Agriport

MINI PROJECT REPORT

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BONAFIDE

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Abstract

Farmers often face challenges in transporting their agricultural products, feed, and supplies due to limited access to transportation options, complex regulations, and other logistical hurdles. Farmer transport websites aim to address these challenges by providing farmers with customized transportation solutions that are affordable, reliable, and efficient. However, there may be drawbacks to existing farmer transport websites, such as limited service areas, pricing, capacity constraints, inefficient tracking and monitoring, lack of customization, and poor customer service. In this context, this article discusses the objectives and potential drawbacks of farmer transport websites, as well as provides examples of transportation websites that farmers can use to meet their agricultural transportation needs. The article also highlights the need for effective and accessible farmer transport websites that can offer reliable and efficient transportation services that meet farmers' specific needs.

Table of Contents

Chapter No.		Chapter Name	Page Number
		Abstract	
1		Introduction	
2		System Architecture	
3		Web Site Front End Implementation	
	3.1	Tools used	
	3.2	Web Page Design	
	3.3	Screenshots	
4		Web Site Backend Implementation	
	4.1	Tools used	
	4.2	Code for backend	
5		Database Design	
	5.1	Database used	
	5.2	Database schema and Tables used in the Project	
6		Screen shots	
7		Conclusion and Future Work	

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CHAPTER 1

INTRODUCTION

Agriculture plays a crucial role in the global economy, and transportation is an essential part of the agricultural supply chain. Farmers need to transport their products, feed, and supplies from one place to another, often over long distances, to reach markets or processing facilities. However, transportation can be a significant challenge for farmers, especially those in remote or rural areas. To address this challenge, various web applications have been developed to provide transportation services tailored to farmers' specific needs. These applications aim to improve farmers' access to transportation services, reduce transportation costs, and increase efficiency and productivity in the agricultural supply chain. In this article, we will discuss the objectives and potential drawbacks of farmer transport web applications, as well as provide examples of existing web applications that farmers can use to meet their agricultural transportation needs. We will also explore the importance of effective and accessible farmer transport web applications and their potential impact on the agricultural sector.

1.1 Existing Web Applications:

- Rivigo
- BlackBuck
- Delhivary
- AgriDigital
- HarvestPort

1.2 Drawbacks of existing application

There could be several drawbacks in existing farmer transportation websites, including:

- Limited Service Areas: Some transportation websites may only serve specific regions or states, which could limit the availability of their services to farmers in other areas.
- Pricing: The cost of transportation services provided by these websites can vary, and farmers may find that the prices offered are not competitive or affordable.

- Capacity Constraints: Some transportation websites may have capacity constraints, meaning that they may not be able to accommodate large or frequent shipments from farmers.
- Inefficient Tracking and Monitoring: Some transportation websites may not have efficient tracking and monitoring systems in place, which could result in longer transit times and potential delivery issues. Lack of Customization: Some transportation websites may not offer customization options for farmers, such as the ability to choose specific carriers or routes for their shipments.
- Poor Customer Service: Some transportation websites may not have a strong customer service team in place, which could result in poor communication and resolution of issues during transportation.

These are some of the potential drawbacks of existing farmer transportation websites, and it is important for farmers to consider these factors when choosing a transportation provider.

1.3 Project Objectives

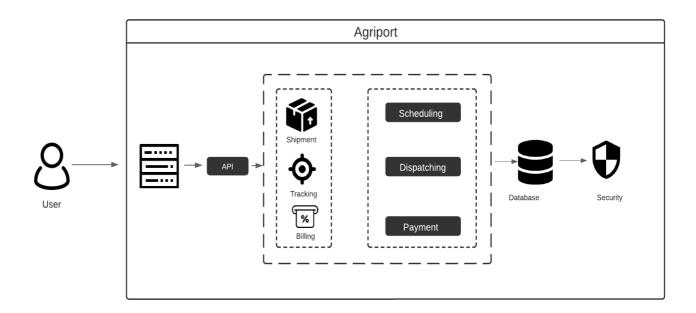
Objectives of Agriport are:

- Connecting farmers with transportation services: This website can provide a platform for farmers to connect with transportation companies and individuals who can help them transport their crops and produce to market.
- Improving efficiency: The website can streamline the transportation process by allowing farmers to easily schedule pickups and deliveries, track shipments, and communicate with carriers.
- Increasing transparency: By providing real-time tracking and updates, the website can
 increase transparency in the transportation process and give farmers greater visibility
 into the status of their shipments.
- Reducing costs: By connecting farmers with transportation services directly, the
 website can help reduce the costs associated with intermediaries and improve the
 overall affordability of transportation for farmers.
- Building community: The website can serve as a resource for farmers and provide a space for them to connect with each other and share information about transportation best practices, market conditions, and other topics of interest.

Overall, the objectives of Agriport is to help farmers more easily and efficiently transport their crops and produce to market, while also improving the transparency and affordability of the transportation process

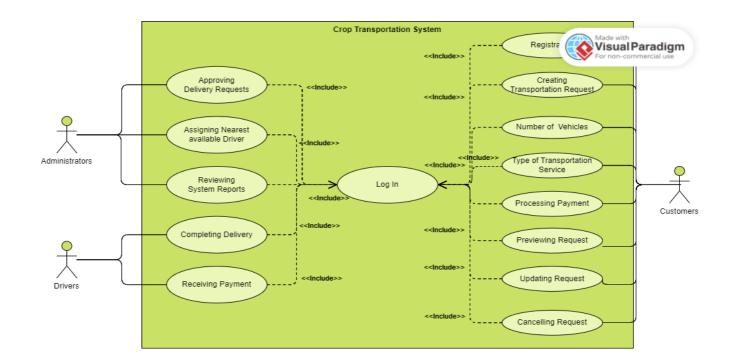
CHAPTER 2

SYSTEM ARCHITECTURE

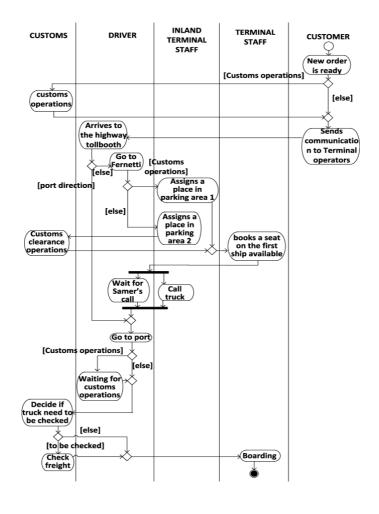


2.1 System Architecture

This diagram shows the different components of a farmers transportation website and how they interact with each other. The user interface component interacts with the application server, which processes requests and interacts with the microservices. The API gateway acts as an intermediary between the user interface and the microservices, while the database stores all necessary data. External services are integrated through APIs, and security components ensure the protection of data. Overall, this system architecture enables a seamless and efficient user experience for farmers and transport providers



2.2 Use Case Diagram



2.3 Activity Diagram

CHAPTER 3

WEB SITE FRONT END IMPLEMENTATION

3.1 Tools used

- Microsoft Visual Studio Code IDE Visual Studio is an integrated development environment from Microsoft. It is used to develop computer programs including websites, web apps, web services and mobile apps
- HTML The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser.
- CSS Cascading Style Sheets (CSS) is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.
- Javascript JavaScript, often abbreviated as JS, is a programming language that is
 one of the core technologies of the World Wide Web, alongside HTML and CSS. As
 of 2022, 98% of websites use JavaScript on the client side for webpage behavior,
 often incorporating thirdparty libraries.
- Bootstrap 5 Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.
- **Font-awesome** Font Awesome is a font and icon toolkit based on CSS and Less. As of 2020, Font Awesome was used by 38% of sites that use third-party font scripts, placing Font Awesome in second place after Google Fonts.

3.2 Web Page Design

The components are reusable and and easy to maintain. Some of the components used are-

• **Header and Navigation bar**: The website has been designed so that the user can access any of the webpages from a single click. For the navigation bar we implemented Bootstrap's navbar template. We incorporated UI Design when developing this feature as the nav bar, setting it to static (so it stays at the top of the page as the user scrolls) ensuring that the navigation links are always easily accessible this insures ease of navigation for the user as well as efficiency of use which ultimately contributes to a positive user experience.



Code for Header and Nav bar:

Code For Home Page:

```
div class="mention foo")

(Type include "movem.php"):

div class="mention" style="font-size:Spx text-align; center; position; absolute; top; 58%; left; 58%; transform; translate(-50%, -50%); color; white; ")

div class="mention" style="font-size:Spx text-align; center" position; absolute; top; 58%; left; 58%; transform; translate(-50%, -50%); color; white; ")

div class="mention-size:Spx to drop your goods to the desired place-(p)

div position in the success style="text-align; center" heef="looking.php" Nook a vehicle-(a)

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div class="min bin-success" style="text-align; center" heef="looking.php" Nook a vehicle-(a)

div)

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```

```
clive class can delight provides great service. Every one of them is professional and great at their jobs//p>

(/disc)

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(div id="box" class="container")

(div id="box" class="container")

(div id="box" class="container")

(div class="page-leader")

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(div class="page-leader")

(div class="page-leader")

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```

11

Login Page:

Admin Login Page:

Driver Page:

Vehicle Page:

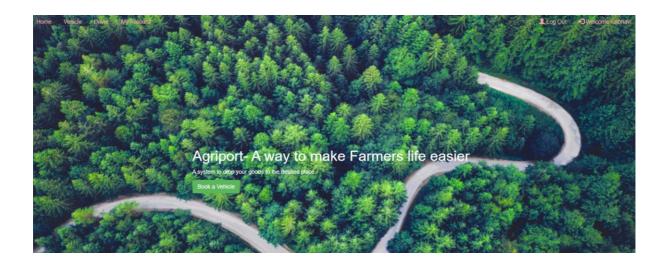
Booking Page:

Sign Up:

```
<div class="row"
     <?php echo $msg; ?>
       <div class="page-header">
          <h1 style="text-align: center;">Sign Up</h1>
       <form class="form-horizontal animated bounce" action="" method="post">
           <div class="input-group"
            <span class="input-group-addon"><i class="glyphicon glyphicon-user"></i></span>
             <input id="firstname" type="text" class="form-control" name="firstname" placeholder="First Name">
             <input id="lastname" type="text" class="form-control" name="lastname" placeholder="Lastname">
           <div class="input-group">
            <span class="input-group-addon"><i class="glyphicon glyphicon-user"></i></span>
             <input id="email" type="email" class="form-control" name="email" placeholder="Email">
           <div class="input-group">
             <input id="username" type="text" class="form-control" name="username" placeholder="Username">
             <input id="password" type="password" class="form-control" name="password" placeholder="Password">
          <div class="input-group">
  <button type="submit" name="submit" class="btn btn-success">Sign Up</button>
```

Admin Navbar:

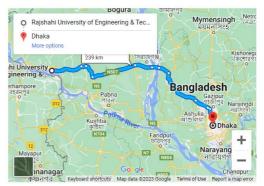
3.3 Screenshots



Welcome to our services!







The trucks

Driver

The driver of ruet are very punctual and they provides great service. Every one of them is professional and great at their jobs

Trucks



In Ruet we have around ten trucks and each one of it is well maintained. These trucks goes in different direction of the city and can also be hired.

Vaibhavi Tandon

Sign Up



Login

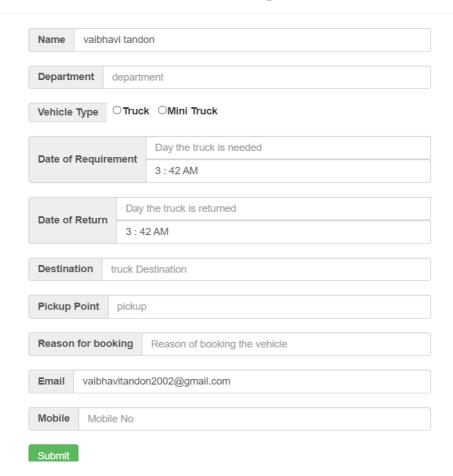


Admin Login

Admin Login



Booking



Vehicle List

Bus Picture

Bus Registration No

846656

Drive List

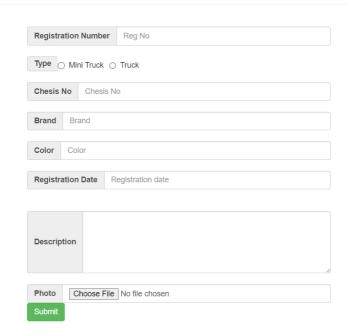


Booking Id Requested Date Return Date Destination Vehicle Registration Driver Total Km Oil Cost Extra Cost Total Cost Paid

Add New Driver Add New Vehicle Billing Booking Trip Details

Admin Panel

New Vehicle Form



CHAPTER 4

WEB SITE BACK-END IMPLEMENTATION

4.1 Tools used

- **PHP:** PHP is a general-purpose scripting language geared toward web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1993 and released in 1995. The PHP reference implementation is now produced by The PHP Group.
- MySQL: MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language.

4.2 Code for Back-end

Establishing Database Connection (dbconnection.php)

```
<?php
    $connection=mysqli_connect("localhost","root","","vehicle management");

    session_start();
?>
```

Login Page backend

Driver List Backend:

```
<?php
    $connection= mysqli_connect("localhost","root","","vehicle management");
    session_start();

$driverid= $_GET['driverid'];

$sql= "SELECT * FROM `driver` WHERE driverid='$driverid'";
    //echo $sql;
    $res= mysqli_query($connection,$sql);
    $row= mysqli_fetch_assoc($res);

}>
```

Booking Backend:

```
$\text{connection= mysqli_connect("localhost","root","","vehicle management");
    session_start();

$id= $_GET['id'];

$sql= "SELECT * FROM `booking` WHERE booking_id='$id'";
    //echo $sql;
    $res= mysqli_query($connection,$sql);
    $row= mysqli_fetch_assoc($res);

$sql1= "SELECT * FROM `vehicle` WHERE veh_available='0'";
    //echo $sql;
    $res1= mysqli_query($connection,$sql1);
```

```
$sql2= "SELECT * FROM `driver` WHERE dr_available='0'";
//echo $sql;
$res2= mysqli_query($connection,$sql2);
?>
```

Login Admin Backend:

```
<?php
    session_start();
    $connection=mysqli_connect("localhost","root","","vehicle management");
    $msg="";
    if(isset($_POST['submit'])){
        $username=mysqli_real_escape_string($connection,strtolower($_POST['use
rname']));
        $password=mysqli_real_escape_string($connection,$_POST['password']);
        $login_query="SELECT * FROM `admin` WHERE username='$username' and
password='$password'";
        $login_res=mysqli_query($connection,$login_query);
        if(mysqli_num_rows($login_res)>0){
            $_SESSION['username']=$username;
            header('Location:admin.php');
        else{
             $msg= '<div class="alert alert-danger alert-dismissable"</pre>
style="margin-top:30px";>
                    <a href="#" class="close" data-dismiss="alert" aria-</pre>
label="close">×</a>
                    <strong>Unsuccessful!</strong> Login Unsuccessful.
                  </div>';
        }
```

Enter Vehicle Backend:

```
<?php
    $connection= mysqli_connect("localhost","root","","vehicle management");
    session_start();</pre>
```

Signup Backed:

```
<?php
    $connection=mysqli_connect("localhost","root","","vehicle management");
    session_start();
    $msg="";
    if(isset($_POST['submit'])){
        $firstname=
mysqli real escape string($connection,strtolower($ POST['firstname']));
        $lastname=
mysqli_real_escape_string($connection,strtolower($_POST['lastname']));
        $email=
mysqli_real_escape_string($connection,strtolower($_POST['email']));
        $username=
mysqli real escape string($connection,strtolower($ POST['username']));
        $password=
mysqli_real_escape_string($connection,strtolower($_POST['password']));
        $signup_query= "INSERT INTO `user`(`user_id`, `first_name`,
last name`, `email`, `username`, `password`) VALUES
('','$firstname','$lastname','$email','$username','$password')";
        $check_query= "SELECT * FROM `user` WHERE username='$username' or
email='$email'";
```

CHAPTER 5

DATABASE DESIGN

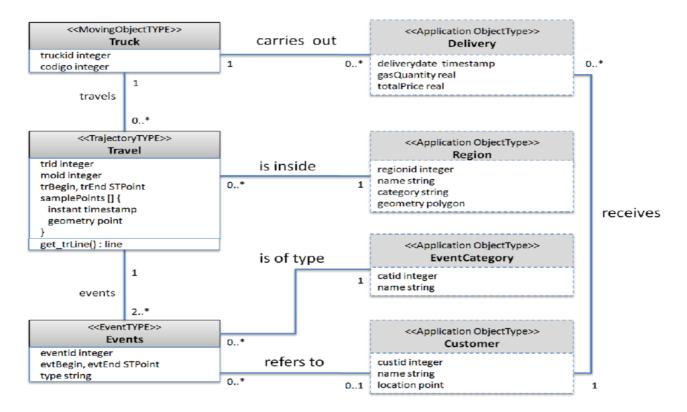
5.1 Database used

The database used in the project is MySQL.

MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language.

MySQL is currently the most popular database management system software used for managing the relational database. It is open-source database software, which is supported by Oracle Company. It is fast, scalable, and easy to use database management system in comparison with Microsoft SQL Server and Oracle Database. It is commonly used in conjunction with PHP scripts for creating powerful and dynamic server-side or web-based enterprise applications.

5.2 Database schema and Tables

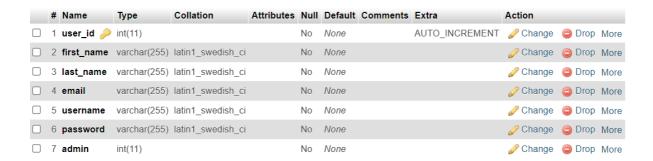


List of Table-

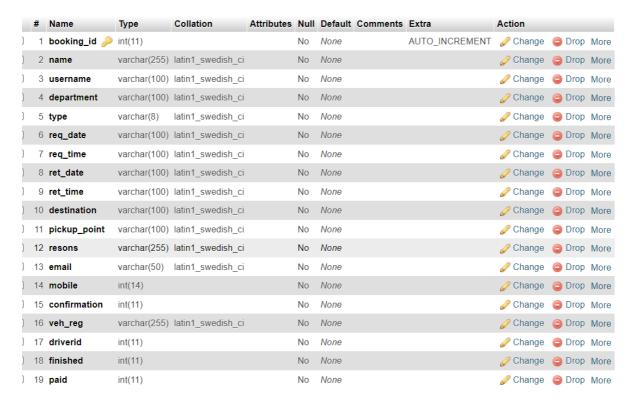
tbladmin - for storing admin detail



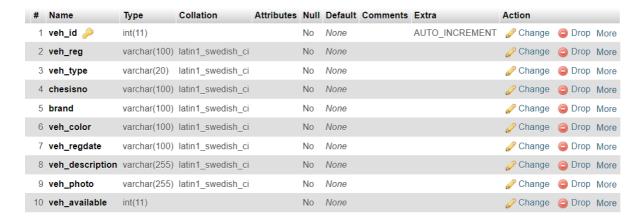
tblusers - to store user details



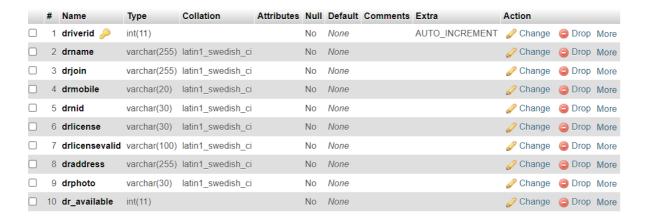
tblbook - to store appoint booking details



tbyehicle- To store the details of the vehicle



tbdriver- To store driver details



5.3 Database Connectivity

We have used PHP to connect with our mysql database Code for database connection

```
<?php
    $connection=mysqli_connect("localhost","root","","vehicle management");

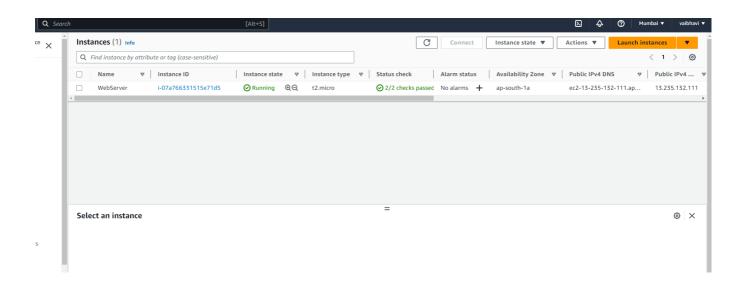
session_start();
?>
```

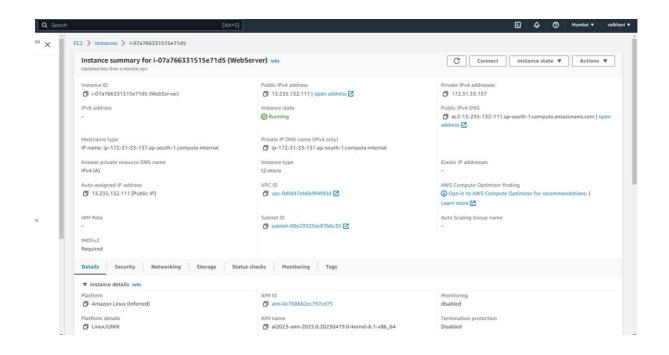
CHAPTER 6

WEB HOSTING IN CLOUD

Steps for hosting the project in AWS EC2 server

- 1. Launch a PHP AWS EC2
- 2. Choosing the OS and hardware
- 3. Editing some basic configurations
- 4. Creating a key pair
- 5. Locking the key file
- 6. Connecting to Instance
- 7. Installing Apache
- 8. Installing MySql
- 9. Installing PHP with common extensions
- 10. Installing phpMyAdmin
- 11. Allowing Mysql Root Login through phpMyAdmin
- 12. Connecting Instance with FTP client







CHAPTER 7

SCREEN SHOTS



Welcome to our services!



Driver

The driver of ruet are very punctual and they provides great service. Every one of them is professional and great at their jobs

Trucks



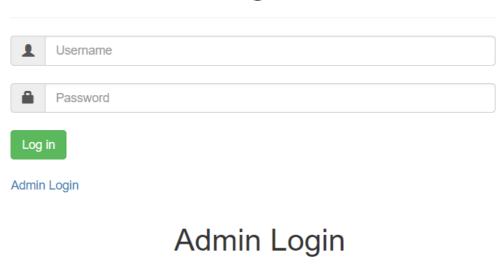
In Ruet we have around ten trucks and each one of it is well maintained. These trucks goes in different direction of the city and can also be hired.

Vaibhavi Tando

Sign Up

1	First Name					
1	Lastname					
1	Email					
1	Username					
	Password					
Sign	Sign Up					

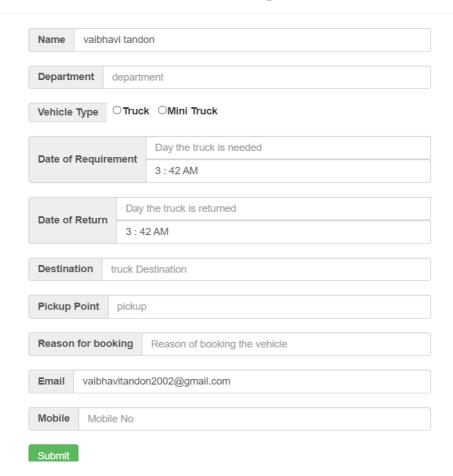
Login



■ Username
Password

Log in

Booking



Vehicle List

Bus Picture

Bus Registration No

846656

Drive List

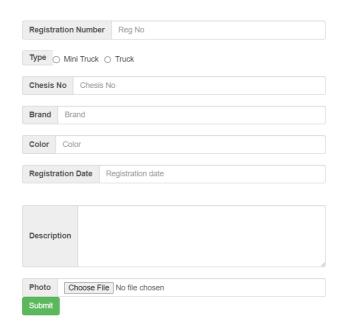


My Bill

, 5												
Booking Id	Requested Date	Return Date	Destination	Vehicle Registration	Driver	Total Km	Oil Cost	Extra Cost	Total Cost	Paid		
Add New Dri	iver Add New \	/ehicle Billin	g Booking	Trip Details								

Admin Panel

New Vehicle Form



CHAPTER 8

CONCLUSION AND FUTURE WORK

Conclusion 8.1

Overview

In conclusion, Agriport website will play an important role in providing transportation services and information to the farmers. These website aims to improve access to transportation, navigate regulations, and offer customized solutions for transporting agricultural products, feed, and supplies. However, there may be drawbacks to existing websites, such as limited service areas, pricing, capacity constraints, inefficient tracking and monitoring, lack of customization, and poor customer service. It is important for farmers to carefully consider these factors when choosing a transportation provider. Nevertheless, the existence of farmer transport websites in India and around the world can help farmers move their goods efficiently and cost-effectively, contributing to the growth and sustainability of the agricultural industry.

8.2 Lessons Learnt

I was not familiar with the PHP language development environment. So, I had to learn PHP and JavaScript frameworks to fulfil this project.. I found some grate video tutorials and some example, and view them and follow examples to grab lessons. Mostly inexperience of project planning and scheduling identify and have grate advices from my supervisors to improve proper time management and planning.

8.2 Critical Assessment of the Project

This website aims to provide farmers with a customized transportation solution that is affordable, reliable, and efficient. The website's objectives include addressing the challenges that farmers face in transporting their agricultural products, feed, and supplies due to limited access to transportation options, complex regulations, and other logistical hurdles. The website appears to be well-designed and easy to navigate, with a user-friendly interface that allows farmers to book transportation services and track their shipments.

However, there are some potential drawbacks to the website, such as limited service areas, pricing, capacity constraints, inefficient tracking and monitoring, lack of customization, and

poor customer service. These issues could impact the website's effectiveness and limit its ability to meet the specific transportation needs of farmers.

To address these drawbacks, the website could consider expanding its service areas, offering more flexible pricing options, improving tracking and monitoring capabilities, providing more customization options, and enhancing customer service. Additionally, the website could partner with other transportation providers to expand its network and increase its capacity to meet farmers' transportation needs.

Overall, this website has the potential to be a valuable resource for farmers looking for transportation solutions. However, it needs to address the potential drawbacks and improve its services to meet farmers' specific needs effectively.

Future Work and Enhancements

Adding following future enhancement in the system are as follows.

- Integration of real-time tracking and monitoring
- Expansion of service areas and partnerships
- Customization and flexibility

References

- 1. Landstar: https://www.landstar.com/
- 2. C.H. Robinson: https://www.chrobinson.com/
- 3. J.B. Hunt: https://www.jbhunt.com/
- 4. Schneider: https://schneider.com/
- 5. Heartland Express: https://heartlandexpress.com/
- 6. Rivigo: https://www.rivigo.com/
- 7. BlackBuck: https://www.blackbuck.com/
- 8. Delhivery: https://www.delhivery.com/
- 9. Xpressbees: https://www.xpressbees.com/
- 10. Shadowfax: https://shadowfax.in/