A Project Report

on

VISIT PLANNER

Submitted in partial fulfilment

of the requirement for the

award ofthe degree of

BACHELOR OF TECHNOLOGY

Under The
Supervision of

Mr. Arjun KP

Submitted By

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SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GALGOTIAS UNIVERSITY, GREATER NOIDA, INDIA

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ENGINEERG

CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the thesis/project/dissertation, entitled **"VISIT PLANNER: AN EASY WAY TO PLAN YOUR TRIP"** in partial fulfillment of the requirements for the award of the B.Tech submitted in the School of Computing Science and

Engineering of Galgotias University, Greater Noida, is an original work carried out during the October 2021 to December 2021, under the supervision of Mr. ARJUN KP,

Department of Computer Science and Engineering/Computer Application and Information and

Science, of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the thesis/project/dissertation has not been submitted by me/us for the award of any other degree of this or any other places.

SABAL SINHA(18SCSE1010484)

MD NADEEM KHAN(18SCSE1120008)

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Mr. ARJUN KP
Assistant Professor

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of **SABAL SINHA(18SCSE1010484) and MD NADEEM KHAN (18SCSE1120008)** has been held ON "**VISIT PLANNER"** and his/her work is recommended for the award of B.Tech.

Signature of Examiner(s) **Signature of Supervisor(s)**

Signature of Project Coordinator **Signature of Dean**

Date:
Place: Greater Noida

ABSTRACT

Visit planner is a web-based application through which any one can plan their trip. Visit planner provides planning functionality that makes it easy for planning trip in a matter of minutes. By pre-planning your dream visit, you can then proceed with ease. It is an online travel planning system. It aimed offer a range of services to ensure that runs smoothly and efficiently. Visit planner provides very smooth facility to one who wants to make their visit memorable.

It is a responsive website site that pulls data from a third-party API, https://OpenWeatherMap.com and https://Foursquare.com, to present search results in a useful way.

This app will be built using HTML, CSS, Java script and JQuery.

It is a website where we can plan our trip according to weather basically it gives users the ability to find the weather results and venues in a specific location.

The user of this app will be able to plan a trip by finding the weather and other venues sorted by category.

INTRODUCTION

This project is helpful in planning our trip to anywhere in the world. It can be used by anyone who wants to go somewhere for their work or chilling through online, basically it is a self-usable website. It is an online visit planning system. This project will help user for planning trip without spoilation due to uncertain weather and also help in finding best places to visit like for food, clubbing, movies and many thing, it mostly works on two API'S , *FOURSQUARE API(used for providing recommended places according to users review.* Open Weather API (used for providing current and forecast of weather, so that user not get stuck in bad weather) .

Advantages of this project such as:

- It gives user ability to find weather result of wanted city.
- It provides details of best or recommended places of searched city.
- Saves time and inconvenience on visit to a city .
- Helps in knowing a new city in convenient way.

FORMULATION OF PROBLEM

Problem identification is very first step of system analysis. The analyst meets with the customer and the end user. Here customers are the marketing persons and end-user are people .

In this step, we are interested to understand the product's objective and also defined the goals for fulfilling the requirement according to the objective. After identifying overall goals, we moved towards evaluation of supplementary information during preliminary investigation. We also focused on "Does the technology exit to build the system?" and "What bounds have been placed on costs and schedule?"

To perform it we scanned followings:

- ❖ The performance of the system
- ❖ The information being supplied and its form
- ❖ The economy of processing
- ❖ The control of the information processing
- ❖ The efficiency of the existing system

TECHNOLOGY USED

HTML

HTML (Hypertext Markup Language) is the predominant markup language for web pages. It provides a means to describe the structure of text-based information in a document by denoting certain text as headings, paragraphs, lists, and so on and to supplement that text with interactive forms, embedded images, and other objects. HTML is written in the form of labels (known as tags), surrounded by angle brackets. Advantages of HTM are:-

- A HTML document is small and hence easy to send over the net. It is small because it does not include formatted information.
- HTML is platform independent.
- HTML tags are not case-sensitive.

JAVASCRIPT

JavaScript is a script-based programming language that was developed by Netscape Communication Corporation. JavaScript was originally called Live Script and renamed as JavaScript to indicate its relationship with Java. JavaScript supports the development of both client and server components of Web-based applications. On the client side, it can be used to write programs that are executed by a

Web browser within the context of a Web page. On the server side, it can be used to write Web server programs that can process information submitted by a Web browser and then update the browser's display accordingly.

CSS

Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

jQuery

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

FOURSQUARE API

The Foursquare Places API provides location based experiences with diverse information about venues, users, photos, and check-ins. The

API supports real time access to places, Snap-to-Place that assigns users to specific locations, and Geo-tag.

OPEN WEATHER API

Open Weather API is an Application Programming Interface that allows weather data to be queried from scripts and code. It provides current weather data and forecast data via an easy-to-use, well-defined programming interface.

LITERATURE SURVEY

Maps represent the real world on a much smaller scale. They help you travel from one location to another.

They help you organize information. They help you figure out where you are and how to get where you want to go.

There are many types of maps. The kind you use depends on what you want to know. Here are a few examples:

- Looking for a particular store? A street map will show you roads, their names, and various locations along those roads.
- Doing a project for a geography class? A topographic map will inform you about land elevations and features.
- On vacation at a national park? A park map will show you trails, roads, sites of interest, and locations of important buildings such as restrooms.
- Whether on a page of paper or on a device that contains GPS technology, maps are important because they help you get around in your daily life.

Visit Planner help you in finding nearby location, shops, whether report, traffic. Using this app, you can plan your weekend with your friends or plan your holidays with you family.

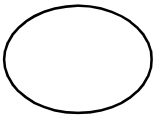
DATA FLOW DIAGRAM

Data flow diagrams are widely used for modeling for requirements. DFDs show the flow of data through a system. The DFD is also known as a data flow graph or a bubble chart.

Standard symbol used for DFD

1.DATA FLOW 

It is used to connect processes to each other, to sources or sinks, the arrowhead indication the direction of data flow.

2.PROCESS 

It is used to represent some transformation of input data to yield output data.

3.SOURCE 

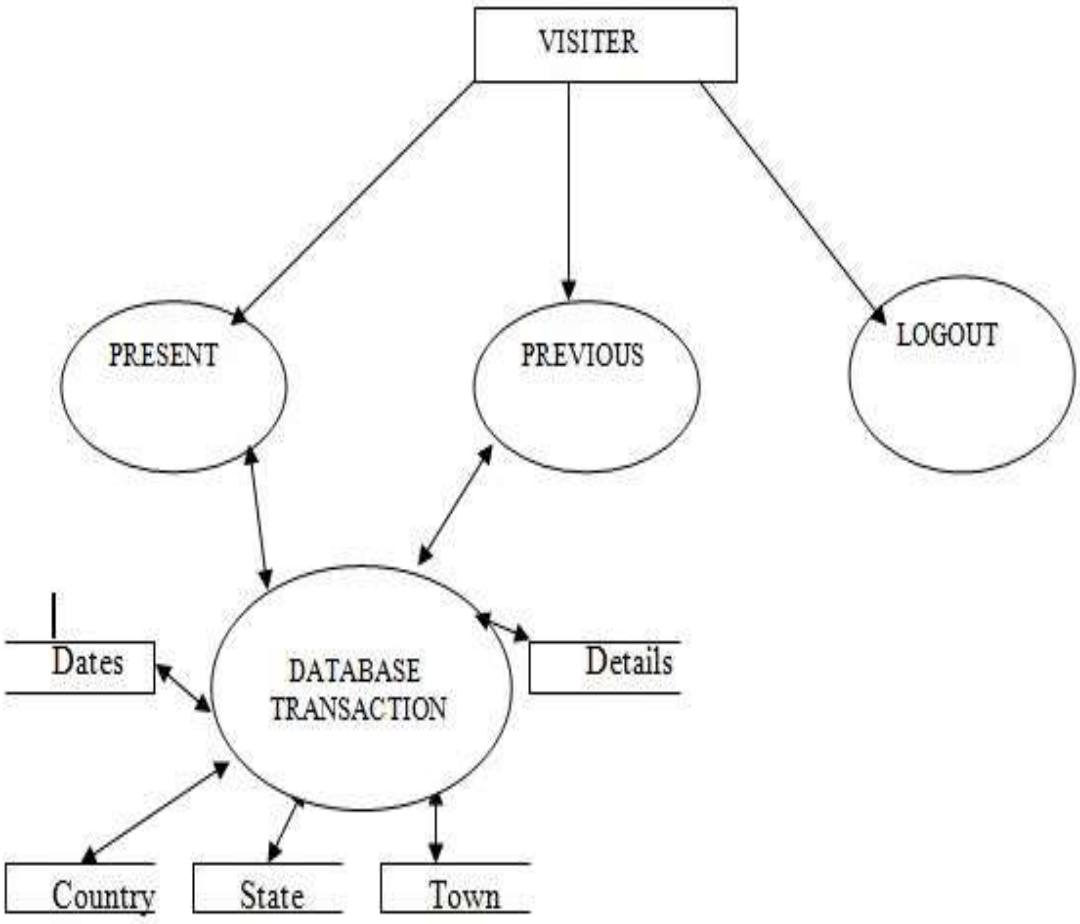
A source of system input or sinks of system outputs.

4.DATA SOURCE

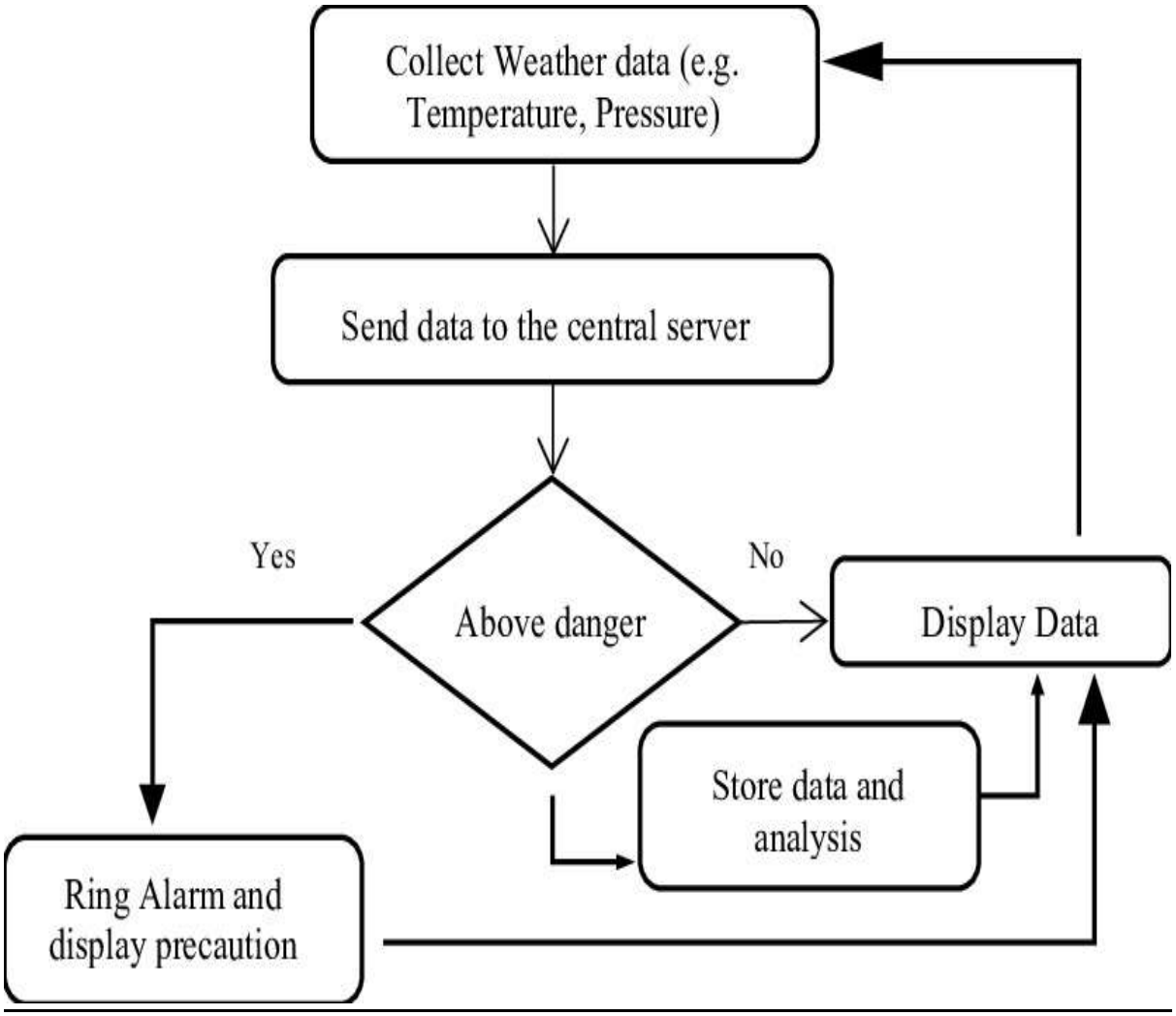
It is used for repository of data. The arrowheads indicate net inputs and net outputs.

DFD FOR RECOMMENDED PLACES: -

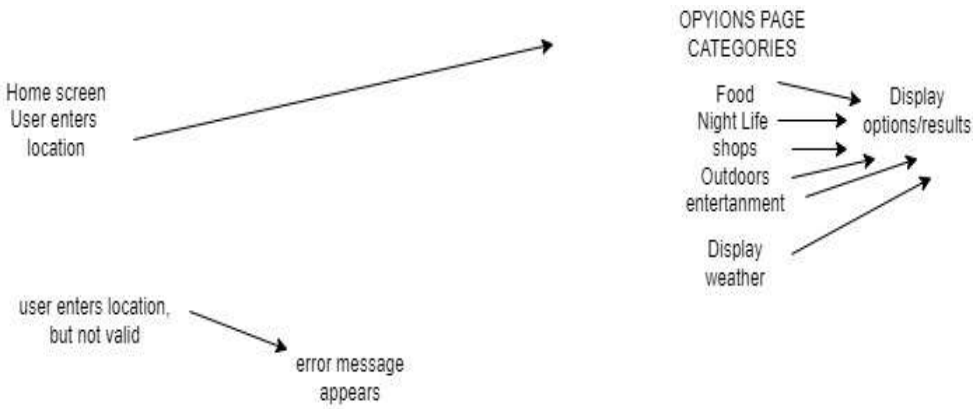
LEVEL1 DFD(VISITER):-

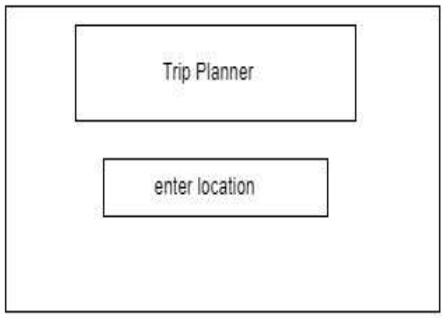


WEATHER FORECASTING:-

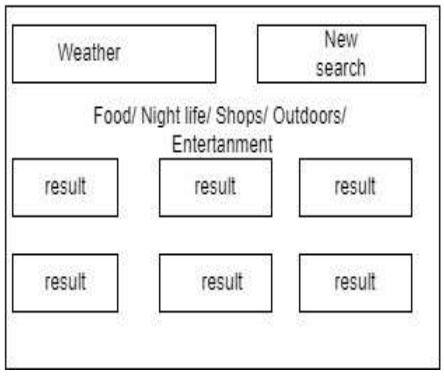


WORKING DIAGRAM:-





-User enters location on home screen



-User is brought to the options page that displays the weather of the location and categories
-User checks on categories to render search results can click on see more for the results
-User can enter a new search

Implementation and Description of Modules:

HTML CODE:-

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <meta property="og:title" content="Visit Planner" />

    <meta property="og:image" content="https://github.com/annalyncs/my-portfolio/blob/master/images/screenshots/trip-planner-home.png?raw=true" />

    <meta property="og:description" content="A responsive website site that pulls data from a third party API, https://OpenWeatherMap.com and https://Foursquare.com, to present search results in a useful way." />

    <meta property="og:type" content="website" />

    <meta property="og:url" content="https://annalyncs.github.io/thinkful-api-capstone-trip-planner/" />

    <title>Visit Planner</title>

    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/normalize/4.2.0/normalize.min.css">

    <link href="https://fonts.googleapis.com/css?family=Roboto|Megrim|Montserrat:400,600|Raleway:400,700" rel="stylesheet">

    <link href="index.css" rel="stylesheet" />
```

```
</head>

<body>

  <main role=main>

    <div class="start-display" id="start-page">

      <header class="row" role="banner">

        <h1 class="logo">Visit Planner</h1>

        <p class="api-info">Powered by OpenWeatherMap and Foursquare API</p>

        <p>Plan your visit by finding out the current weather and the best things to do in a new city!</p>

      </header>

      <form action="#" class="search-form row" id="search-query-form">

        <input type="text" placeholder="Enter a city" class="search-query" id="search-term" required>

        <button type="submit" class="submit-button">Search</button>

      </form>

    </div>

    <section class="weather row" id="weather-display">

    </section>

    <nav role="navigation" class="navigation hide" id="results-navigation">

      <div class="options row">

        <button class="category-button" id="food-button">FOOD</button>

        <button class="category-button" id="nightlife-button">NIGHTLIFE</button>
```

```
            <button class="category-button" id="shops-button">SHOPS</button>

            <button class="category-button" id="outdoors-button">OUTDOORS</button>

            <button class="category-button" id="entertainment-button">ARTS</button>

          </div>

        </nav>

        <section id="foursquare-results" class="row">

</section>

        <footer class="footer">

          <a href="https://github.com/annalyncs" target="_blank"><img src="social-icons/github-icon-80.png" alt="github icon"></a> 

          <a href="https://www.linkedin.com/in/annalyn-sarmiento/" target="_blank"><img src="social-icons/linkedin-icon-80.png" alt="linkedin icon"></a> 

          <a href="mailto:annalyn.c.s@gmail.com"><img src="social-icons/mail-icon-80.png" alt="email icon"></a>

          <p>Created by Sabal Sinha</p>

        </footer>

    </main>

    <script src="https://code.jquery.com/jquery-3.2.1.min.js" integrity="sha256-hwg4gsxgFZhOsEEamdOYGBf13FyQuiTwlAQgxVSNgt4=" crossorigin="anonymous"></script>

    <script type="text/javascript" src="index.js"></script>

    <script type="text/javascript" src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDYwwQ-wTWZ6jI75jcsRz4if7dv30i5evo&libraries=places&callback=activatePlacesSearch"></script>

</body>
```

</html>

OUTPUT OF THE HTML CODE

Visit Planner

Powered by OpenWeatherMap and Foursquare API

Plan your visit by finding out the current weather and the best things to do in a new city!

new delhi Search

Current Weather for New Delhi

Mist

Description:

mist

Temperature:

55.56 °F / 13.09 °C

Min. Temperature:

55.56 °F / 13.09 °C

Max. Temperature:

55.56 °F / 13.09 °C

Humidity:

88 %

CSS CODE:-

```
body {
    font-family: 'Roboto', sans-serif;
    text-align: center;
    background: url("./images/map.jpg");
    background-size: cover;
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-position: center;
    margin: 0px;
    padding: 0px;
}

.hide {
    display: none;
}

a {
    text-decoration: none;
    color: steelblue;
}
```

```
/**START DISPLAY**/


header p {
    font-size: 15px;
}


header p.api-info {
    color: steelblue;
    font-size: 12px;
}


header {
    background-color: rgba(255, 255, 255, 0.7);
    padding: 10px;
    border-radius: 10px;
    width: 80%
}


.start-display {
```

```
    height: 100vh;
    background: url("./images/roads.jpg");
    background-size: cover;
    background-repeat: no-repeat;
    background-attachment: fixed;
    box-shadow: 0 0 10px black;
    padding-top: 200px;
    margin-bottom: 45px;
}

h1.logo {
    font-family: 'Megrim', sans-serif;
    font-size: 60px;
    margin-bottom: 15px;
}

form {
    padding: 30px;
}

form input {
```

```
    height: 50px;
    width: 250px;
    padding: 10px;
    border-radius: 5px;
    border: 0px;
}

form button {
    height: 50px;
    width: 100px;
    background: #eee;
    border: 0px;
    border-radius: 5px;
    margin-left: 10px;
    box-shadow: 0 0 5px black;
    font-size: 20px;
}

form a {
    color: black;
    text-decoration: none;
```

```
}



/** WEATHER DISPLAY **/


.weather-results {
    padding: 10px;
    margin: 30px 0;
    text-align: center;
}


.weather-results h1 {
    font-size: 40px;
    color: black;
    font-family: 'Megrim', sans-serif;
}


.weather-image {
    width: 50%;
}
```

```
.weather-results {
    margin: 10px;
    padding: 10px;
    width: 100%;
    background: rgba(230, 223, 223, 0.7);
    border-radius: 5px;
}



/** NAVIGATION **/


nav {
    margin: 20px 0;
}


button.category-button {
    margin: 5px;
    padding: 10px;
    background: #fff;
    border: 0px;
    border-radius: 5px;
```

```
    box-shadow: 0 0 10px black;
    font-family: 'Montserrat', sans-serif;
    font-weight: 600;
}

button.selected {
    background: #ccc;
}

/** RESULT DISPLAY **/

div .result-image {
    width: 100%;
    float: left;
    height: 15em;
    margin-top: 1rem;
    margin-bottom: 1rem;
    background-size: cover;
    background-position: center center;
}
```

```
.col-3,
.result {
    margin: 10px;
    padding: 10px;
    width: 100%;
    background: rgba(230, 223, 223, 0.7);
    border-radius: 5px;
}

.result-description {
    padding: 10px;
    text-align: justify;
    overflow: hidden;
    font-size: 0.9em;
}

.result-description h2 {
    font-size: 1.3em;
    font-family: 'Raleway', sans-serif;
    font-weight: 700;
```

```
    ;
}

#foursquare-results span {
    display: inline-block;
    height: 32px;
    padding: 0;
    vertical-align: top;
    background-color: #ccc;
    border-radius: 5px;
}

#foursquare-results span.icon-text {
    padding: 8px 4px 0 4px;
}



/** FOOTER **/

footer {
    background-color: rgba(255, 255, 255, 0.7);
```

```
    height: 125px;
    padding: 20px;
    margin-top: 20px;
    box-shadow: 0 0 10px black;
}



/** RESPONSIVE DESIGN **/

* {
    box-sizing: border-box;
}

.row {
    max-width: 1000px;
    padding-left: 20px;
    padding-right: 20px;
    margin: 0 auto;
}

@media screen and (min-width: 640px) {
```

```
    .col-3 {
        width: 30%;
        display: inline-block;
        vertical-align: text-top;
    }
}
```

JAVA SCRIPT CODE:-

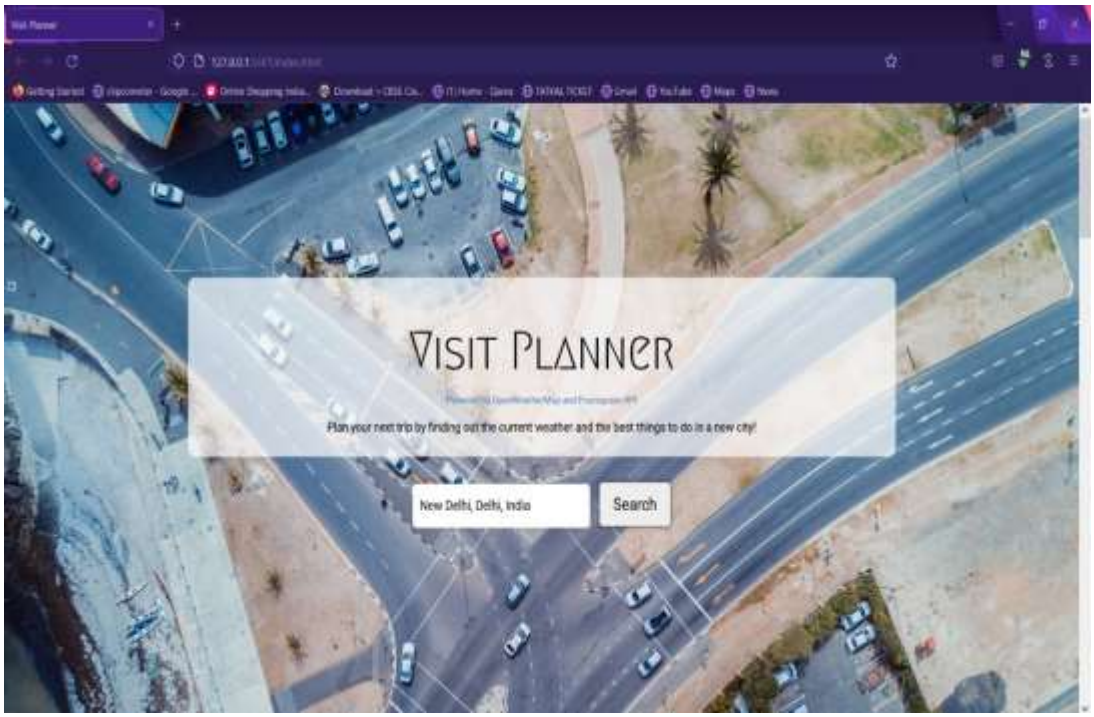
```
const WEATHER_SEARCH_URL =
"https://api.openweathermap.org/data/2.5/weather?id=524901&APPID=d86b9843fdc4941e520f9859
22146256"
const FOURSQUARE_SEARCH_URL =
"https://api.foursquare.com/v2/venues/explore?&client_id=FPRD2S2RFIB4QLBNBBHNAMLYOUF
2AZSZ21ZK53QYASWCRJ1Z&client_secret=FEFA44EG0YDZ0XKA1UWX5ZWLZJLE30E2GY
RLGB44PKE5KZ0E&v=20170915"

//press on submit button and scroll to results
function scrollPageTo(myTarget, topPadding) {
    if (topPadding == undefined) {
        topPadding = 0;
    }
    var moveTo = $(myTarget).offset().top - topPadding;
    $('html, body').stop().animate({
        scrollTop: moveTo
    }, 200);
}



//retrieve data from OpenWeather API
function getWeatherData() {
    let city = $('.search-query').val();
    $.ajax(WEATHER_SEARCH_URL, {
        data: {
            units: 'imperial',
            q: city
        },
        dataType: 'jsonp',
        type: 'GET',
        success: function (data) {
            let widget = displayWeather(data);
            $('#weather-display').html(widget);
            scrollPageTo('#weather-display', 15);
```

```
    }
  });
}

function displayWeather(data) {
  return `
  <div class="weather-results">
    <h1><strong>Current Weather for ${data.name}</strong></h1>
    <img src="https://openweathermap.org/img/w/${data.weather[0].icon}.png">
    <p style="font-size:30px; margin-top:10px;">${data.weather[0].main}</p>
    <p style="color:steelblue;" ">Description:</p><p"> ${data.weather[0].description}</p>
    <p style="color:steelblue;">Temperature:</p><p> ${data.main.temp} &#8457; /
${(((data.main.temp)-32)*(5/9)).toFixed(2)} &#8451;</p>
    <p style="color:steelblue;">Min. Temperature:</p><p> ${data.main.temp_min} &#8457; /
${(((data.main.temp_min)-32)*(5/9)).toFixed(2)} &#8451</p>
    <p style="color:steelblue;">Max. Temperature:</p><p> ${data.main.temp_max} &#8457; /
${(((data.main.temp_max)-32)*(5/9)).toFixed(2)} &#8451</p>
    <p style="color:steelblue;">Humidity:</p><p> ${data.main.humidity} &#37;</p>
  </div>
`;
}

//retrieve data from FourSquare API
function getFourSquareData() {
  $('.category-button').click(function () {
    let city = $('.search-query').val();
    let category = $(this).text();
    $.ajax(FOURSQUARE_SEARCH_URL, {
      data: {
        near: city,
        venuePhotos: 1,
        limit: 9,
        query: 'recommended',
        section: category,
      },
      dataType: 'json',
      type: 'GET',
```

```
        success: function (data) {
            try {
                let results = data.response.groups[0].items.map(function (item, index) {
                    return displayResults(item);
                });
                $('#foursquare-results').html(results);
                scrollPageTo('#foursquare-results', 15);
            } catch (e) {
                $('#foursquare-results').html("<div class='result'><p>Sorry! No Results
Found.</p></div>");
            }
        },
        error: function () {
            $('#foursquare-results').html("<div class='result'><p>Sorry! No Results
Found.</p></div>");
        }
    });
  });
}

function displayResults(result) {
  return `
    <div class="result col-3">
      <div class="result-image" style="background-image:
url(https://igx.4sqi.net/img/general/width960${result.venue.photos.groups[0].items[0].suffix})" ;>
      </div>
      <div class="result-description">
        <h2 class="result-name"><a href="${result.venue.url}"
target="_blank">${result.venue.name}</a></h2>
        <span class="icon">
          <img
src="${result.venue.categories[0].icon.prefix}bg_32${result.venue.categories[0].icon.suffix}"
alt="category-icon">
        </span>
        <span class="icon-text">
          ${result.venue.categories[0].name}
        </span>
```

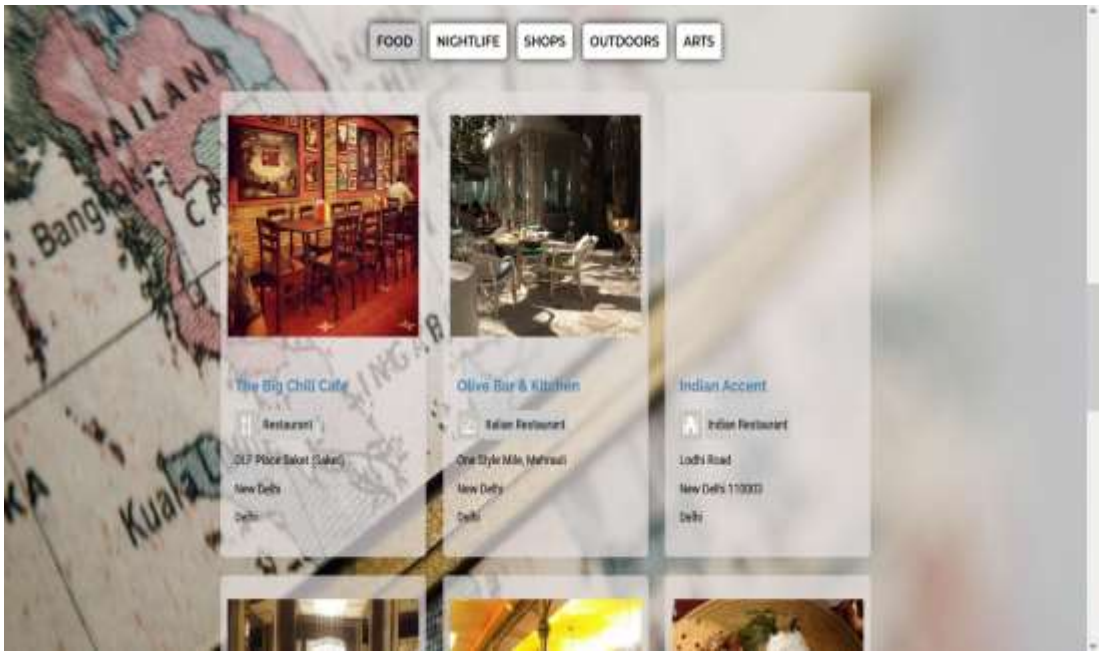
```
            <p class="result-address">${result.venue.location.formattedAddress[0]}</p>
            <p class="result-address">${result.venue.location.formattedAddress[1]}</p>
            <p class="result-address">${result.venue.location.formattedAddress[2]}</p>
          </div>
        </div>
`;
}


function enterLocation() {
    $('.category-button').click(function () {
        $('button').removeClass("selected");
        $(this).addClass("selected");
    });

    $('.search-form').submit(function (event) {
        event.preventDefault();
        $('.navigation').removeClass("hide");
        $('#weather-display').html("");
        $('#foursquare-results').html("");
        getWeatherData();
        getFourSquareData();
        $('button').removeClass("selected");
    });
}

//autocomplete location name in form
function activatePlacesSearch() {
    let options = {
        types: ['(regions)']
    };
    let input = document.getElementById('search-term');
    let autocomplete = new google.maps.places.Autocomplete(input, options);
}

$(enterLocation)
```

OUTPUT AFTER APPLYING JAVASCIPT AND CSS:-



HOME SCREEN OF VISIT PLANNER

WEATHER FORECAST SCREEN



RECOMMENDED PLACES SCREEN

FOOTER

CONCLUSION

Most people without using the latest technology waste a lot of time just planning their trips. So, an application like Optimized Visit Planner really helps tourists to utilize their precious time to the fullest and also enjoy their trip at the same time.
This kind of planner can help in investing and conserving their time in better way and can help the visitors as similar as a tourist guide and also can forecast weather so that one can travel to their destination without any difficulty.
sThat’s how one can plan their visit in an easy and convenient way.

Reference

Software Engineering	: IGNOU Book
HTML	: https://www.w3schools.com/html/
Cascading Style Sheet	: https://www.w3schools.com/css/
JavaScript	: https://www.javatpoint.com/javascript-Tutorial
Personal Home Page	: https://www.tutorialspoint.com/php/index.htm