



TRANSPORT MANAGEMENT SYSTEM

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ABSTRACT

Digital This system provide the basic components of a shared information system to support the collaboration, rates, routes, roles, transaction sets, documents, and information exchanged to facilitate the booking, execution, and settlement of any type of transportation movement. Using this system user can online check rates of transportation and routes to the destination. Here user can check everything online and can book his order to transport his goods and also can add vehicles. Admin can also check which truck is available for transportation and how long it takes to reach the delivery point In this Transport System all the work is done manually. It will store all the records of goods delivery. Using this system user can online check rates of transportation and routes to the destination. Here user can check everything online and can book his order to transport his goods. User can also manage billing operation of transportation. Admin can also check which truck is available for transportation and how long it takes to reach the delivery point. This system provide the basic components of a shared information system to support the collaboration, rates, routes, roles, transaction sets, documents, and information exchanged to facilitate the booking, execution, and settlement of any type of transportation movement.

Keywords - HTML, PHP, CSS

1. INTRODUCTION

Transport management system project is developed to automate transport operation like payment, booking order, delivery report, generating transactions receipt etc. in a transport office. Using this system user can computerize transport office work like billing, tracking payments, creating report etc. The main job of the transporter is to provide transport service to consigner and consignee. Transportation management system is a software application to maintain day to day transactions in transport office. Using this system user can manage transport work. He can select vehicle to transport the goods as well as to Travel. He can also track the vehicle delivery of goods. Customer can also book good transport order online. User can also check his goods delivery status online. Using this system user can online check rates of transportation and routes to the destination. Here user can check everything online and can book his order to transport his goods. User can also manage billing operation of transportation. Admin can also check which truck is available for transportation and how long it takes to reach the delivery point. This system provide the basic components of a shared information system to support the collaboration, rates, routes, roles, transaction sets, documents, and information exchanged to facilitate the booking, execution, and settlement of any type of transportation movement.

2. LITERATURE REVIEW

This research reports the experiences of both adopters and non-adopters of transportation management systems (TMS) technology. TMS adopters represent a diverse array of companies. with a surprisingly high percentage of adopters using outsourced services for decision support activities. Motives for adoption tend to align with the firm's strategic needs though functionality focuses on the shipper's day-to-day operational needs. While expectations of system performance and return on investment vary greatly, TMS users illustrate a generally high level of satisfaction. Non-adopters view decision support for transportation activities as a low priority. This article explores future prospects for TMS development and adoption Rates and capacity in all modes will be volatile for months to come. Without the ability to manage rates and carriers, you'll likely pay more for shipping than you should. Manual tracking or relying on forwarders, brokers, or carriers for updates means you'll have many surprises when shipments are delayed. With so much complexity and volatility for the foreseeable future, it's never been more important to be able to have a transportation management system (TMS) focuses on optimizing the transportation segment of the supply chain. While there might be some overlap with ERP and WMS, the TMS works on the edge of the enterprise, connecting all transportation stakeholders such as carriers, freight forwarders, internal and external shippers. TMS benefits are well documented, including routing compliance, cost containment, visibility, event management, and trade compliance. A cloud based TMS with a Software-as-a-Service (SaaS) delivery model can significantly accelerate the return 4on investment. This is because the TMS vendor manages the hardware, infrastructure, software, tools, and personnel. Upgrades are seamless, and there is no need to schedule deployment windows to support upgrades, fixes, and patches. There is no concern with who on your team will work with the added servers, databases, tools, and network connections and if they have the right skills for the task. The demand for transportation management systems (TMS) is on the rise. A basic solution manages truck and carrier dispatch, fleet maintenance, driver records, billing and driver pay, and DOT compliance. Additionally, a TMS streamlines

operations by optimizing carrier routes, managing customer activity, and reporting analytics. Joe Couto, chief operating officer at High Jump, outlines factors to consider before selecting a TMS. Holistic view of your supply chain.

3. OBJECTIVE AND SCOPE OF PROJECT

3.1 Objective of Project

The main objective of this application is to automate the complete operations of the goods transport. In current system all work is getting done manually. User has to manage many things so it is very difficult to manage this business doing work manually. Using this system user can automate many transports operation like booking, tracking s, creating report etc. Using this system keeping records of transportation is easy. User can find any old records in few clicks. User can also generate old delivery reports and other report easily. They need maintain hundreds of thousands of records. Also searching should be very faster so they can find required details instant

3.2 Scope of project

This web site is being developed for college and is intended to be used by individuals with web access. Who are interested in obtaining diploma in various fields like Computer Science and Engineering? This is also very useful for faculty and students of college to get access information of examination, admission, and results. Information of different event conducted by the college will be available on the website as well. Department of Computer Science and Engineering 5/13

4. METHODOLOGY

This web application uses React is for front and firebase as database. React and firebase work tightly coupled with each other. Firebase cloud service is provided by Google and provides advantage in cost as well as speed. Normally, if we use any other database like MySQL, it needs a server which act as a middleware between database and frontend page. While I firebase, it does not need any server as it communicates directly with the cloud which reduces response time and increases efficiency.

4.1 Module 1: Main Page

Main web app is developed in react js and communicates directly with firebase. In react js, latest hooks and functional components are used. Many third party components from NPM are used to reduce code complexity and increase readability. Md bootstrap is also used to make look and feel better. Plethora of CSS styles and effects are given to various components to make user more immersed with our website and maximum interaction with website.

In firebase we are using Real-time database to store text values like titles, descriptions, image URLS's, etc. And firebase storage is used to store data like images, videos and all which will be referenced in Real-time database.

4.2 Module 2: Home

Admin panel is crucial part of this project as this provides all rights to admin, to modify data which is displayed to user. Many operations can be performed like Add, Display and Manage vehicles. Admin panel further consist of 3 parts, Frontend, Backend server, Firebase. Frontend directly communicates with firebase to perform CRUD applications. Whereas backend server is used to retrieve Google analytics data, filter it.

Express js is used to create a http server. It is accessed at frontend by API endpoints provided by server which returns JSON data of all statistic reports of page hits, devices, comparison with previous month, etc.

5. FLOWCHART

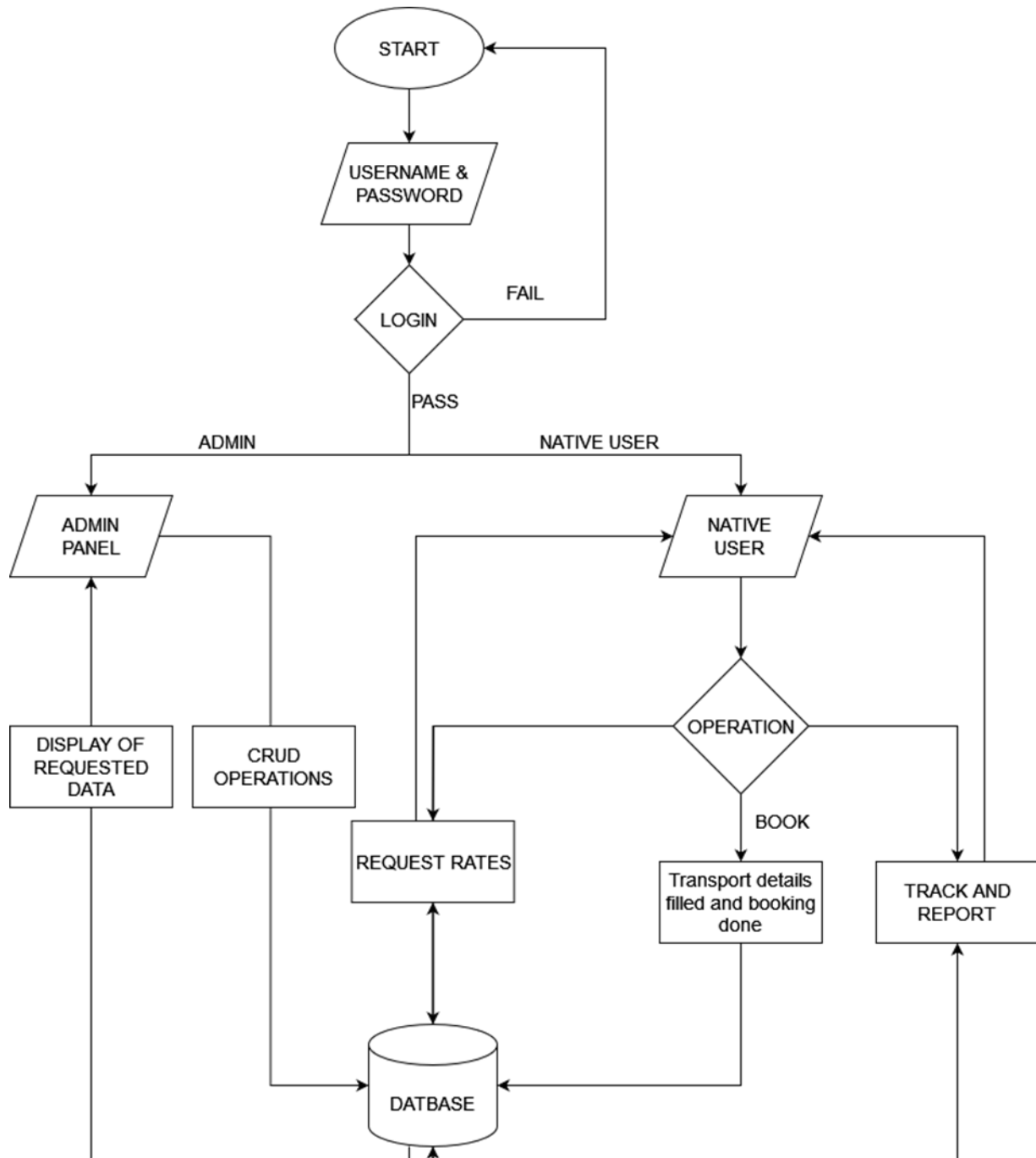


Figure 5.1: Flowchart

6. SYSTEM CONFIGURATION

6.1 Hardware Requirement

- Hard-disk
- RAM – 8 GB
- Processor

6.2 Software Requirement

- Operating System – Windows 7 and above, Android

- Front-end- PHP, CSS, HTML
- Back-end- SQL, C, JavaScript

7. USE CASE DIAGRAM

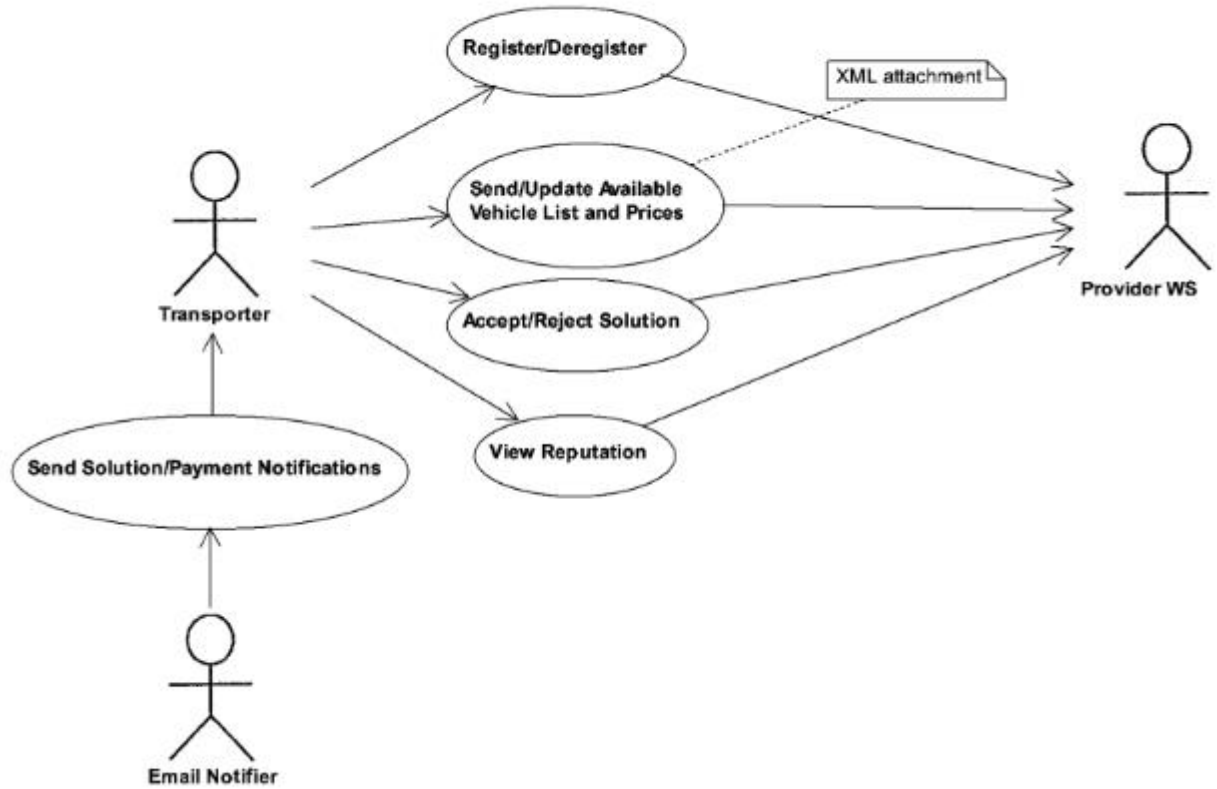


Fig 7.1: Use Case Diagram

8. DATA FLOW DIAGRAM



FIG 8.1: DFD Level 0

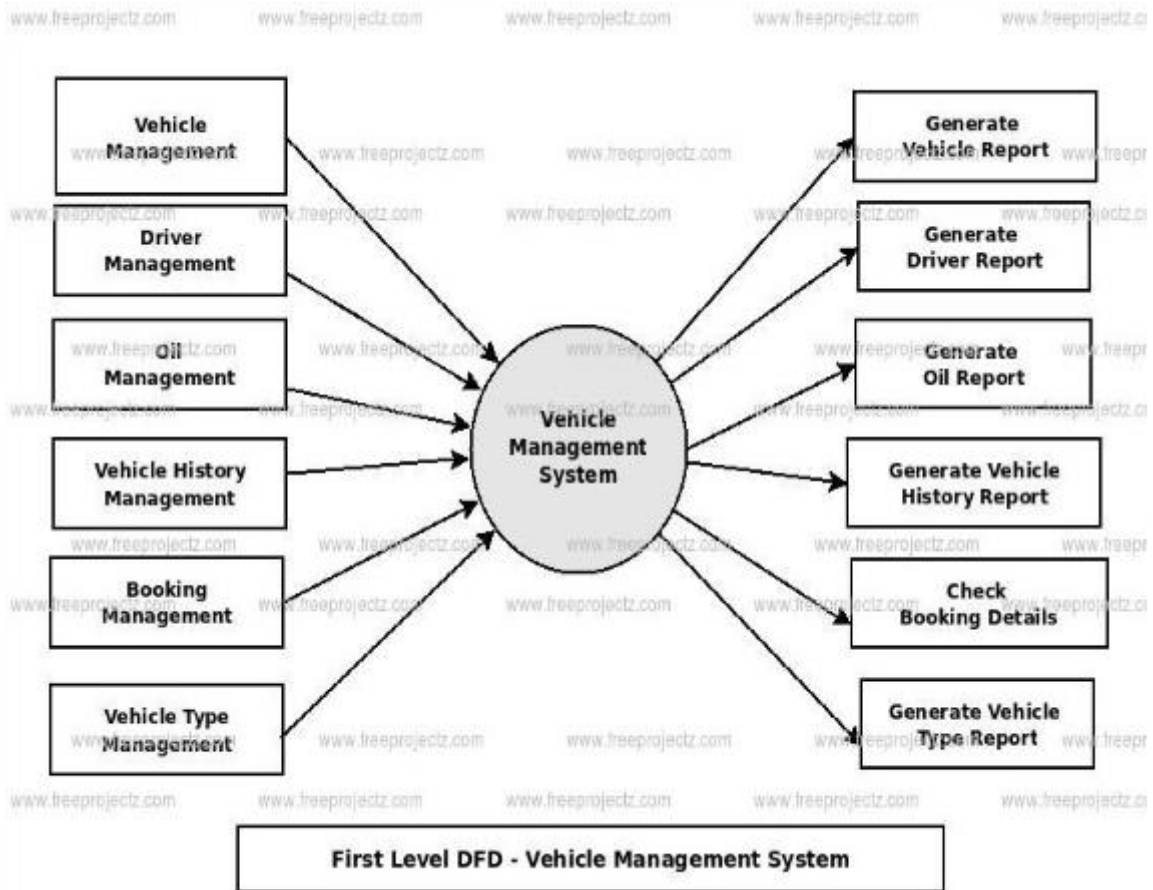
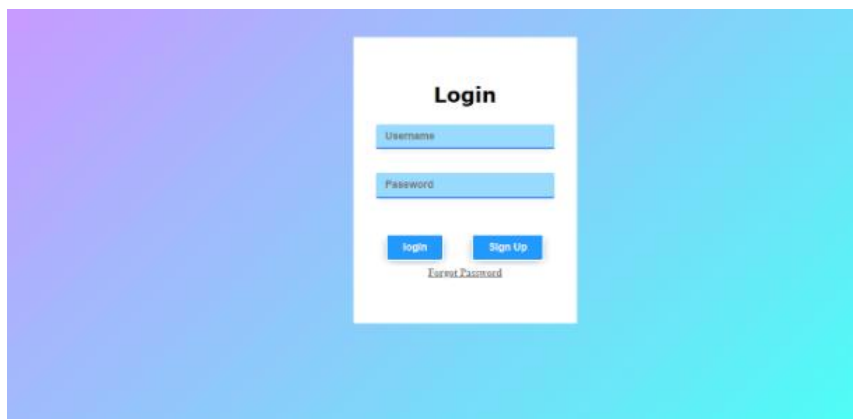


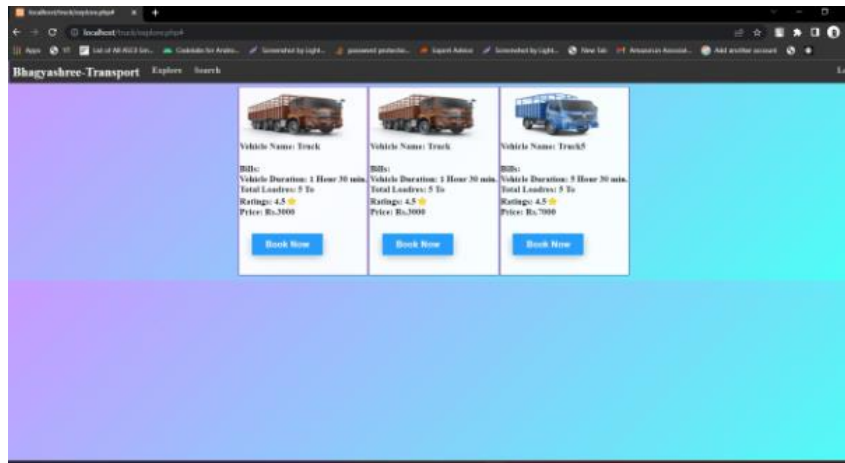
Fig 8.2: DFD Level 1

9. RESULT OF PROJECT

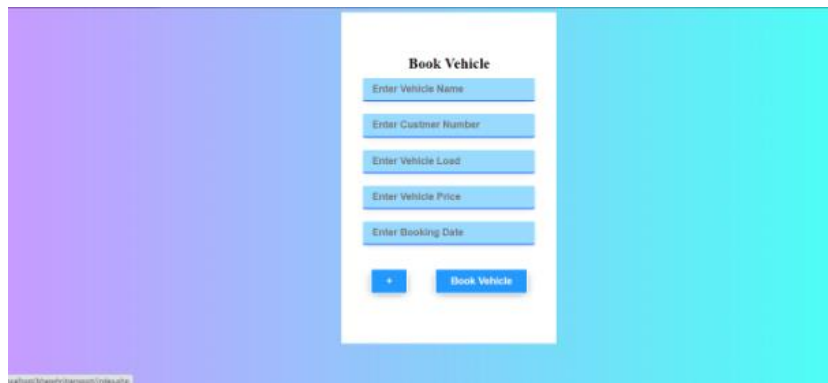
9.1 SNAPSHOTS OF PROJECT



9.1.1 Snapshot



9.1.2 Snapshot



9.1.3 Snapshot

10. CODE OF MODULES

```

<?php
    session_start();

    //If User Already Logged In Or Any Active Session Then Login Automatically

    if ($_SESSION) {
        header('location:index.php');
    }

    include('dbcon.php');

    $usernameError = "";
    $passwordError = "";

?>

<?php
    if(isset($_POST['submit'])) {

        $username = mysqli_real_escape_string($con, $_POST['username']);

        $password = mysqli_real_escape_string($con, $_POST['password']);
    }

```

```
//Searching Username
$usernameQuery = "select * from login where username = '$username'";
$usernameQueryResult = mysqli_query($con, $usernameQuery);
$usernameCount = mysqli_num_rows($usernameQueryResult);

//Searching Is admin
$adminSearch = "select * from admins where admin = '$username'";
$adminResult = mysqli_query($con, $adminSearch);
$adminCount = mysqli_num_rows($adminResult);

if($usernameCount) {
    $username_pass = mysqli_fetch_assoc($usernameQueryResult);
    $db_pass = $username_pass['password'];
    if($password == $db_pass) {
        if ($adminCount) {
            $admin = $username;
            $_SESSION['admin'] = $admin;
        }
        else {
            $_SESSION['username'] = $username;
        }
    }
}

?>
<script type="text/javascript">
    window.location = "explore.php";
</script>
<?php
}
else {
    $passwordError = "Incorrect Password";
}
}

else if($adminCount) {
    $admin_pass = mysqli_fetch_assoc($adminResult);
    $db_tpass = $admin_pass['password'];
    if($password == $db_tpass) {
```

```
        //$_SESSION['admin'] = $admin;

        ?>

        <script type="text/javascript">

            window.location = "explore.php";

        </script>

        <?php

        }

        else {

            $passwordError = "Incorrect Password";

        }

    }

    else {

        $usernameError = "Incorrect Username";

    }

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Login</title>

    <link rel="stylesheet" href="css/basic.css">

    <style>

        body {

            height: 100vh;

        }

        a {

            color: gray;

            font-weight: bold;

        }

    </style>

</head>

<body>
```



```

<div class="commanDiv">
  <span color="rgba(0, 0, 0, 0.55)" style="font-family: Verdana; font-size: 2rem; font-weight: bold; text-align: center; text-transform:
capitalize;">Login</span><br>
  <form action="" method="POST"><br>
    <input type="text" name="username" id="username" class="inputs" placeholder="Username" required=""><br>
    <?php
      echo $usernameError;
    ?>
    <br style="box-sizing: border-box; margin: 0px; padding: 0px; transition: all 0.3s linear 0s;" />
    <input type="password" name="password" id="password" class="inputs" placeholder="Password" required=""><br>
    <br>
    <?php echo $passwordError;?><br>
    <input type="submit" name="submit" class="btn" value="login">
      <a href="signUp.php"><button type="button" class="btn">Sign Up</button></a><br>
    <a href="forgotPassword.php" target="_blank">Forgot Password</a>
  </form>
</div>
</body>
</html>

```

11. ADVANTAGES AND DISADVANTAGES OF PROPOSED SYSTEM

Advantages

- We can keep all records of all Vehicles at one place
- We can access this data anytime
- Easy to use website
- No tension of keeping records in written format
- We can add multiple vehicles and keep records of them
- Easy and clean UI(User Interface) of system

Limitations

- Many third party components are used and if they get deprecated,code need to be changed.
- Website may get crashed due to huge traffic if sufficient amount ofbandwidth is not provided.
- As amount if users increases, cost of firebase increases.

12. CONCLUSION

This system provide the basic components of a shared information system to support the collaboration, rates, routes, roles, transaction sets, documents, and information exchanged to facilitate the booking, execution, and settlement of any type of transportation movement. Using this system user can online check rates of transportation and routes to the destination. Here user can check everything online and can book his order to transport his goods and also can add vehicles. Admin can also check which truck is available for transportation and how long it takes to reach the delivery point

REFERENCE

- [1] tutorials point
- [2] W3schools
- [3] Beginning JavaScript:
- [4] PHP: The complete Reference