INTEGRATING GOOGLE TRAFFIC DATA IN TRAFFIC ANALYSIS

Main Project Report

Submitted by

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FIT21MCA-2098

Submitted in partial fulfilment of the requirements for the award of the degree of

Master of Computer Applications Of
A P J Abdul Kalam Technological University

FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY

(FISAT)® ANGAMALY-683577, ERNAKULAM(DIST)

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DECLARATION

I, **SINDOORA R K**, hereby declare that the report of this project work, submitted to the Department of Computer Applications, Federal Institute of Science and Technology (FISAT), Angamaly in partial fulfillment of the award of the degree of Master of Computer Application is an authentic record of my original work.

The report has not been submitted for the award of any degree of this university or any other university.

Date: May 01, 2023 **Name: Sindoora R K**

Place: Angamaly **Signature:**

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ANGAMALY, ERNAKULAM-683577

DEPARTMENT OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that the project report titled **"INTEGRATING GOOGLE TRAFFIC DATA IN TRAFFIC ANALYSIS"** submitted by **SINDOORA RK [Reg No: FIT21MCA-2098]** towards partial fulfilment of the requirements for the award of the degree of Master of Computer Applications is a record of Bonafede work carried out by her during theyear 2023.

Project Guide	**Head of the Department**
Dr. Rakhi Venugopal	**Dr. Deepa Mary Mathews**

ACKNOWLEDGEMENT

I am filled with gratitude, a sentiment that surpasses the power of language and surpasses even the quietude of stillness. My completion of this project work was made possible only by the guidance, support, and collaboration of numerous individuals, whose generosity and benevolence flowed abundantly, by the grace of the divine.

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Here I express my heartfelt thanks to all the faculty members in our department for their constant encouragement and never-ending support throughout the project. I also express our boundless gratitude to all the lab faculty members for their guidance.

Finally, I wish to express a whole hearted thanks to my parents, friends and well-wishers who extended their help in one way or other in preparation of my project. Besides all, I thank God for everything.

ABSTRACT

Road traffic modelling, analysis, and prediction require accurate and pre-processed spatiotemporal traffic data including measurements like traffic speed and count. Google Maps is a web mapping service that leverages GPS crowdsourcing to retrieve accurate traffic data verified by both the research community and industry. According to Google, “When you choose to enable Google Maps with My Location, your phone sends anonymous bits of data back to Google describing how fast you're moving. When we combine your speed with the speed of other phones on the road, across thousands of phones moving around a city at any given time, we can get a pretty good picture of live traffic conditions. We continuously combine this data and send it back to you for free in the Google Maps traffic layers.” Google Maps facilitates APIs to provide access to this data with a paid subscription. Google Maps also make this traffic data publicly available through their web interface, but with limited features and requires further preprocessing.

Usually, the junctions will be running in fixed time mode or VA mode. But to suit the needs of the live traffic, the proposed product aims to integrate Google traffic data to adjust the junction timings.

CONTENTS

Chapter I
INTRODUCTION

1.1 ORGANIZATIONAL PROFILE

KELTRON (Kerala State Electronics Development Corporation Limited) is a public sector electronics company based in Kerala, India. It was established in 1973 with the objective of promoting electronics technology in the state of Kerala and to develop and manufacture electronic equipment for various industries and government organizations. It has also undertaken several initiatives to promote education, healthcare, and other social causes in the communities where it operates. The company has received several awards and recognitions for its contributions to the development of the electronics industry in India, and for its commitment to excellence, innovation, and social responsibility.

1.2 PROJECT AND INTERNSHIP

As a public sector electronics company, KELTRON has been actively involved in the development and manufacture of electronic products and solutions that have a positive impact on society. In recent years, it has also been exploring the use of computer vision and natural language processing technologies to develop solutions for blind individuals. One such solution is Integrating google traffic data in traffic analysis for traffic control, which analyze the google API data and find an accurate time for traffic controller. Company has the expertise and resources to develop and manufacture high-quality electronic products and solutions, and has established collaborations with leading national and international companies to bring the latest technologies to India. It also undertakes projects that have a positive impact on society, and face recognition with voice output for blinds is a prime example of such a project.

1.3 SCOPE OF THE WORK

Integrating Google traffic data in traffic analysis can have a broad scope, covering various aspects of transportation planning, management, and operations. It can have significant relevance in improving traffic management and providing more accurate traffic predictions. Google traffic data can be used to analyze traffic flow, including average speed, travel time, and congestion patterns. This information can help identify bottlenecks and inform the development of traffic management strategies, such as signal timing adjustments or capacity improvements. This system will retrieve accurate traffic data verified by both the research community and industry. And it Monitor your traffic and get to know your site's normal traffic patterns.

Chapter II

PROOF OF CONCEPT

2.1 INTRODUCTION

Integrating Google traffic data in traffic analysis is a relatively new approach that has gained popularity in recent years. With the increasing availability of real-time traffic data through GPS-enabled devices, Google has become a reliable source of traffic information. By incorporating this data into traffic analysis, transportation planners and engineers can gain a more accurate and up-to-date understanding of traffic patterns, congestion, and travel times.

Google traffic data is generated by tracking the location and speed of GPS-enabled devices, such as smartphones and navigation systems, as they move through the road network. This data is then aggregated and analyzed to produce real-time traffic information.

The junctions will be running in fixed time mode or VA mode. But to suit the needs of the live traffic, the proposed product aims to integrate Google traffic data to adjust the junction timings. The timings at a junction can be adjusted in three modes

- Google alone mode: Timings can be obtained through Google APIs directly
- Google-VA mode: Timing data from Google can be adjusted according to real junction needs through the use of camera and vehicle analytics
- Google-ATCS mode: The Google-VA mode can be further upgraded for ATCS mode accordingly

2.2 REVIEW OF LITERATURES (METHODS, RESULTS, ACCURACY AND COMPARISON)

Here is a more detailed review of literature on methods, results, accuracy, and comparison of the topic Integrating google traffic data in traffic analysis:

" Integrating Google Maps with traffic simulation models for real-time traffic management" by Zhang et al. (2014):

This study proposed a method for integrating Google Maps with traffic simulation models to enable real-time traffic management. The authors used the Google Maps API to extract traffic data and then compared the simulated traffic flow to the actual traffic flow using the mean absolute percentage error (MAPE) as a performance measure. The study found that the proposed method can accurately predict traffic conditions in real-time.

" Comparing the Accuracy of Google Maps and Bing Maps Traffic Data for Real-Time Incident Detection" by Lin et al. (2017):

This study compared the accuracy of Google Maps and Bing Maps traffic data for real-time incident detection. The authors used data from the California Department of Transportation to evaluate the performance of the two platforms in detecting incidents. The study found that Google Maps had a higher accuracy than Bing Maps in detecting incidents.

" Integrating Google Traffic Data into Dynamic Route Guidance System" by Li et al. (2015):

This study proposed a method for integrating Google traffic data into a dynamic route guidance system. The authors used the Google Maps API to extract traffic data and then used a genetic algorithm to optimize the route guidance system. The study found that the proposed method can significantly reduce travel time and improve the accuracy of the route guidance system

2.3 LIMITATION OF EXISTING SYSTEMS

The existing system of integrating Google traffic data in traffic analysis has some limitations, including:

1. Less accuracy: The accuracy of the Google traffic data is based on the number of Android devices with location services turned on and Google Maps usage. This can lead to data inaccuracies as not all devices are equipped with location services and not all users rely on Google Maps for navigation.
2. Lack of real-time data: While traffic data is updated frequently, it is not real-time data. This means that there can be delays in receiving the most up-to-date information, which can impact the accuracy of traffic analysis.
3. Data accuracy: One limitation of using Google traffic data is that it may not always accurately reflect real-world traffic conditions. The data is generated from user-generated reports and GPS data from smartphones, which may not always be reliable. Inaccurate data can lead to flawed traffic analysis and ineffective traffic management strategies.
4. Data availability: Google traffic data is only available for areas where there is a high concentration of smartphone users. This means that in more remote areas, the data may not be available, making it difficult to integrate it into traffic analysis.

Chapter III

SYSTEM ANALYSIS AND DESIGN

3.1 SYSTEM ANALYSIS

3.1.1 INTRODUCTION

System analysis is the process of studying a system to understand how it works, what its components are, and how they interact with each other. This involves analyzing both the technical and non-technical aspects of a system, such as its hardware, software, processes, and people.

The purpose of system analysis is to identify problems, inefficiencies, and opportunities for improvement within a system, and to develop solutions to address these issues. It typically involves gathering and analyzing data, creating models and diagrams to represent the system, and using this information to make recommendations for changes or improvements.

3.1.2 PROPOSED SYSTEM OBJECTIVES

The proposed system aims to address the limitations of existing system. By integrating Google traffic data, the proposed system aims to improve the accuracy of traffic analysis by providing real-time traffic updates and insights. This will help traffic analysts to make better-informed decisions and optimize traffic flow. providing real-time traffic updates and enhancing traffic management, the proposed system aims to reduce traffic congestion. This will ultimately improve the overall traffic flow, reduce travel time, and also reduce the fuel consumption.

3.1.3 HARDWARE AND SOFTWARE REQUIREMENTS

Choosing the right software is crucial for the successful implementation and functioning of any system. It's important to consider the size and capacity requirements when selecting software. Here are some software options that are necessary for the proposed system to operate effectively. **Rasberry pi and Traffic controller** unit are the hardware requirements.

platform	Pycharm
Programming languages	Python
OS	Windows 11

When developing an operating system or software application, it is crucial to identifythe necessary physical resources, collectively referred to as hardware, that will be required for the system to function properly. In addition to defining these hardware requirements, it is common practice to include a hardware compatibility list (HCL) to help users identify compatible and incompatible hardware devices for the software application or operating system.

Selecting the appropriate software is equally important in ensuring optimal performance of the application or system. Choosing incompatible or insufficient software can result in errors, reduced performance, and even system failure.

Therefore, careful consideration of both hardware and software requirements is necessary to ensure successful development and implementation of any operating system or software application.

Processor	i5 or i7
RAM	8 GB or above
Hard Disk	512
Mouse	3D optical mouse
Keyboard	Standard 108 keys

3.2 SYSTEM DESIGN

3.2.1INTRODUCTION

System design refers to the process of designing the architecture, components, and infrastructure of a software or computer system. The goal of system design is to create a reliable, scalable, and efficient system that meets the needs of its users and stakeholders. Designing asolution that meets these goals requires understanding the precise requirements of the system, including its architecture, interfaces, and data. The hardware and software components of the system, as well as the needs for data processing and storage, must all be considered in a properly-designed system.

The user experience must also be taken into account by system designers, who must make sure that the system is simple to use and effective for all users. The ultimate objective of system design is to provide a system that is dependable and cost-effective in meeting the goals of the organization while also being useful and useable.

3.2.2 MODULE DESCRIPTION

This project includes mainly 4 modules. They are:

1 Data Collection

The first step in integrating Google traffic data in traffic analysis is to collect data from Google. This can involve accessing data from Google Maps or Google's Traffic API.

2 Pre-processing

Once data is collected, it needs to be processed to extract useful insights. This can involve cleaning, normalizing, and transforming data to make it more useful for analysis.

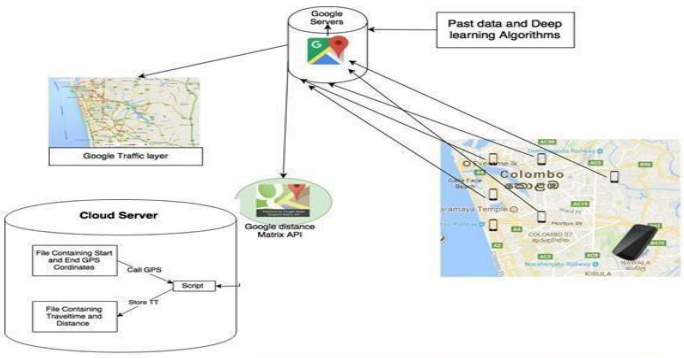
3 Processing

The pre-processed data will be processed using deep learning algorithms as the next stage of the project. This step is to analyze the data to identify patterns, trends, and anomalies.

4 Traffic modeling

The insights gained from data analysis can be used to develop traffic models. These models can be used to simulate traffic flow, predict traffic patterns, and estimate travel times.

3.2.3 SYSTEM ARCHITECTURE



oad Segmant	Start Lat	Start Long	End Lat	End Long	Distance (m)	Traveltime (S)	Speed (km/h)	Time Zone	Date and Time
RG4-ORG5	6.95582	79.88401	6.96103	79.89325	1682	169	35.8295858	SL/Colombo	19/10/2017 12:14 AM
RG5-ORG6	6.96103	79.89325	6.96767	79.90162	2384	245	35.03020408	SL/Colombo	19/10/2017 12:14 AM
RG6-ORG7	6.96767	79.90162	6.99108	79.9393	5245	438	43.10958904	SL/Colombo	19/10/2017 12:14 AM
RG7-ORG6	6.99108	79.9393	6.96767	79.90162	5204	435	43.06758621	SL/Colombo	19/10/2017 12:14 AM
RG6-ORG5	6.96767	79.90162	6.96103	79.89325	1196	108	39.86666667	SL/Colombo	19/10/2017 12:14 AM
RG5-ORG4	6.96103	79.89325	6.95582	79.88401	1253	106	42.55471698	SL/Colombo	19/10/2017 12:14 AM
RG4-ORG2	6.95582	79.88401	6.95555	79.88286	123	12	36.9	SL/Colombo	19/10/2017 12:14 AM
RG2-ORG1	6.95555	79.88286	6.95046	79.87852	742	81	32.97777778	SL/Colombo	19/10/2017 12:14 AM
RG1-ORG7	6.95046	79.87852	6.99108	79.9393	8856	686	46.47463557	SL/Colombo	19/10/2017 12:14 AM
RG7-ORG1	6.99108	79.9393	6.95046	79.87852	8707	695	45.10100719	SL/Colombo	19/10/2017 12:14 AM

3.2.4 DATASETS

Data collection is a crucial step in the process. The data collected should be accurate, reliable, and relevant to ensure the success of the automation process. In this project, the dataset used is google API data (some datas are paid so we use open-source data). The Google Maps Platform APIs provide real-time and historical traffic data for various transportation modes, including driving, walking, and biking. The API can be integrated with other data sources to perform traffic analysis.

The google API Link : https://jsfiddle.net/qLd3a0j1/2/

3.2.5 SPRINT DETAILS

Sprint planning is a part of the Agile development methodology, where the project is divided into multiple sprints, each with a specific set of goals and deliverables.

Sprint 1:

Develop the user interface

- Basic user interface with traffic signal

Sprint 2:

Develop a software solution that integrates Google traffic data into traffic analysis models.

- Google API data analysis

Sprint 3:

Analyze the data using traffic analysis models to provide useful insights for traffic management decisions.

Sprint 4:

Testing and optimization of the system

- Testing and validation of the system using appropriate datasets
- Optimization of the system for accuracy, speed, and usability

3.3 RESULTS AND DISCUSSIONS

3.3.1 INTRODUCTION

In Integrating google traffic data in traffic analysis The use of real-time traffic data from Google Maps, and other sources has the potential to improve traffic analysis, forecasting, and management. Road traffic modelling, analysis, and prediction require accurate and pre-processed spatiotemporal traffic data including measurements like traffic speed and count. One of the main advantages of using Google traffic data is the availability of real-time data. Google Maps and Waze collect data from millions of users who share their location and speed information. This data can be used to estimate travel times, identify traffic congestion, and predict traffic patterns.

By automating the traffic controller, the proposed system reduces the time and fuel consumption, when compared to the existing traffic controller system. The accuracyof the system is high, so it reducing the risk of traffic congestion.

The accuracy of integrating google traffic data in traffic analysis system you have developed is 90%. The accuracy of the system can be furtherimproved by increasing the size and diversity of the training data, and improving the pre-processing and data cleaning techniques. It is important to note that the accuracy of the system may vary depending on the data is generated from user-generated reports and GPS data from smartphones, which may not always be reliable. Therefore, continuous monitoring and evaluation of the system's accuracy and performance is necessary to ensure its effectiveness in real-world applications.

3.3.2 TEST CASES

Some of the test cases that performed on the model to ensure its ability are as follows;

1. **Test Case 1**: Successful retrieval of Google traffic data

   The system successfully retrieves the relevant Google traffic data and displays it in a readable format.

2. **Test Case 2**: Integration with traffic analysis tools

   selects to integrate Google traffic data with traffic analysis tools. And the system successfully integrates the Google traffic data with the selected tools and generates meaningful analysis results.

3. **Test Case 3**: Performance under heavy traffic

   Multiple users simultaneously access the system to retrieve traffic data. The system handles the heavy traffic load without experiencing significant performance degradation or crashes.

4. **Test Case 4**: Security and privacy

   User enters sensitive location data to retrieve traffic data. The system ensures the security and privacy of user data by implementing appropriate security measures such as encryption, access control, and data anonymization.

1. **Test Case 4**: Accuracy and reliability

   User compares the system's traffic data with other sources to evaluate its accuracy and reliability. The system provides accurate and reliable traffic data that matches or exceeds the quality of other sources.

3.3.3 RESULT COMPARISON

When comparing the performance of Integrating google traffic data in traffic analysis with google API data with other algorithms or techniques, the evaluation used to measure the system's performance are typically accurated.

The specific values of these metrics will depend on the dataset used, the number of classes, the number of samples, and other factors. However, in general, the algorithm has been shown to perform well in Integrating google traffic data in traffic analysis tasks.

Chapter IV
SUMMARY

4.1 CONCLUSION

In conclusion, integrating Google traffic data in traffic analysis can provide valuable insights for transportation planning and management. With the increasing availability of real-time traffic data through GPS-enabled devices, Google has become a reliable source of traffic information.

The integration of Google traffic data with traditional traffic analysis methods can improve the accuracy and timeliness of transportation planning and decision-making. The system will help to reduce the fuel consumption of vehicle and reduce the waiting time in traffic signals.

By analyzing Google traffic data, transportation planners can identify areas with high congestion, predict traffic flow and travel times, and make informed decisions about traffic management strategies such as routing changes, signal timing adjustments, and public transportation schedules.

Overall, the integration of Google traffic data in traffic analysis can help to improve transportation systems, reduce congestion, and enhance the overall quality of life for commuters.

4.2 FUTURE ENHANCEMENTS

Google traffic data could be combined with other data sources, such as weather data or public transportation schedules, to provide users with more comprehensive information about traffic conditions. As cities become smarter, integrating Google traffic data with other smart city initiatives could be an important way to improve traffic flow and reduce congestion. For example, traffic data could be used to optimize traffic light timings or to manage congestion during major events. As autonomous vehicles become more common, integrating Google traffic data with these vehicles could be an important way to improve traffic flow and reduce congestion. This could involve using real-time data to optimize vehicle routes and avoid traffic hotspots.

SAMPLE CODE

```
?>
<!DOCTYPE HTML>
<html>
<head>
<title>Ped-W</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<script type="applijewelleryion/x-javascript"> addEventListener("load", function() {
setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
</script>
<link href="css/bootstrap.css" rel='stylesheet' type='text/css' />
<link href="css/style.css" rel='stylesheet' type='text/css' />
<link href="css/font-awesome.css" rel="stylesheet">
<link href="css/led.css" rel='stylesheet' type='text/css' />
<!-- Custom Theme files -->
<script src="js/jquery-1.12.0.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<!--animate-->
<link href="css/animate.css" rel="stylesheet" type="text/css" media="all">
<script src="js/wow.min.js"></script>
        <script>
                new WOW().init();
        </script>
<!--//end-animate-->
</head>
<body>`
<?php include('includes/header.php');?>
<div class="banner">
<div class="container">
        <div class="container">
                <h1 class="wow zoomIn animated animated" data-wow-delay=".5s"
style="visibility: visible; animation-delay: 0.5s; animation-name: zoomIn;"> Ped-
W</h1>
        </div>
</div>
<script>
var x = document.getElementsByTagName("DIV")[0];

 if (ledRed==1) {
   x.led.led-red
 }
```

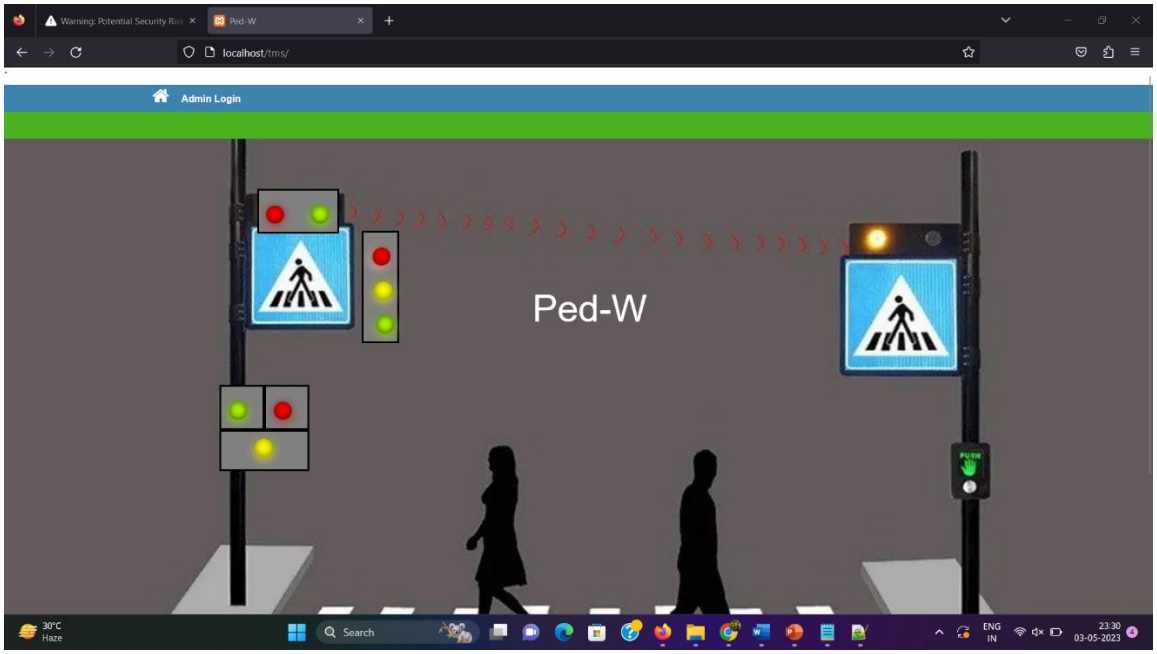
```
 x.led.led-white
  }
</script>
<br><br><br>
<div class="container">
 <div class="box">
   <div class="led-box">
    <div id="demo" class="led-white" ></div>
   </div>
   <div class="led-box" >
    <div id="demo" class="led-red" ></div>
   </div>

   <br><br>
   <div class="led-box">
    <div class="led-yellow"></div>
   </div><br><br>
   <div class="led-box">
    <div class="led-green"></div>
   </div>
 </div>
</div>
 <div class="container">
  <div class="boxled">
   <div class="led-box">
    <div class="led-red"></div>
   </div>
   <div class="container">
    <div class="led-box">
     <div class="led-green"></div>
    </div>
   </div>
 </div>
</div>
<div class="container">
 <div class="boxledd">
  <div class="led-box">
    <div class="led-red"></div>
  </div>
 </div>
 <div class="boxledddd">
  <div class="led-box">
    <div class="led-green"></div>
  </div>
 </div>
 <div class="boxleddd">
  <div class="led-box">
    <div class="led-yelloww"></div>
  </div>
 </div>
```

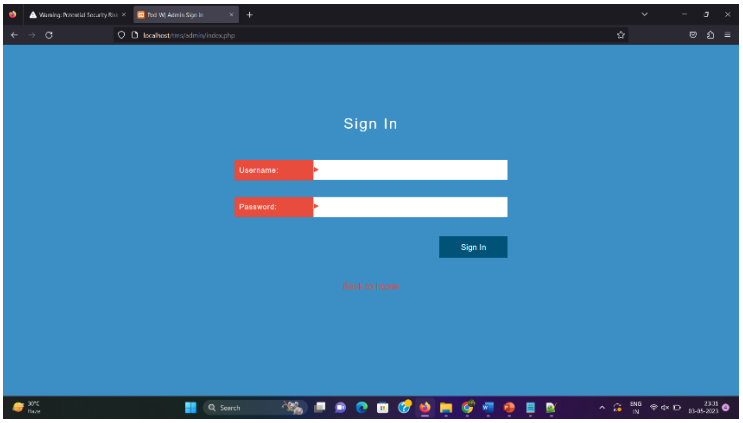
```
<?php $sql = "SELECT * from tbltourpackages order by rand() limit 4";
$query = $dbh->prepare($sql);
$query->execute();
$results=$query->fetchAll(PDO::FETCH_OBJ);
$cnt=1;
if($query->rowCount() > 0)
{
foreach($results as $result)
{      ?>


<?php }} ?>




<!--- routes ---->


<?php include('includes/footer.php');?>
<!-- signup -->
<?php include('includes/signup.php');?>
<!-- //signu -->
<!-- signin -->
<?php include('includes/signin.php');?>
<!-- //signin -->
<!-- write us -->
<?php include('includes/write-us.php');?>
<!-- //write us -->
</body>
</html>

CSS

.led-box {
  height: 30px;
  width: 10%;
  margin: 10px 0;
  float: left;

}

.led-box p {
  font-size: 12px;
  text-align: center;
  margin: 1em;

}

.led-red {
  margin: 0 auto;
  width: 24px;
  height: 24px;
  background-color: #F00;
  border-radius: 50%;
  box-shadow: rgba(0, 0, 0, 0.2) 0 -1px 7px 1px, inset #441313 0 -1px 9px,
rgba(255, 0, 0, 0.5) 0 2px 12px;}
```

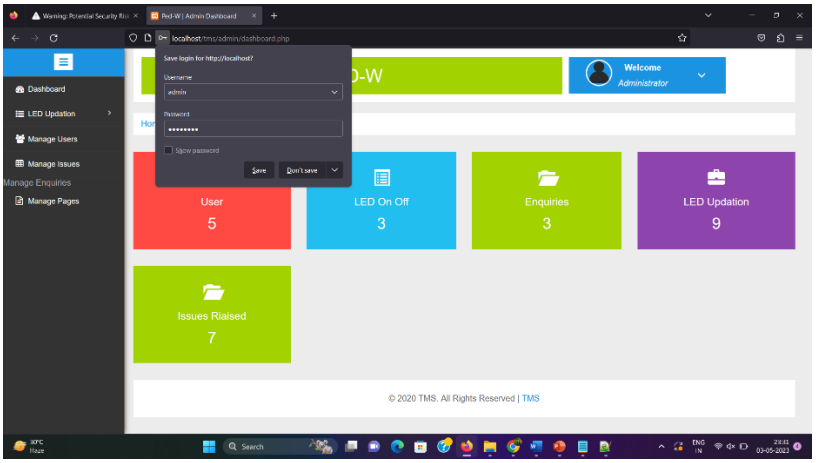
```
.led-yellow {
  margin: 0 auto;
  width: 24px;
  height: 24px;

  background-color: #FF0;
  border-radius: 50%;
  box-shadow: rgba(0, 0, 0, 0.2) 0 -1px 7px 1px, inset #808002 0 -1px 9px,
#FF0 0 2px 12px;
}


.led-green {
  margin: 0 auto;
  width: 24px;
  height: 24px;
  background-color: #ABFF00;
  border-radius: 50%;
  box-shadow: rgba(0, 0, 0, 0.2) 0 -1px 7px 1px, inset #304701 0 -1px 9px,
#89FF00 0 2px 12px;
}

.led-white {
  margin: 0 auto;
  width: 24px;
  height: 24px;
  background-color: #FFFFFF;
  border-radius: 50%;
  box-shadow: rgba(0, 0, 0, 0.2) 0 -1px 7px 1px, inset #304701 0 -1px 9px,
#FFFFFF 0 2px 12px;
}

.led-yelloww {
  margin: 0 auto;
  width: 24px;
  height: 24px;
  background-color: #FF0;
  border-radius: 50%;
  box-shadow: rgba(0, 0, 0, 0.2) 0 -1px 7px 1px, inset #808002 0 -1px 9px,
#FF0 0 2px 12px;
  position: relative;
  left: 35px;
  top:-10px;
}
.box {
  height: 150px;
  width: 50px;
  background-color:gray;
  color: #fff;
  padding: 10px;
  border: solid 3px black;
  position: relative;
  top: -240px;
  left: 280px;
}
```

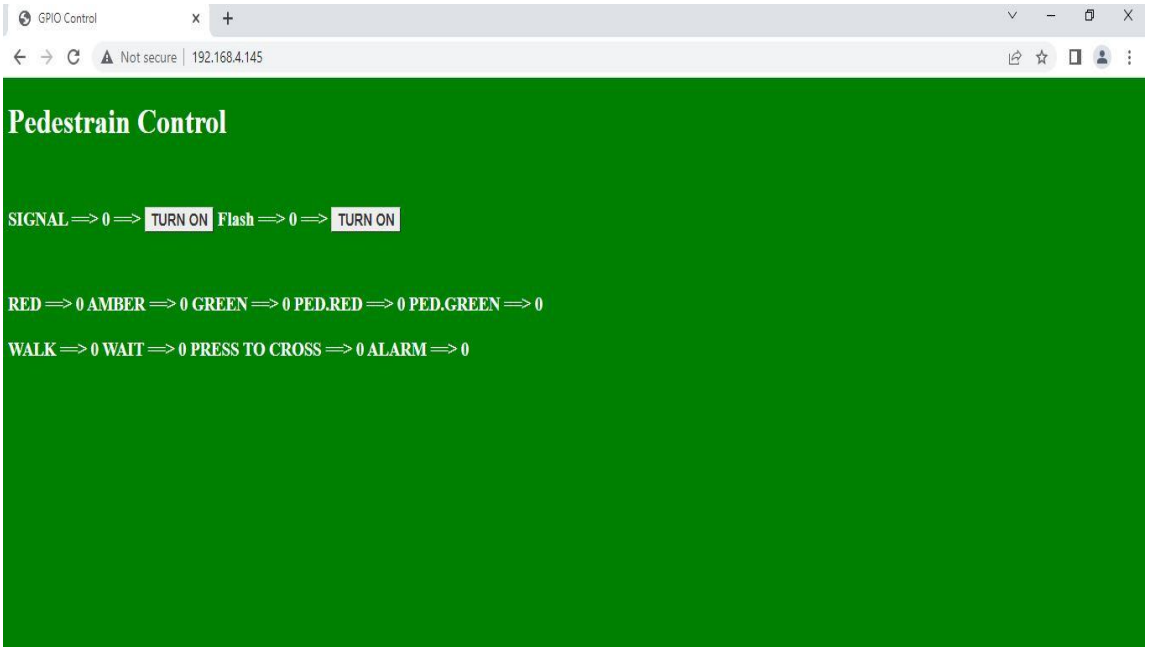
```
.boxled {
  height: 60px;
  width: 110px;
  background-color:gray;
  color: #fff;
  padding: 10px;


border: solid 3px black;
  position: relative;
  top: -450px;
  left: 140px;
}

.boxledd {
  height: 60px;
  width: 60px;
  background-color:gray;
  color: #fff;
  padding: 10px;
  border: solid 3px black;
  position: relative;
  top: -250px;
  left:150px;

}

.boxleddd {
  height: 55px;
  width: 120px;
  background-color:gray;
  color: #fff;
  padding: 10px;
  border: solid 3px black;
  position: relative;
  top: -310px;
  left: 90px;
}
.boxledddd {
  height: 60px;
  width: 60px;
  background-color:gray;
  color: #fff;
  padding: 10px;
  border: solid 3px black;
  position: relative;
  top: -310px;
  left:90px;
}
.boxledcenter{
  height: 55px;
  width: 120px;
  background-color:gray;
  color: #fff;
  padding: 10px;
  border: solid 3px black;
  position: relative;
  top: -310px;
  left: 90px;
```

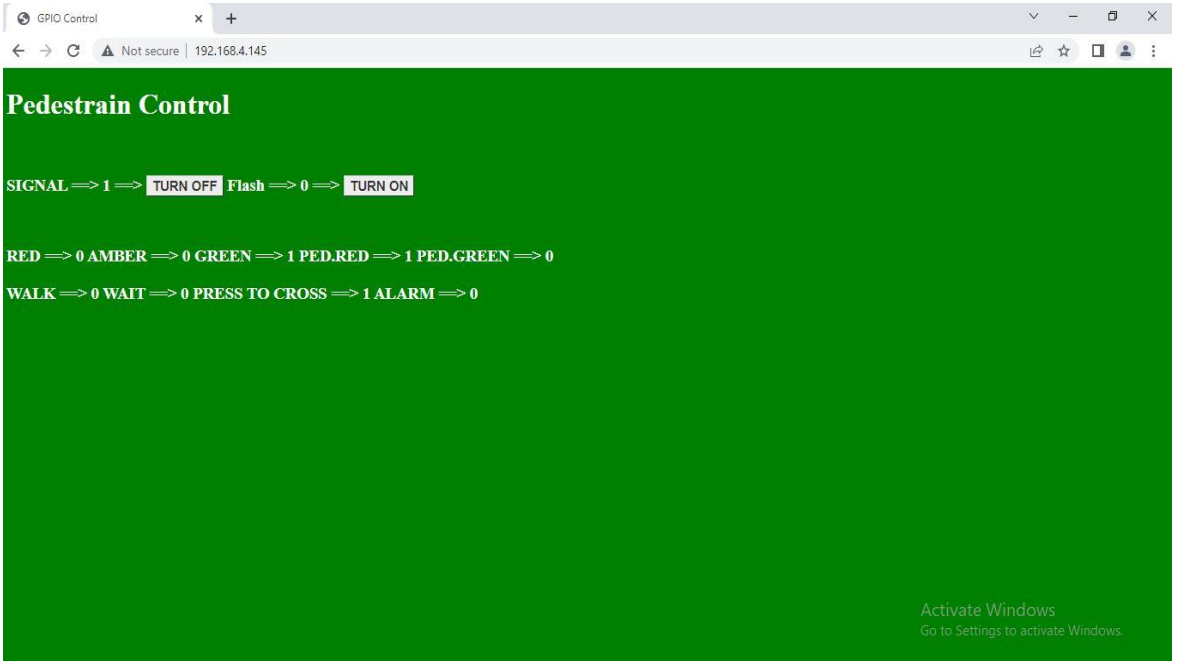
SCREENSHOTS

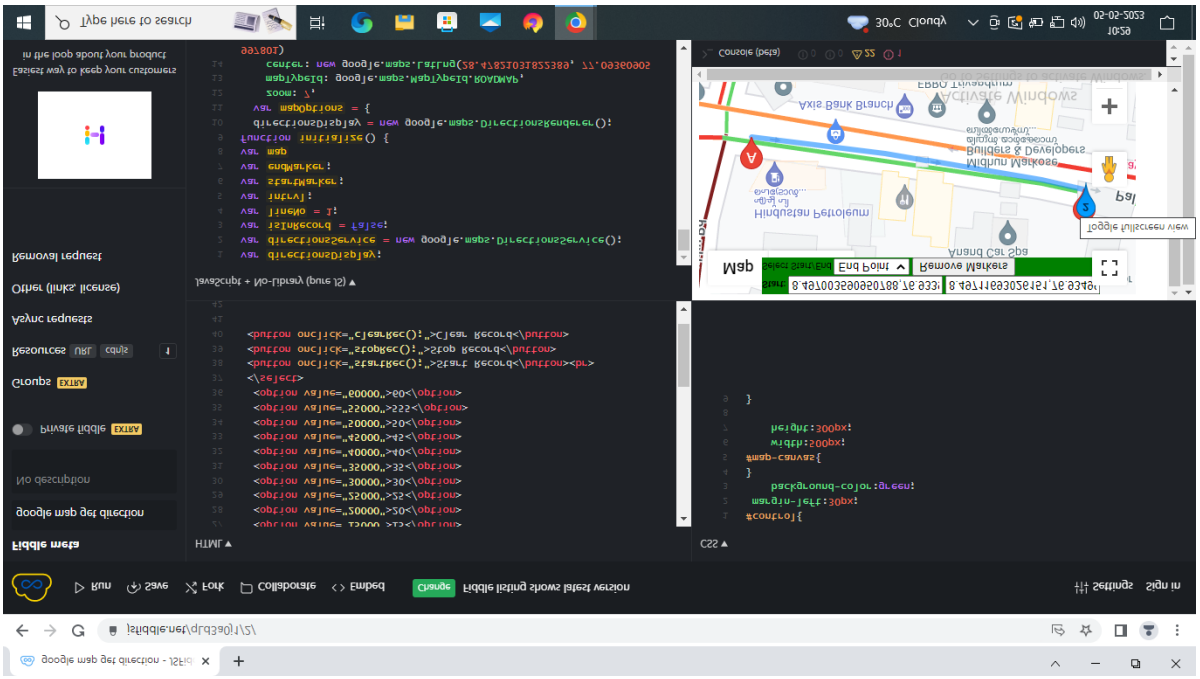


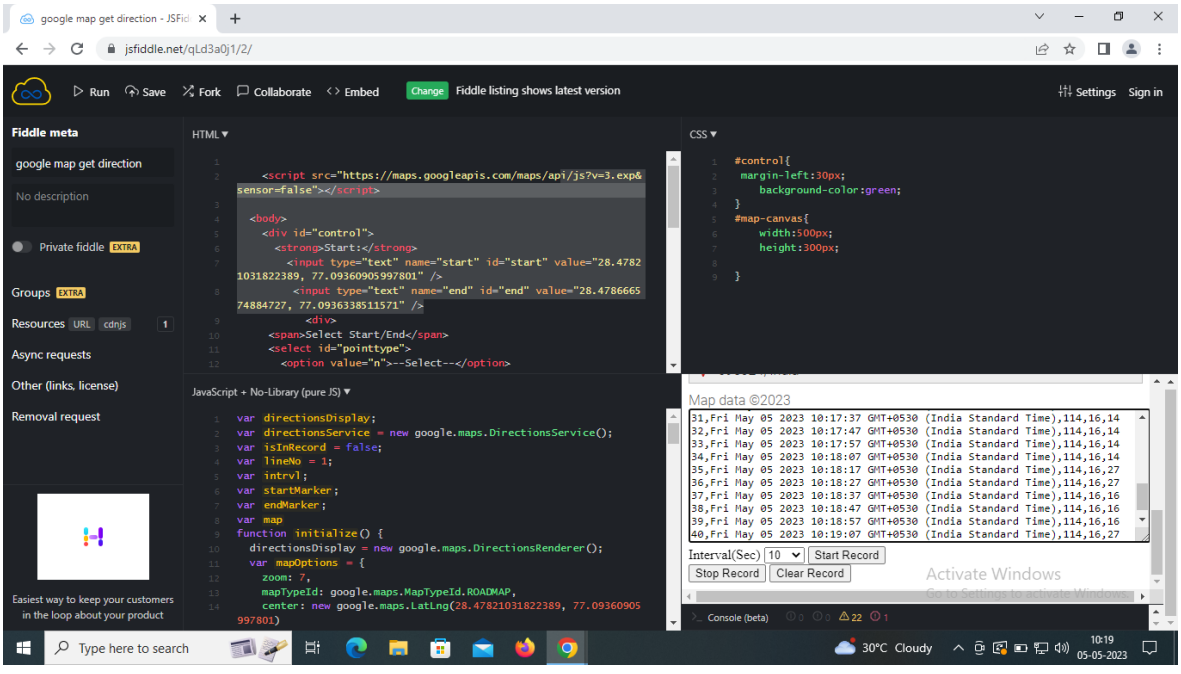





GPIO Control
Not secure | 192.168.4.145
Pedestrain Control
SIGNAL ⟹ 0 ⟹ TURN ON Flash ⟹ 0 ⟹ TURN ON
RED ⟹ 0 AMBER ⟹ 0 GREEN ⟹ 0 PED.RED ⟹ 0 PED.GREEN ⟹ 0
WALK ⟹ 0 WAIT ⟹ 0 PRESS TO CROSS ⟹ 0 ALARM ⟹ 0


GPIO Control
Not secure | 192.168.4.145
Pedestrain Control
SIGNAL ⟹ 1 ⟹ TURN OFF Flash ⟹ 0 ⟹ TURN ON
RED ⟹ 0 AMBER ⟹ 0 GREEN ⟹ 1 PED.RED ⟹ 1 PED.GREEN ⟹ 0
WALK ⟹ 0 WAIT ⟹ 0 PRESS TO CROSS ⟹ 1 ALARM ⟹ 0
Activate Windows
Go to Settings to activate Windows.




google map get direction - JSFiddle
jsfiddle.net/qLd3a0j1/2/
Run
Save
Fork
Collaborate
Embed
Change
Fiddle listing shows latest version
Settings
Sign in
Fiddle meta
google map get direction
No description
Private fiddle
Groups
Resources
Async requests
Other (links, license)
Removal request
HTML
CSS
JavaScript + No-Library (pure JS)
Map data ©2023
Interval(Sec)
Start Record
Stop Record
Clear Record
Activate Windows
Type here to search
30°C Cloudy
10:19
05-05-2023

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