated reasons, but it may break at any time.

babel-preset-react-app is part of the create-react-app project, which
is not maintained anymore. It is thus unlikely that this bug will
ever be fixed. Add "@babel/plugin-proposal-private-property-in-object" to
your devDependencies to work around this error. This will make this message
go away.
Compiled with warnings.

[eslint]
src\Api.Service.ts
  Line 3:1:  Assign object to a variable before exporting as module default  import/no-anonymous-default-export

src\App.tsx
  Line 3:8:  'logo' is defined but never used  @typescript-eslint/no-unused-vars

src\Components\Home.tsx
  Line 9:9:  'Search' is assigned a value but never used

                                     @typescript-eslint/no-unused-vars
  Line 12:12: 'data' is assigned a value but never used
```

Figure 4.2: Installing REACT NATIVE packages

```
Windows PowerShell

Compiled successfully!

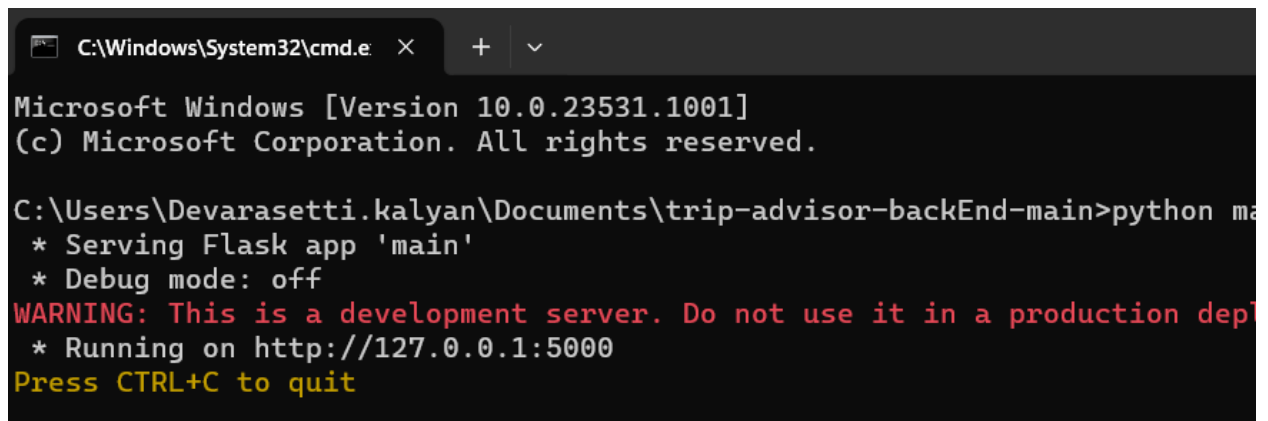
You can now view frontend in the browser.

  Local:            http://localhost:3000
  On Your Network:  http://192.168.114.1:3000

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
Files successfully emitted, waiting for typecheck results...
Issues checking in progress...
No issues found.
```

Figure 4.3: Front-end server launched

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\Windows\System32\cmd.e' and window controls. The terminal text shows the Windows version and copyright information, followed by the execution of a Python command to start a Flask application. The output indicates the app is served on http://127.0.0.1:5000.

```
C:\Windows\System32\cmd.e  X  +  v
Microsoft Windows [Version 10.0.23531.1001]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Devarasetti.kalyan\Documents\trip-advisor-backEnd-main>python ma
* Serving Flask app 'main'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production dep
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
```

Figure 4.4: Back-end server launched

A1		fx		S.No.					
	A	B	C	D	E	F	G	H	I
1	S.No.	State	Capital	Population	Area	Languages			
2	1	Andhra Pradesh	Amaravati	4,95,06,791	1,62,975	Telugu			
3	2	Arunachal Pradesh	Itanagar	13,83,727	83,743	English			
4	3	Assam	Dispur	3,12,05,570	78,550	Assamese			
5	4	Bihar	Patna	10,40,99,400	94,163	Hindi			
6	5	Chhattisgarh	Raipur	2,55,45,190	1,35,194	Hindi			
7	6	Goa	Panaji	14,58,545	3,702	Konkani			
8	7	Gujarat	Gandhinagar	6,04,39,690	1,96,024	Gujarati			
9	8	Haryana	Chandigarh	2,53,51,460	44,212	Hindi			
10	9	Himachal Pradesh	Shimla (Summer) Dharamshala	68,64,602	55,673	Hindi			
11	10	Jharkhand	Ranchi	3,29,88,130	79,716	Hindi			
12	11	Karnataka	Bangalore	6,10,95,290	1,91,791	Kannada			
13	12	Kerala	Thiruvananthapuram	3,34,06,060	38,863	Malayalam			
14	13	Madhya Pradesh	Bhopal	7,26,26,800	3,08,252	Hindi			
15	14	Maharashtra	Mumbai (Summer) Nagpur (Winter)	11,23,74,300	3,07,713	Marathi			
16	15	Manipur	Imphal	28,55,794	22,347	Meitei			
17	16	Meghalaya	Shillong	29,66,889	22,720	English			
18	17	Mizoram	Aizawl	10,97,206	21,081	English, Hindi, Mizo			
19	18	Nagaland	Kohima	19,78,502	16,579	English			
20	19	Odisha	Bhubaneswar	4,19,74,210	1,55,820	Odia			
21	20	Punjab	Chandigarh	2,77,43,330	50,362	Punjabi			
22	21	Rajasthan	Jaipur	6,85,48,430	3,42,269	Hindi			
23	22	Sikkim	Gangtok	6,10,577	7,096	English, Nepali			
24	23	Tamil Nadu	Chennai	7,21,47,030	1,30,058	Tamil			
25	24	Telangana	Hyderabad	3,51,93,970	1,12,077	Telugu			
26	25	Tripura	Agartala	36,73,917	10,492	Bengali, English, Kokborok			
27	26	Uttar Pradesh	Lucknow	19,98,12,300	2,43,286	Hindi			
28	27	Uttarakhand	Bhararisingh (Summer) Dehradun	1,00,86,290	53,483	Hindi			
29	28	West Bengal	Kolkata	9,12,76,110	88,752	Bengali, Nepali			
30									
31									

Figure 4.5: CSV data files

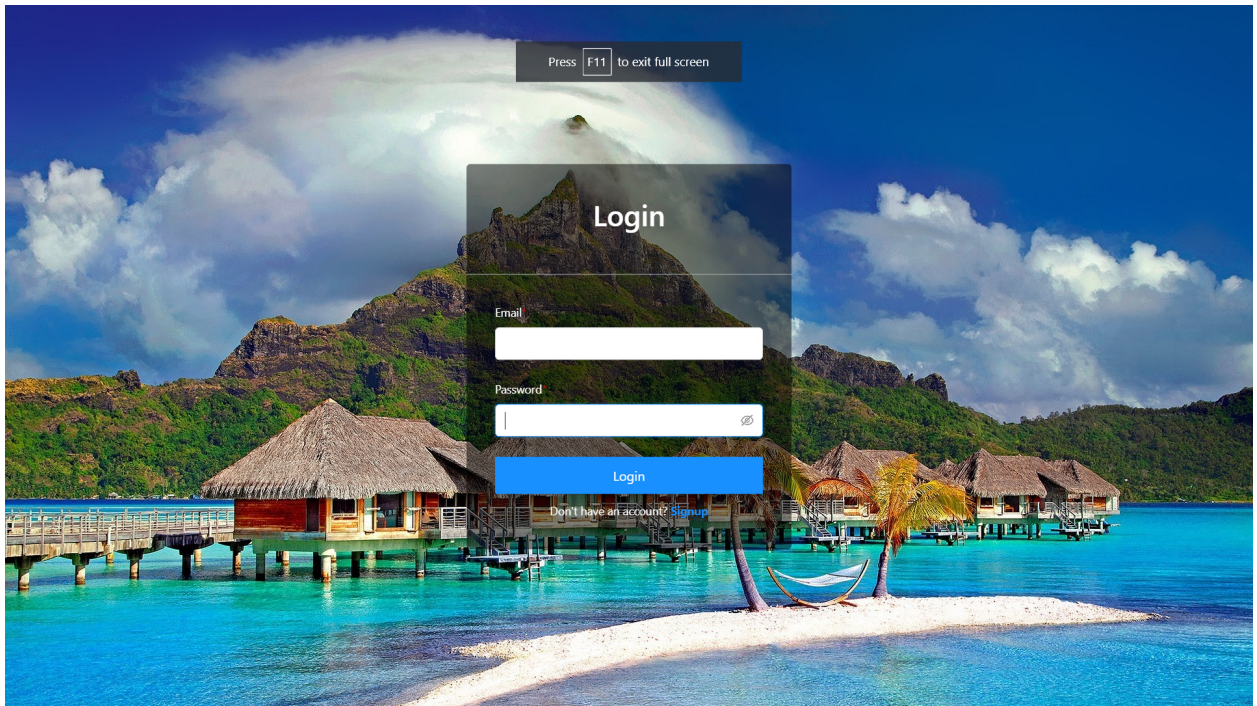


Figure 4.6: User login UI

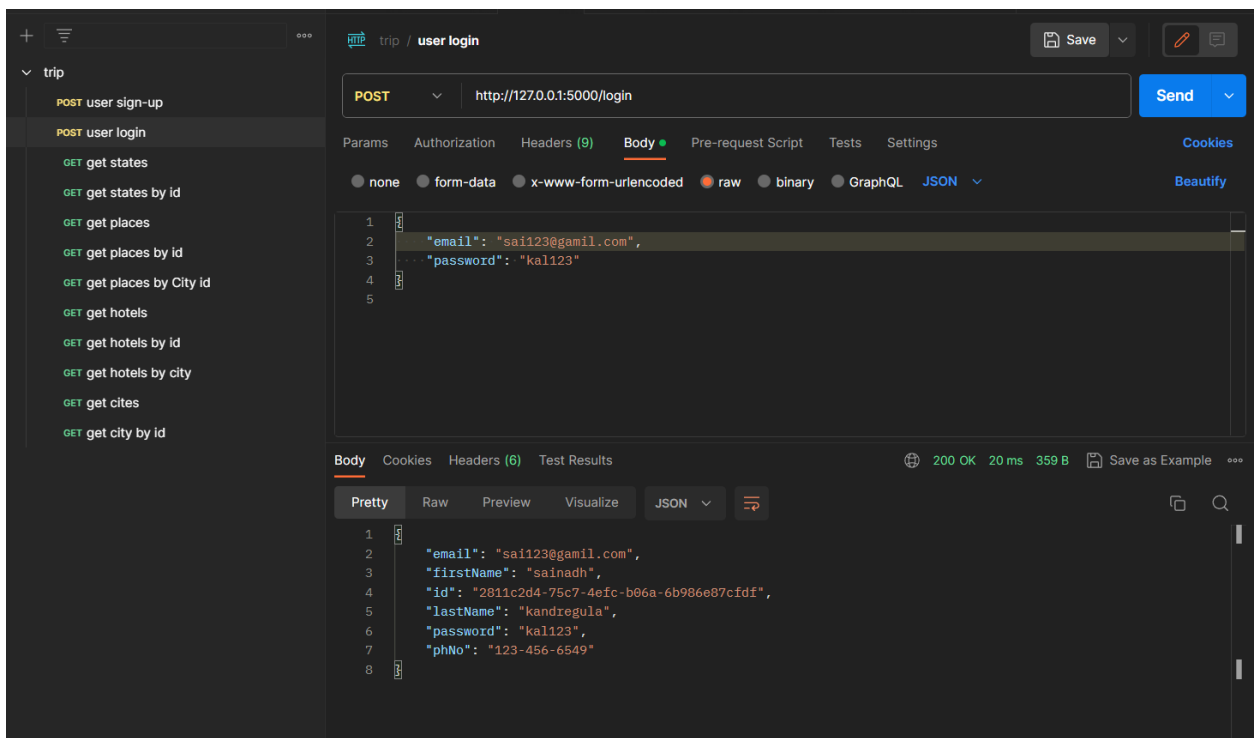


Figure 4.7: Login back-end

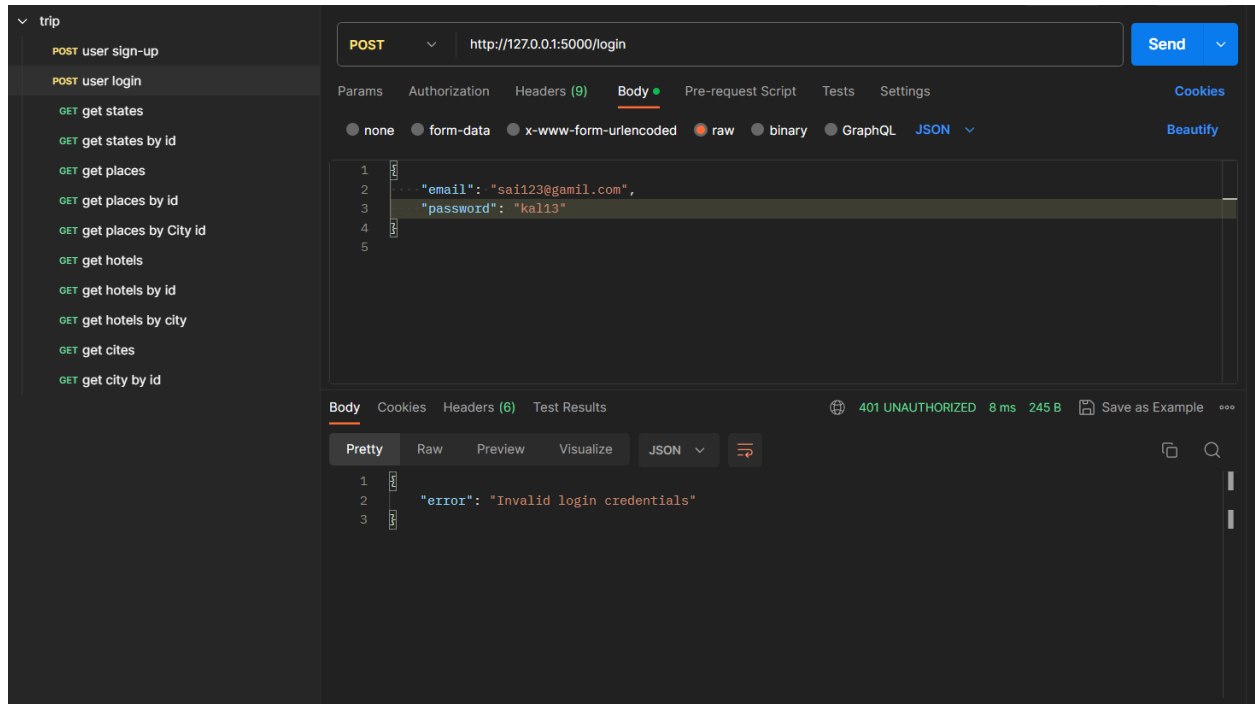


Figure 4.8: Invalid user login

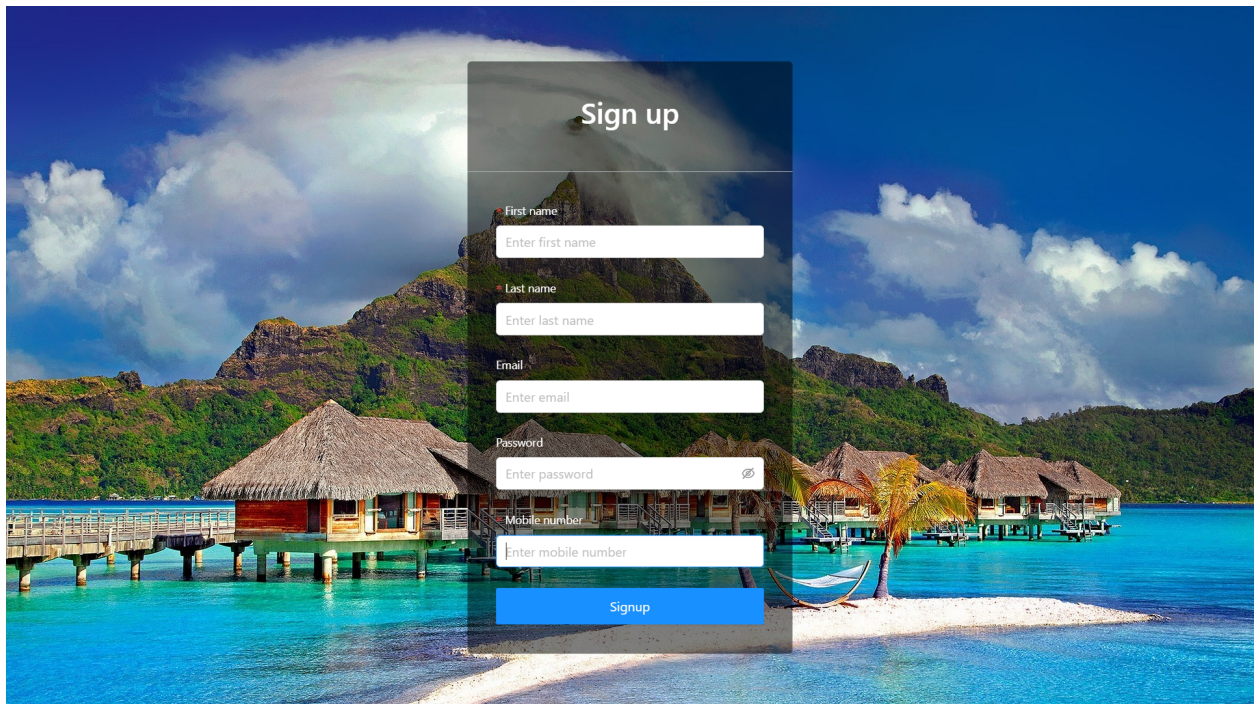


Figure 4.9: User sign-up UI

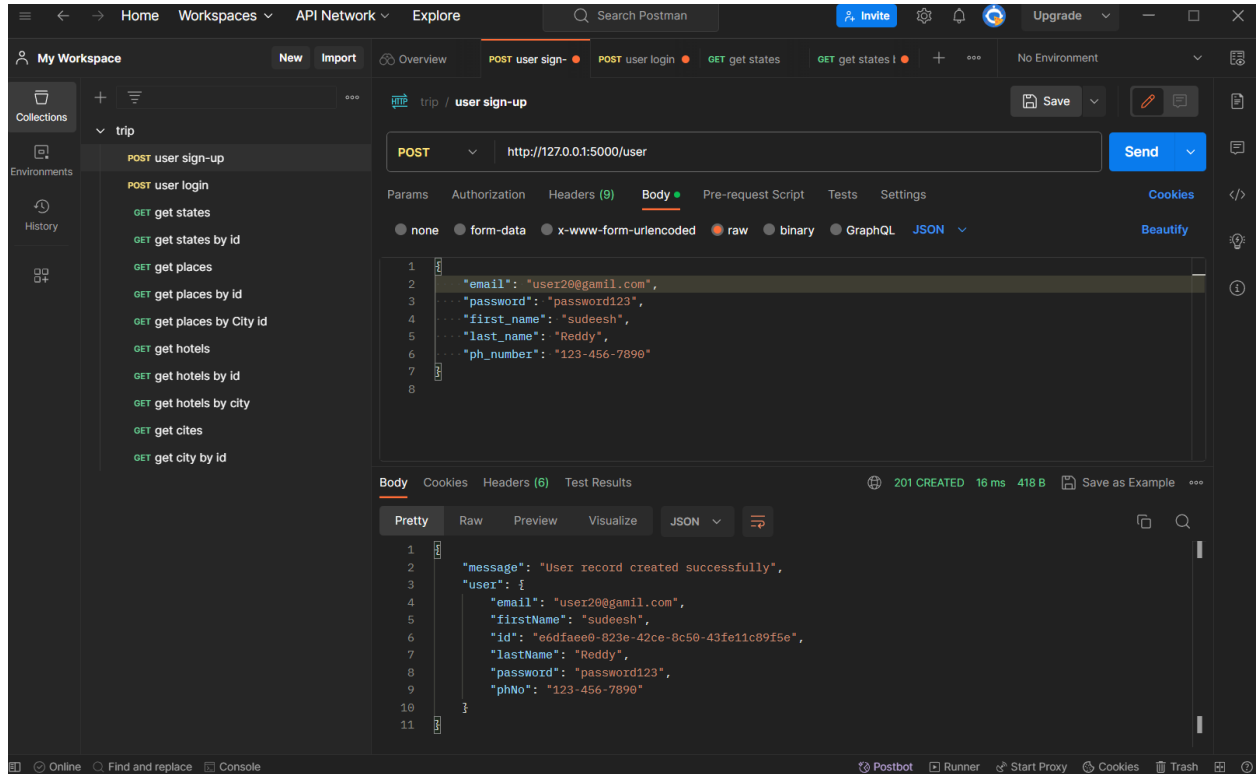


Figure 4.10: Sign-up back-end

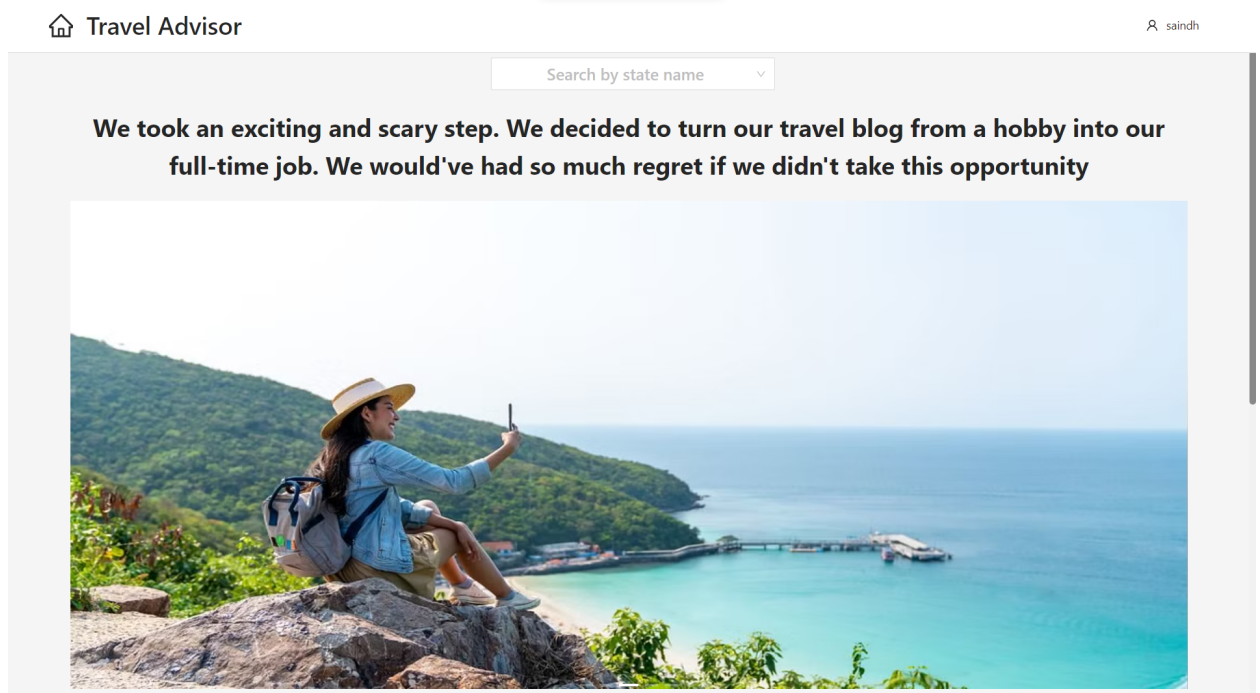


Figure 4.11: Home Page

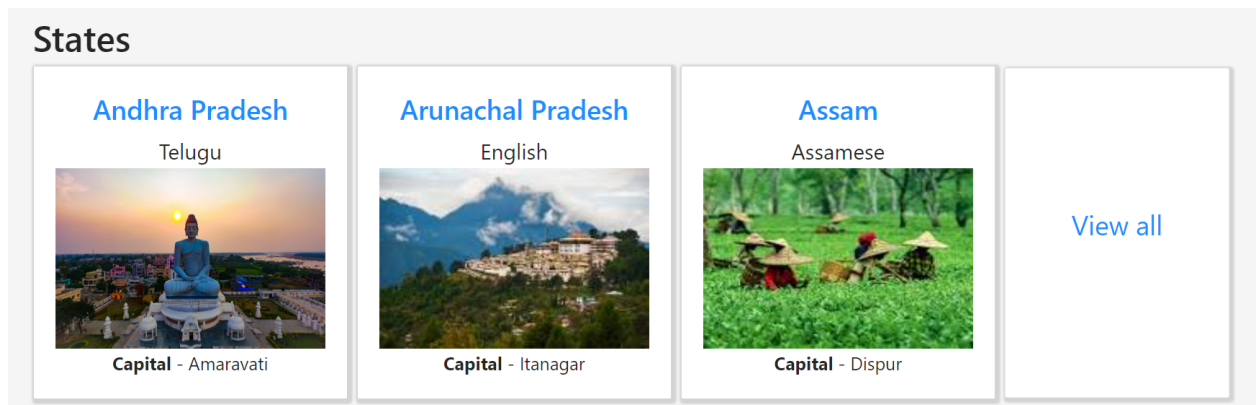


Figure 4.12: States Widget

 Travel Advisor



Figure 4.13: States UI

 Travel Advisor



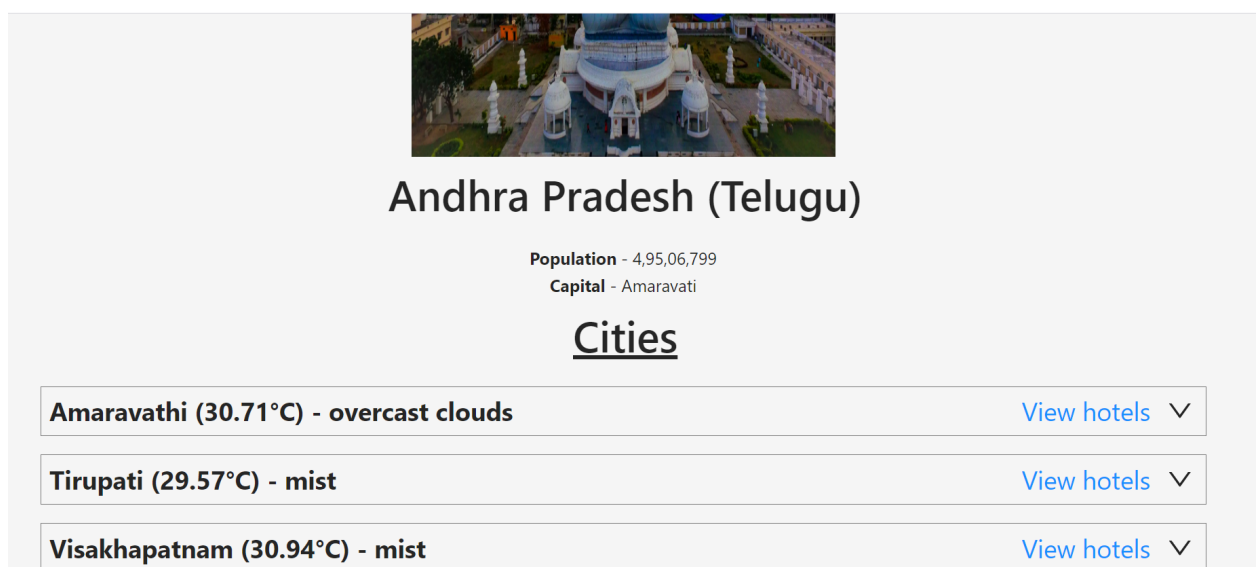


Figure 4.14: City details

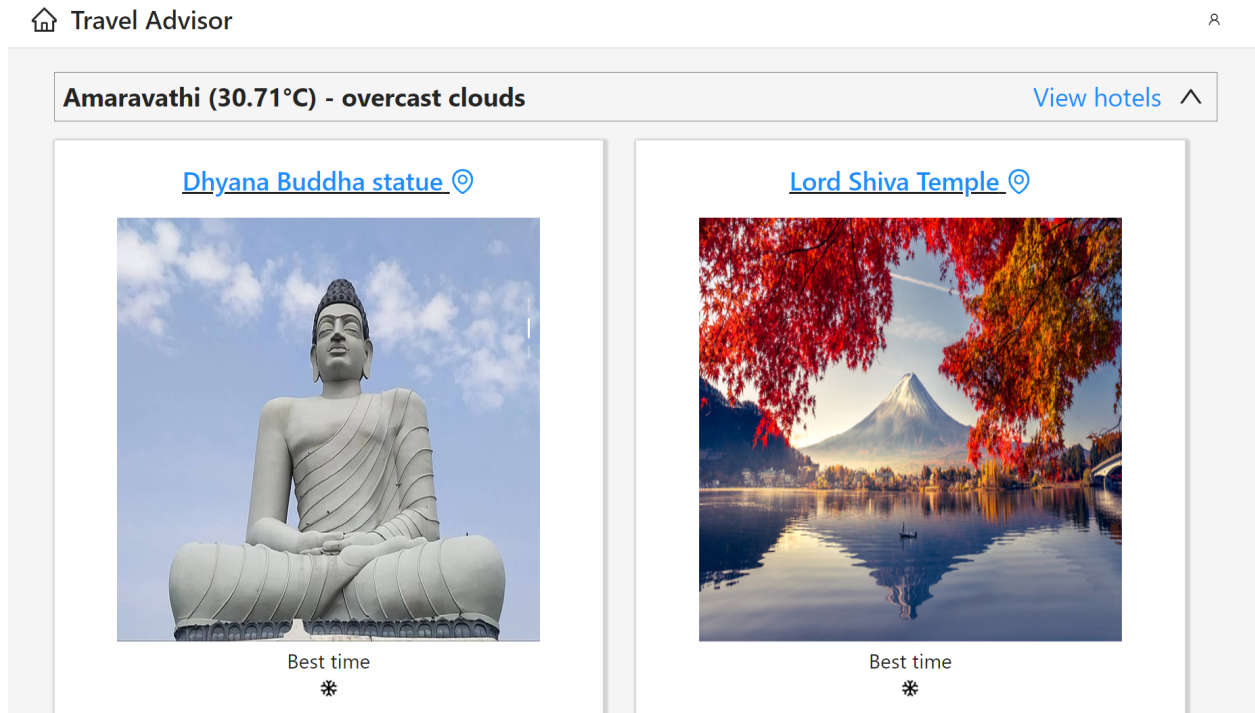


Figure 4.15: Places

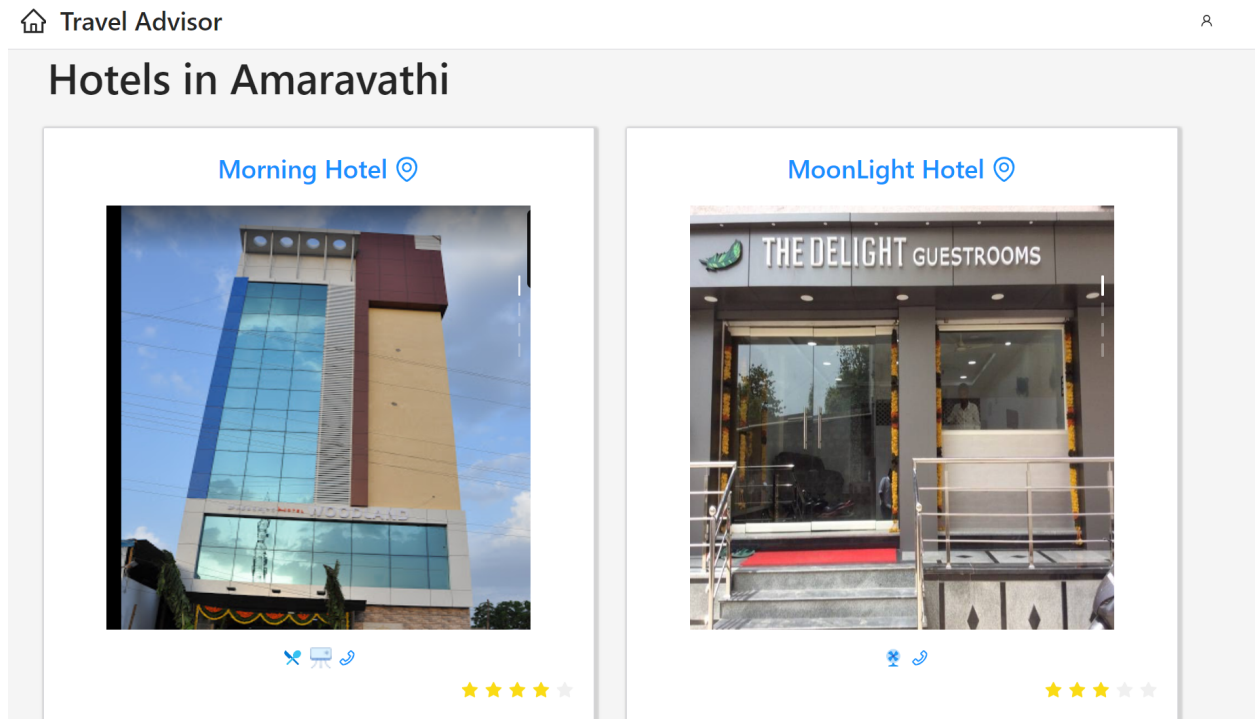


Figure 4.16: Hotels UI


```

C:\Windows\System32\cmd.e x + v
Microsoft Windows [Version 10.0.23531.1001]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Devarasetti.kalyan\Documents\trip-advisor-backEnd-main>python main.py
* Serving Flask app 'main'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [09/Oct/2023 09:26:49] "POST /user HTTP/1.1" 201 -
127.0.0.1 - - [09/Oct/2023 09:27:02] "POST /user HTTP/1.1" 201 -
127.0.0.1 - - [09/Oct/2023 09:28:11] "GET /places HTTP/1.1" 200 -
127.0.0.1 - - [09/Oct/2023 09:28:22] "POST /login HTTP/1.1" 401 -
127.0.0.1 - - [09/Oct/2023 09:28:30] "POST /login HTTP/1.1" 401 -
127.0.0.1 - - [09/Oct/2023 09:28:50] "POST /user HTTP/1.1" 201 -
127.0.0.1 - - [09/Oct/2023 09:28:59] "POST /login HTTP/1.1" 401 -
127.0.0.1 - - [09/Oct/2023 09:30:31] "POST /user HTTP/1.1" 201 -
127.0.0.1 - - [09/Oct/2023 09:31:00] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [09/Oct/2023 09:31:41] "POST /login HTTP/1.1" 401 -

```

Figure 4.17: User login logs

```

C:\Windows\System32\cmd.e x + v
127.0.0.1 - - [08/Oct/2023 22:15:49] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:15:49] "GET /states?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:15:49] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:15:49] "GET /states?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /hotels?cityId=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /city?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /hotels?cityId=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "OPTIONS /city?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /city?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /hotels?cityId=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /city?id=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /hotels?cityId=1 HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:08] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "OPTIONS /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "OPTIONS /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "GET /states HTTP/1.1" 200 -
127.0.0.1 - - [08/Oct/2023 22:16:55] "GET /states HTTP/1.1" 200 -

```

Figure 4.18: User activity logs

References

1. https://www.researchgate.net/publication/344729288_Machine_Learning_in_Tourism
2. <https://www.jetir.org/papers/JETIR2108096.pdf>
3. https://www.ripublication.com/ijaer18/ijaerv13n7_103.pdf
4. REFERENCE 4
5. REFERENCE 5
6. <https://ijcrt.org/papers/IJCRT2103628.pdf>
7. <https://ieeexplore.ieee.org/document/1041302>
8. <https://www.ijert.org/design-and-development-of-tour-management-system-using-android>
9. <https://assets.researchsquare.com/files/rs-519174/v1/69f4b27a-d5d4-43f4-afce-a404b603c3eb.pdf?c=1631882921>
10. REFERENCE 10
11. <https://ijcrt.org/papers/IJCRT2004555.pdf>