CHAPTER 1: INTRODUCTION

The Auto-Rickshaw Union Portal is a web-based platform designed to support auto-rickshaw drivers in organizing themselves and advocating for their interests. The project aims to create a sense of community among auto-rickshaw drivers and to provide them with access to essential resources, such as training, legal advice, and financial management tools.

The project's primary objective is to empower auto-rickshaw drivers by building a strong union that can represent their collective interests and influence policy decisions that affect their profession.

The Auto-rickshaw Union Portal consists of various modules that allow auto-rickshaw drivers to communicate with each other, share information, and access essential resources. These modules include registration, grievance redressed, payment gateway, ratings and reviews, knowledge centre, discussion forum, survey and feedback, and marketplace. Each of these modules plays a vital role in creating a cohesive and supportive community of auto-rickshaw drivers.

The auto rickshaw industry plays a vital role in urban transportation, and unions are formed to address the concerns and rights of the drivers. However, managing a large number of drivers and ensuring smooth operations can be challenging. The Auto Rickshaw Union Portal addresses these challenges by providing a comprehensive system that streamlines union activities, enhances communication channels, and empowers drivers.

The portal serves as a one-stop solution for auto rickshaw drivers to interact with their union and access relevant resources. It enables drivers to register as union members, providing them with a unified platform to voice their concerns, participate in decision-making processes, and benefit from various union services.

The Auto Rickshaw Union Portal offers a range of functionalities tailored to meet the specific needs of the auto rickshaw driver community. These include member management, grievance submission and resolution, document management, news and announcements, and optional payment management. By digitizing these processes, the portal simplifies administrative tasks, reduces paperwork, and increases efficiency.

Key Objectives:

- Facilitate better communication and collaboration among auto rickshaw drivers within the union.
- Provide a platform for drivers to submit grievances and track their resolution.
- Centralize document management, making important union resources easily accessible to drivers.
- Deliver timely news and announcements to keep drivers informed about union activities.
- Streamline membership management and provide a seamless registration process.
- Enhance transparency and accountability within the union's operations.
- Foster a sense of unity, solidarity, and empowerment among auto rickshaw drivers.

The Auto Rickshaw Union Portal aims to revolutionize the way auto rickshaw unions operate by leveraging the power of technology. It empowers drivers, strengthens their collective voice, and enables them to actively participate in shaping their working conditions and industry practices.

By utilizing the Auto Rickshaw Union Portal, the union can foster a more inclusive, efficient, and transparent environment for auto rickshaw drivers. The portal serves as a catalyst for positive change, ensuring that drivers' rights are protected, their concerns are addressed promptly, and their contributions to the transportation sector are recognized.

Overall, the Auto-rickshaw Union Portal seeks to improve the lives and working conditions of auto-rickshaw drivers by providing them with a platform to organize and advocate for their interests. By creating a strong union, the project aims to increase the bargaining power of auto-rickshaw drivers, improve their economic prospects, and enhance their social status.

1.1 Abstract:

The Auto Rickshaw Union Portal is a web-based platform developed to meet the specific needs of auto rickshaw drivers within a union. It serves as a centralized hub for drivers to access essential services, communicate with the union, and stay updated with relevant information.

The abstract of the project highlights the core features and functionalities of the Auto Rickshaw Union Portal. It emphasizes the platform's goal of improving communication, collaboration, and support among auto rickshaw drivers, while also streamlining administrative tasks and enhancing transparency within the union.

The abstract briefly mentions the key objectives of the portal, such as providing a platform for grievance submission and resolution, centralizing document management, and facilitating membership management. It also emphasizes the use of technology to empower auto rickshaw drivers, strengthen their collective voice, and foster a more inclusive and efficient union environment.

Overall, the abstract sets the tone for the project, outlining the main focus areas and highlighting the positive impact the Auto Rickshaw Union Portal aims to achieve for auto rickshaw drivers and the entire industry.

1.2 Existing System and Need for System

There are various existing systems that provide services related to auto-rickshaws. Here are a few examples:

- 1. Ola Auto and Uber Auto: These are ride-hailing services that allow passengers to book autorickshaws through their mobile applications. These services provide convenience and safety for passengers, and a source of income for auto-rickshaw drivers.
- 2. Auto-rickshaw associations: There are various auto-rickshaw associations that operate in different regions of the country. These associations provide services such as insurance, training, and legal advice to their members. They also represent the interests of their members in negotiations with the government and other stakeholders.
- 3. Online marketplaces: There are various online marketplaces, such as Olx and Quikr, that allow auto-rickshaw drivers to buy and sell used vehicles and auto parts. These marketplaces provide a platform for auto-rickshaw drivers to access a wider customer base and increase their revenue.
- 4. Government services: The RTO provides various services related to auto-rickshaws, such as registration, fitness certificates, permits, and taxation. These services are essential for autorickshaw drivers to operate legally and comply with safety regulations.
- 5. Social media groups: There are various social media groups, such as Facebook groups, that bring together auto-rickshaw drivers and provide a platform for sharing information, networking, and discussing issues related to their profession.

These are some examples of existing systems that provide services related to auto-rickshaws. However, there is still a need for a comprehensive platform that provides all the necessary services and resources for auto-rickshaw drivers in a single place. This is where the Auto-Rickshaw Union Portal can play a vital role.

1.3 Scope of System

The scope of the Auto-rickshaw Union system includes the following:

- 1. Platform for communication: The system will provide a platform for auto-rickshaw drivers to communicate with each other, share information, and build a sense of community.
- 2. Access to essential resources: The system will provide access to essential resources such as training, legal advice, and financial management tools.
- 3. Marketing and promotion: The system will provide a platform for auto-rickshaw drivers to market their services, attract customers, and increase their revenue.
- 4. Safety and security: The system will provide a platform for auto-rickshaw drivers to report safety concerns, harassment, and other issues related to their profession.
- 5. Advocating for their interests: The system will provide a platform for auto-rickshaw drivers to advocate for their interests, negotiate with policymakers, and address their concerns.
- 6. Social networking: The system will provide a platform for auto-rickshaw drivers to build a positive image, enhance their social status.

Overall, the Auto-rickshaw Union system aims to empower auto-rickshaw drivers and improve their quality of life by providing them with a comprehensive platform that can help them overcome the challenges they face and achieve their goals

1.4 Operating Environment Hardware and Software

SERVERSIDE REQUIREMENTS:

Hardware Requirement:

• Processor : Intel Core i7 & 2,00Hz

• RAM : 4GB & Above

Hard disk : 128 GBCache Memory : 514 KB

Software Requirement:

• Operating System :Windows 10

• Front-end Language : HTML / CSS /BOOTSTRAP/ PHP

Back-end Language :MySQLServer : Xampp.

CLIENT SIDE REOUIREMENTS

Hardware Requirement:

• Processor : Intel Core i7 & 2,00Hz

• RAM : 4GB & Above

Hard disk : 128 GBCache Memory : 514 KB

Software Requirement:

• Operating System :Windows 10

• Browser :Chrome, Firefox, Mozilla

1.5 Brief Description of Technology Used

HTML: HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages. HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML and it was published in late 1999.

CSS: Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable. CSS handles the look and feel part of a web page. Using CSS, you can control the colour of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colours are used, layout designs, and variations in display for different devices and screen sizes as well as a variety of other effects.

BOOTSTRAP: Bootstrap is a widely-used open-source front-end framework for web development, providing a collection of HTML, CSS, and JavaScript components and tools that enable developers to build responsive, mobile-first websites with ease. Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. It is absolutely free to download and use. It is a front-end framework used for easier and faster web development. It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many others.

MySQL: 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.

PHP: PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. PHP stands for Hypertext Pre-processor. It is an interpreted language, i.e., there is no need for compilation. It is faster than other scripting languages, for example, ASP and JSP. It is a server-side scripting language, which is used to manage the dynamic content of the website. It can be embedded into HTML.PHP is an object-oriented language. It is an open-source scripting language. It is simple and easy to learn language.

CHAPTER 2: PROPOSED SYSTEM

2.1 Feasibility Study:

A feasibility study is an important step in the project planning process that assesses the viability and potential success of a proposed project. It evaluates various aspects of the project, such as technical, economic, operational, legal, and scheduling factors, to determine if the project is feasible and worth pursuing.

Technical Feasibility: Assess the technical requirements and determine if the necessary technology and resources are available or can be acquired. Evaluate the technical complexity and potential challenges that may arise during project development and implementation.

Economic Feasibility: Analyze the financial aspects of the project, including cost estimates, potential revenue, and return on investment. Consider factors such as funding sources, budget constraints, and the overall financial viability of the project.

Operational Feasibility: Evaluate the impact of the proposed project on existing operations and processes. Consider the compatibility of the project with the organization's current infrastructure and resources. Identify any operational risks, constraints, or dependencies that may affect the project's success.

Legal and Regulatory Feasibility: Assess the legal and regulatory requirements associated with the project. Determine if the project complies with applicable laws, regulations, permits, licenses, and other legal obligations. Identify any potential legal or compliance risks that need to be addressed.

Stakeholder Analysis: Identify key stakeholders and assess their level of interest, influence, and support for the project. Understand the expectations and requirements of stakeholders and consider their perspectives in the feasibility assessment. Based on the findings of the feasibility study.

It's important to note that a feasibility study is not a guarantee of project success, but rather a tool to assess the project's potential and identify potential challenges. Ongoing evaluation and monitoring throughout the project lifecycle are essential to ensure the project remains on track and aligned with the initial feasibility assessment.

2.2 Objectives of the proposed system

- **1. Enhancing Communication:** The system aims to improve communication channels between auto rickshaw drivers and the union, enabling seamless and efficient communication for announcements, updates, and important information.
- **2. Streamlining Membership Management:** The system facilitates the management of union memberships, providing an easy and centralized platform for auto rickshaw drivers to register, renew their membership, and access relevant membership-related services.
- **3. Document Management:** The system provides a centralized repository for important union documents, such as Permit, PUC, RC, Deriving licences, Fitness certificate, etc. It allows drivers to access and download relevant documents, ensuring transparency and easy availability of information.
- **4. Payment Management (Optional):** If included, the system facilitates payment management, allowing drivers to make union-related payments, such as membership fees or contributions, conveniently and securely through the online portal.
- **5. Empowering Auto Rickshaw Drivers:** The system aims to empower auto rickshaw drivers by providing them with a platform to voice their concerns, participate in decision-making processes, and contribute to the betterment of the industry. It fosters a sense of unity, solidarity, and empowerment among the drivers.
- **6. Efficiency and Effectiveness:** The system aims to improve the overall efficiency and effectiveness of union operations by automating manual processes, reducing paperwork, and streamlining administrative tasks. This allows the union to allocate resources more effectively and focus on core objectives.

These objectives collectively contribute to the creation of a robust Auto Rickshaw Union Portal that empowers drivers, enhances communication and collaboration, improves operational efficiency, and fosters a stronger and more united auto rickshaw community.

2.3Users of the System

Admin Module (Union Head): Union Head will be primary leader & responsible for representing its stakeholder which are auto rickshaw driver. The union head or administrator is responsible for managing the overall operations of the auto rickshaw union. They utilize the system to oversee and monitor membership management, grievance resolution, document management, and communication with the drivers. The union head may also have administrative privileges to manage user accounts, update information, and generate reports. System administrators are responsible for maintaining and managing the technical aspects of the Auto Rickshaw Union Portal.

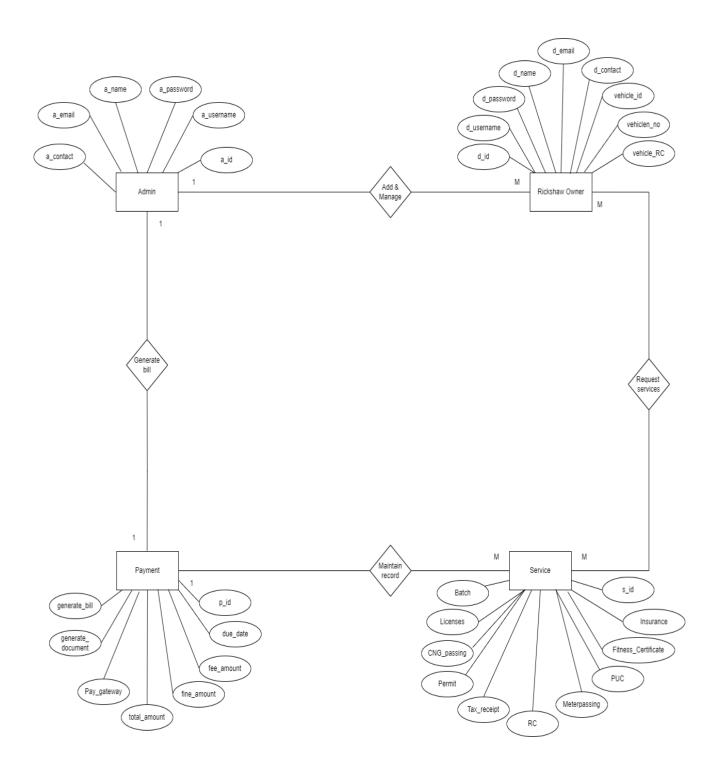
- Registration
- Login
- Dashboard
- Membership for Auto Rickshaw Owner
- Events & Meeting Manage
- Manage Auto Rickshaw Owner Request

Auto Rickshaw Owner Module: This module enables new auto-rickshaw drivers to register themselves with the union by providing their personal details and vehicle information. The auto rickshaw drivers are the main users of the system. They use the portal to access various services and functionalities offered by the union. This includes registering as union members, submitting grievances, accessing union documents, staying updated with news and announcements, and participating in discussions and decision-making processes. Owner is primary user of website would use it to access a range of functionalities such as:

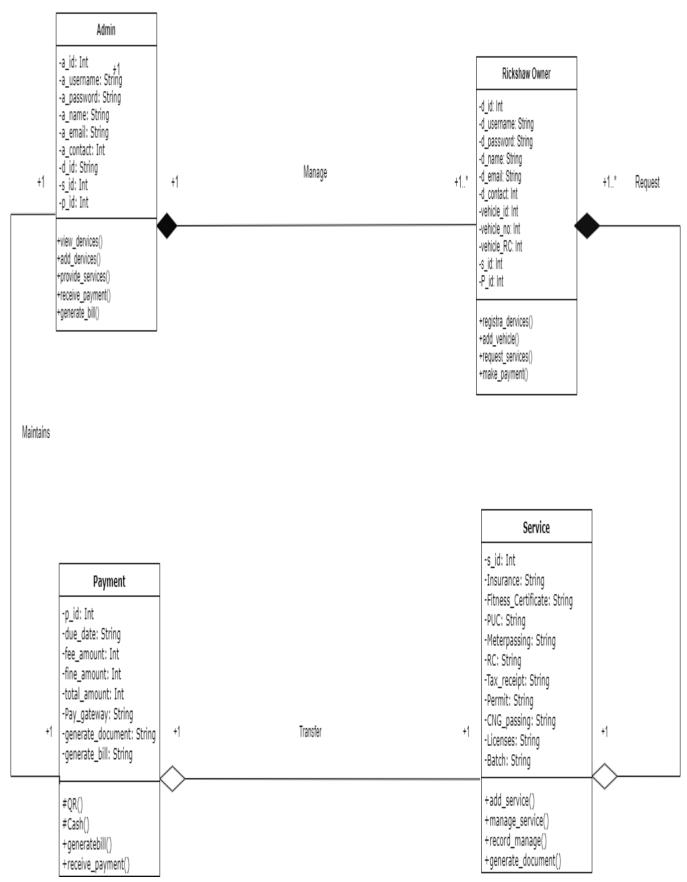
- Registration
- Login
- Rickshaw Driver Profile Management.
- Request Permit, licence, Complain, Challan, RTO fitness Certification,
 Insurances, and Vehicle Document.

CHAPTER 3: ANALYSIS AND DESIGN

3.1 ENTITY-RELATIONSHIP DIAGRAM

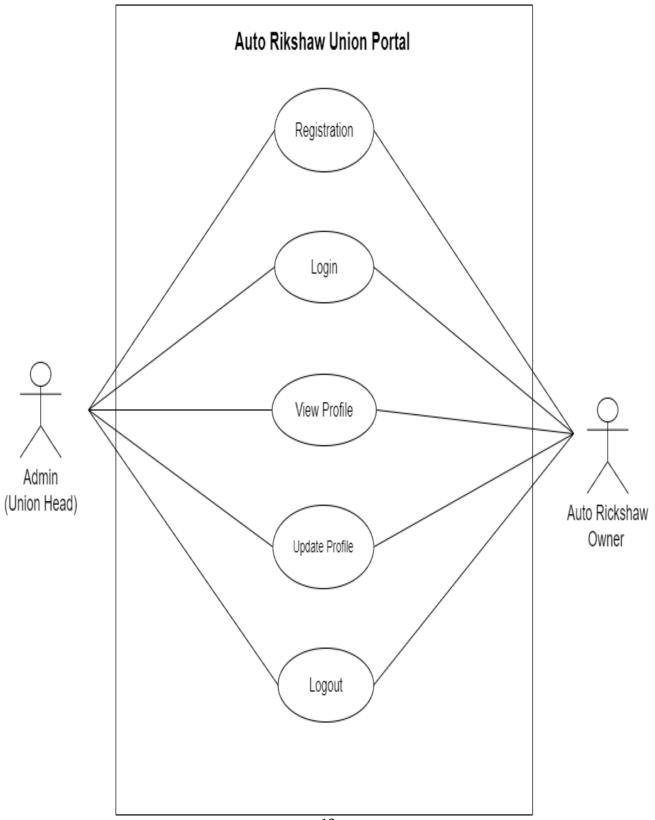


3.2 CLASS DIAGRAM



3.3 USE CASE DIAGRAM:

PROFILE MODULE



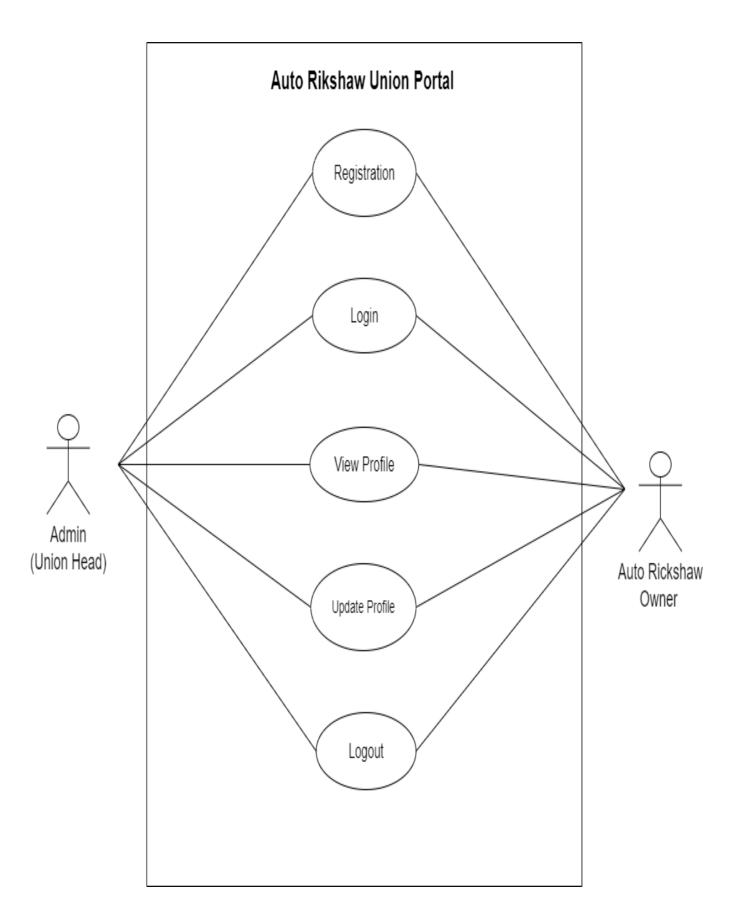
ADMIN UNION HEAD MODULE



AUTO RICKSHAW OWNER MODULE

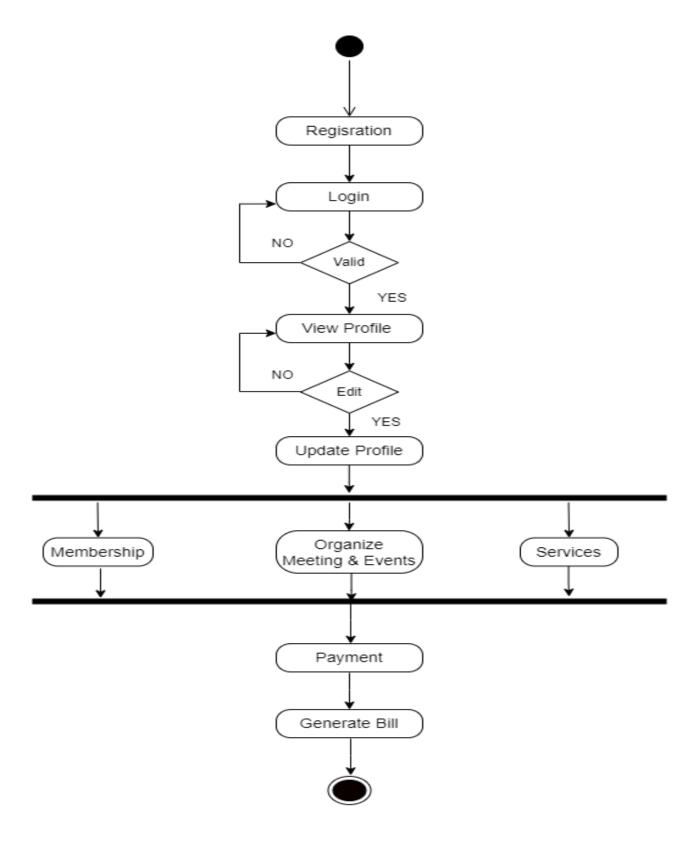


PAYMENT MODULE

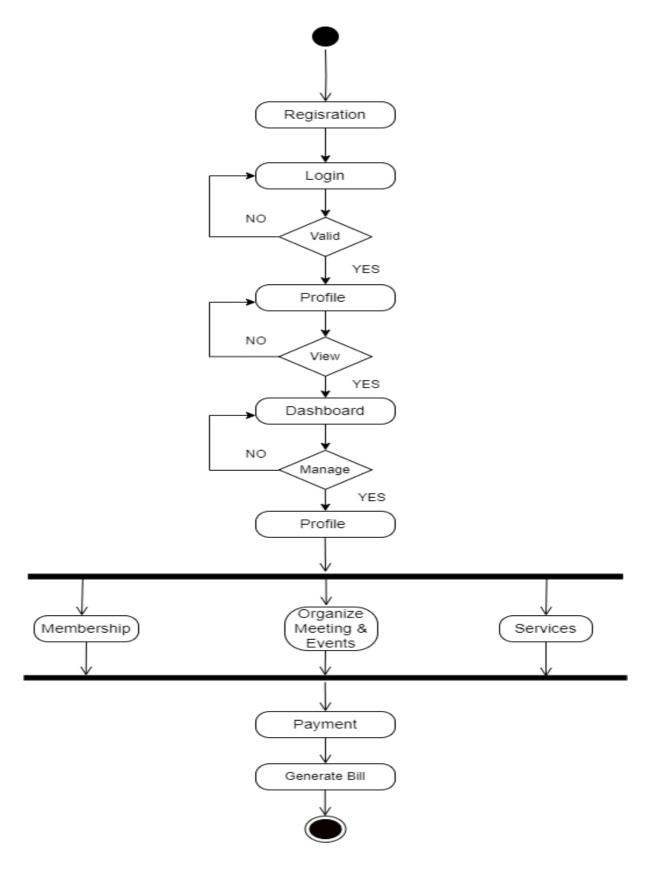


3.4 ACTIVITY DIAGRAM:

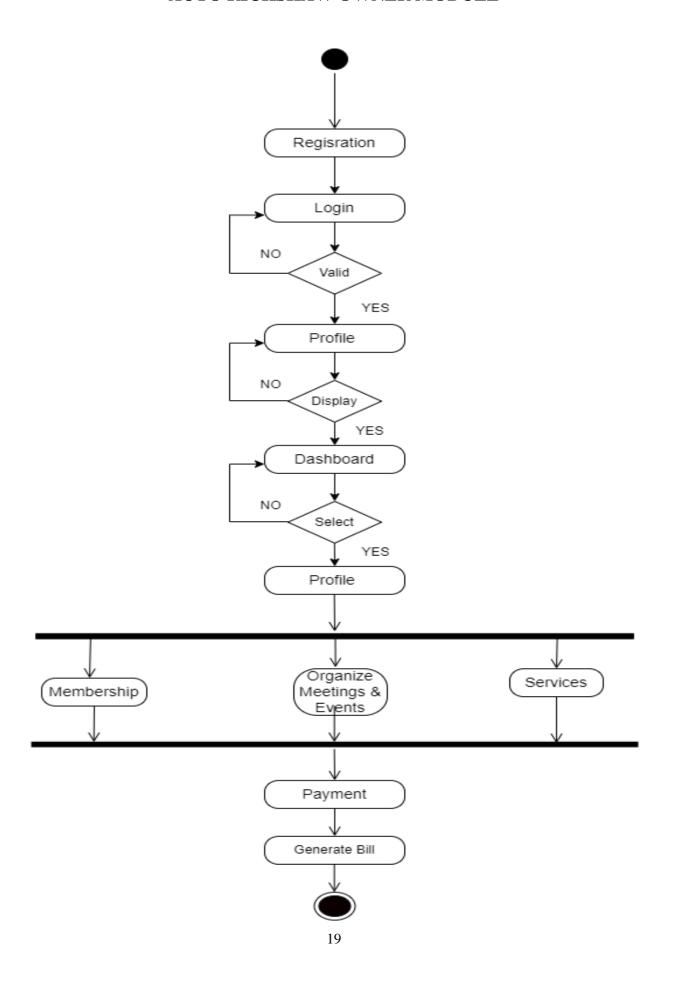
PROFILE MODULE



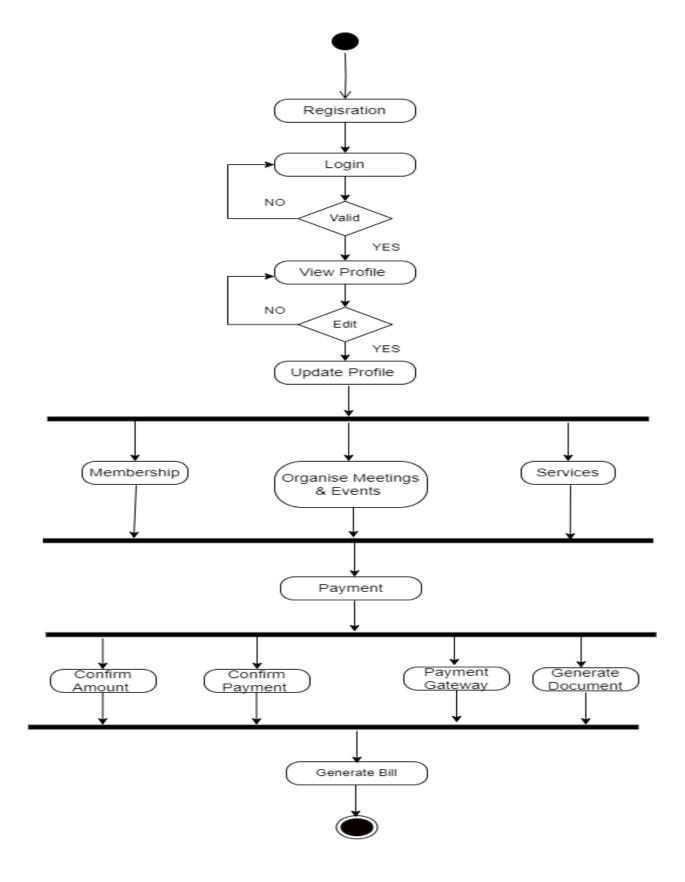
ADMIN UNION HEAD MODULE



AUTO RICKSHAW OWNER MODULE

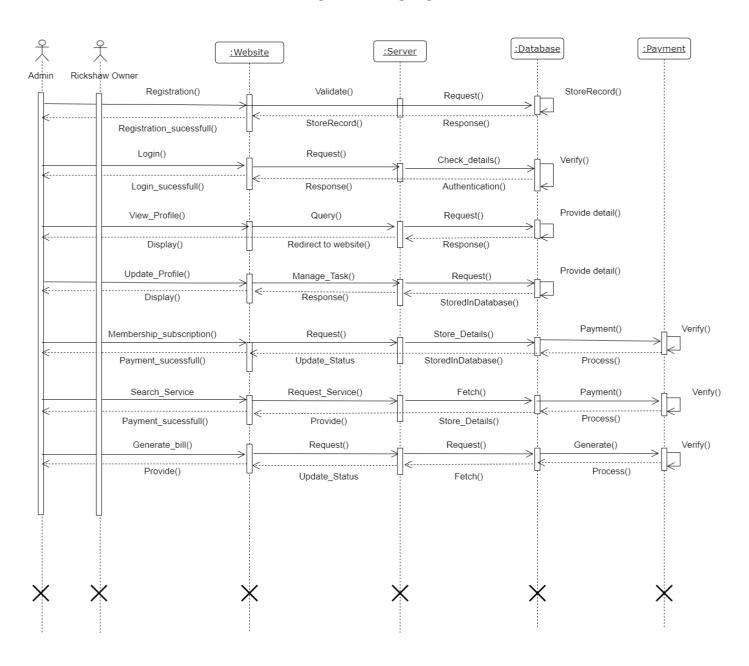


PAYMENT MODULE

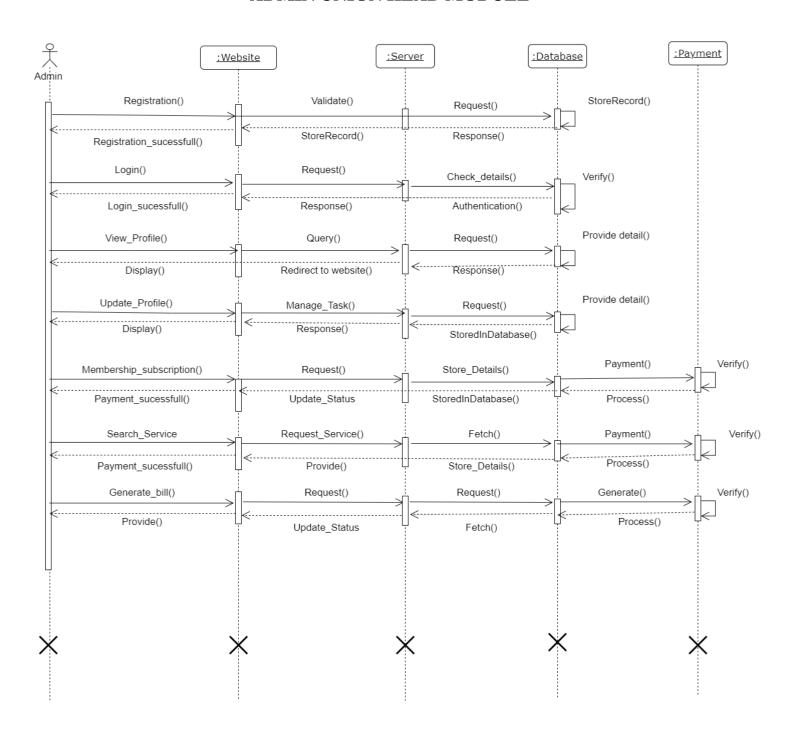


3.5 SEQUENCE DIAGRAM:

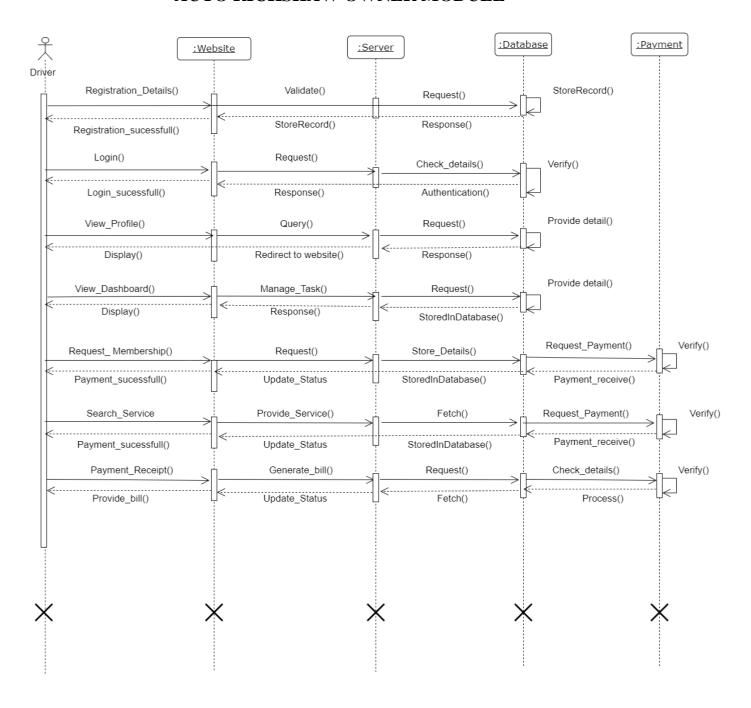
PROFILE MODULE



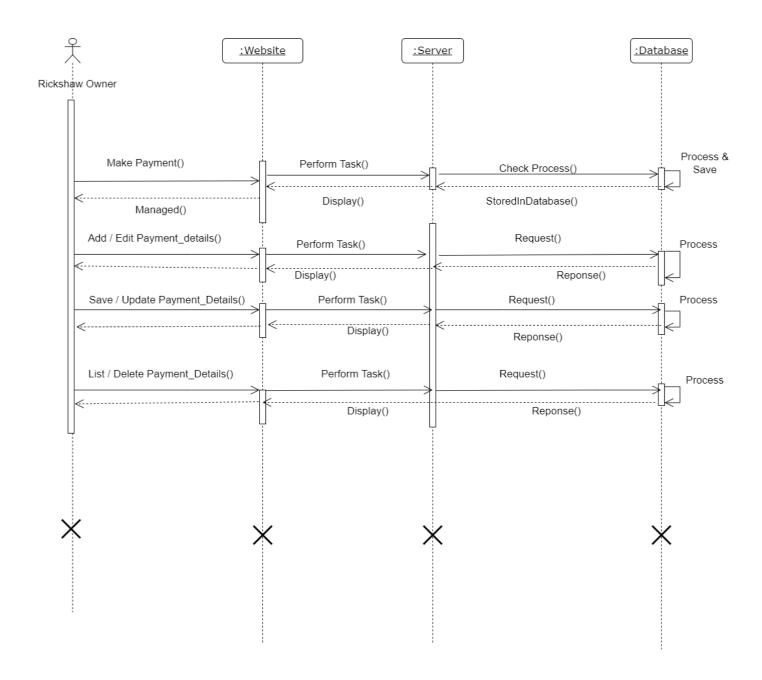
ADMIN UNION HEAD MODULE



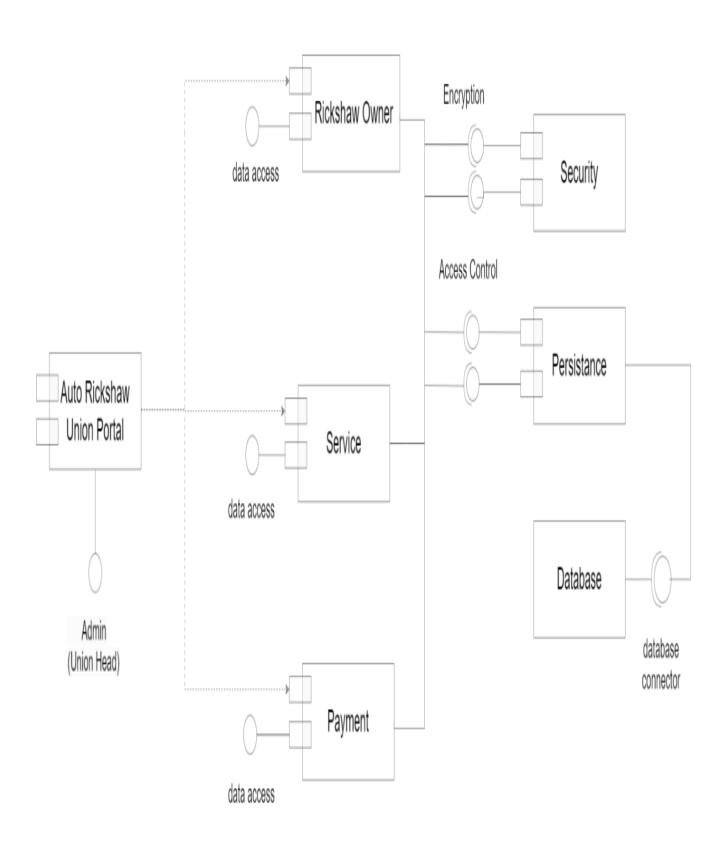
AUTO RICKSHAW OWNER MODULE



PAYMENT MODULE



3.6 COMPONENT DIAGRAM



3.8 TABLE DESIGN

ADMIN TABLE

Sr.no	Field name	Field size	Data type	Description	Constraint
1	a_id	8	Int	Admin id	Primary key
2	a_username	10	Varchar	Admin username	Not null
3	a_password	12	Varchar	Admin password	Not null
4	a_name	12	Varchar	Admin name	Not null
5	a_email	27	Varchar	Admin email	Not null
6	a_contact	11	Int	Admin contact	Not null
7	Pay_id	8	Int	Payment id	Foreign key

RICKSHAW OWNER TABLE

Sr.no	Field name	Field size	Data type	Description	Constraint
1	d_id	8	Int	Driver id	Primary key
2	d_username	10	Varchar	Driver username	Not null
3	d_password	12	Varchar	Driver password Not	
4	d_name	12	Varchar	Driver name	Not null
5	d_email	27	Varchar	Driver email	Not null
6	d_contact	11	Int	Driver contact	Not null
7	vehicle_id	10	Varchar	Driver vehicle id	Not null
8	vehicle_no	10	Varchar	Driver vehicle no	Not null
9	vehicle_RC	10	Varchar	Varchar Driver vehicle RC	
10	P_id	8	Int Payment type		Foreign key

SERVICE TABLE

Sr.no	Field name	Field size	Data type	Description	Constraint
1	s_id	8	Int	Driver id	Primary key
2	Insurances	10	Varchar	Driver username	Not null
3	Fitness_Certificate	10	Varchar	Driver password	Not null
4	PUC	10	Varchar	Driver name	Not null
5	Meterpassing	10	Varchar	Driver email Not nu	
6	RC	10	Int	Driver contact	Not null
7	Tax_receipt	10	Varchar	Driver license Not n	
8	Permit	10	Varchar	Driver vehicle info Not no	
9	CNG_passing	10	Varchar	Driver CNG passing	Not null
10	Licenses	10	Varchar	archar Diverting Licenses	
11	Batch	10	Varchar Driver Batch		Not null
12	P_id	10	Int	Payment type Foreig	

PAYMENT TABLE

Sr.no	Field name	Field size	Data type	Description	Constraint
1	p_id	8	Int	Payment id	Primary key
2	due_date	8	Int	Payment due date	Not null
3	fee_amount	10	Int	Amount Charge	Not null
4	fine_amount	10	Int	Fine Amount	Not null
5	total_amount	10	Int	Total Amount	Not null
6	pay_gateway	10	Varchar	Payment Gateway	Not null
7	generate_ document	10	Varchar	Generate Document	Not null
8	generate_bill	20	Varchar	Generate Bill	Not null
9	d_id	8	Int	Driver id	Foreign key
10	a_id	8	Int	Admin id Fo	
11	S_id	10	Int	Service id Fore	

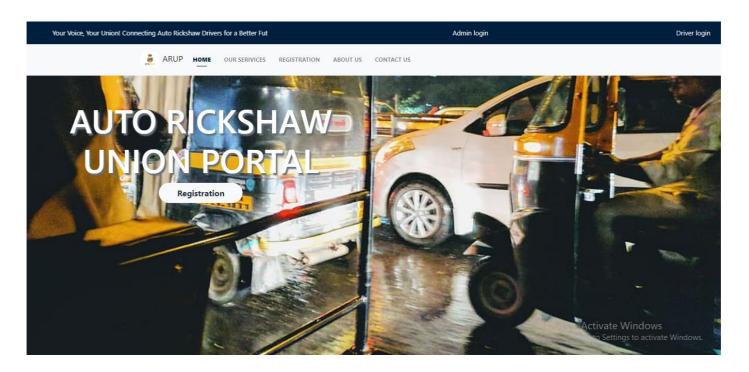
DATA DICTIONARY

Sr.no	Field Name	Field size	Data type	Description	Constrains	Table Name
1	a_contact	11	Int	Admin contact	Not null	Admin
2	a_email	27	Varchar	Admin email	Not null	Admin
3	a_id	8	Int	Admin id	Primary key	Admin, Payment
4	a_name	12	Varchar	Admin name	Not null	Admin
5	a_password	12	Varchar	Admin password	Not null	Admin
6	a_username	10	Varchar	Admin username	Not null	Admin
7	Batch	10	Varchar	Driver Batch	Not null	Service
8	CNG_passing	10	Varchar	Driver CNG passing	Not null	Service
9	d_contact	11	Int	Driver contact	Not null	Rickshaw Owner
10	d_email	27	Varchar	Driver email	Not null	Rickshaw Owner
11	d_id	8	Int	Driver id	Primary key	Rickshaw Owner, Payment
12	d_name	12	Varchar	Driver name	Not null	Rickshaw Owner
13	d_password	12	Varchar	Driver password	Not null	Rickshaw Owner
14	d_username	10	Varchar	Driver username	Not null	Rickshaw Owner
15	due_date	8	Int	Payment due date	Not null	Payment
16	fee_amount	10	Int	Amount Charge	Not null	Payment
17	fine_amount	10	Int	Fine Amount	Not null	Payment
18	Fitness_Certificate	10	Varchar	Driver password	Not null	Service
19	generate_document	10	Varchar	Generate Document	Not null	Payment
20	generate_bill	20	Varchar	Generate Bill	Not null	Payment

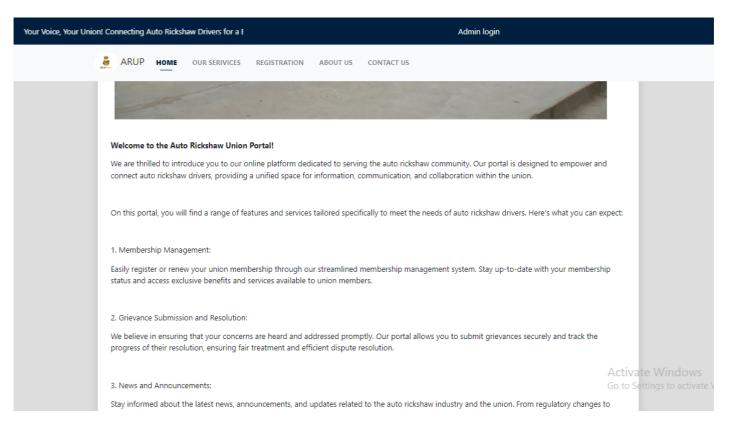
21	Insurances	10	Varchar	Driver username	Not null	Service
22	Licenses	10	Varchar	Diverting Licenses	Not null	Service
23	Meterpassing	10	Varchar	Driver email	Not null	Services
24	p_id	8	Int	Payment type	Foreign key	Payment, Service, Admin, Rickshaw Owner
25	pay_gateway	10	Varchar	Payment Gateway	Not null	Payment
26	Permit	10	Varchar	Driver vehicle info	Not null	Service
27	PUC	10	Varchar	Driver name	Not null	Service
28	RC	10	Int	Driver contact	Not null	Service
29	s_id	8	Int	Driver id	Primary key	Service, Payment
30	Tax_receipt	10	Varchar	Driver license	Not null	Service
31	total_amount	10	Int	Total Amount	Not null	Payment
32	vehicle_id	10	Varchar	Driver vehicle id	Not null	Rickshaw Owner
33	vehicle_no	10	Varchar	Driver vehicle no	Not null	Rickshaw Owner
34	vehicle_RC	10	Varchar	Driver vehicle RC	Not null	Rickshaw Owner

3.10 Sample Input and Output Screens

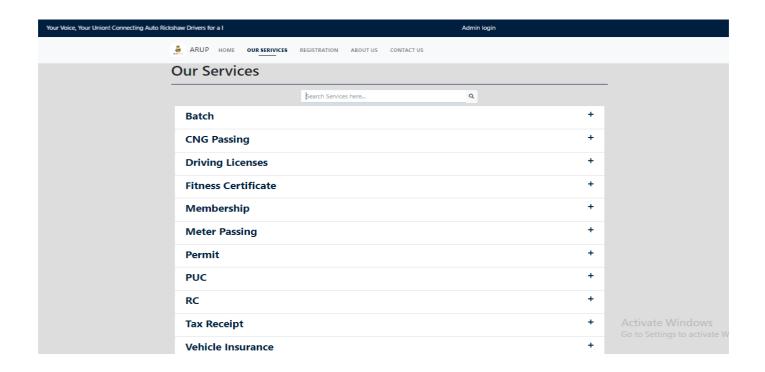
HOME PAGE



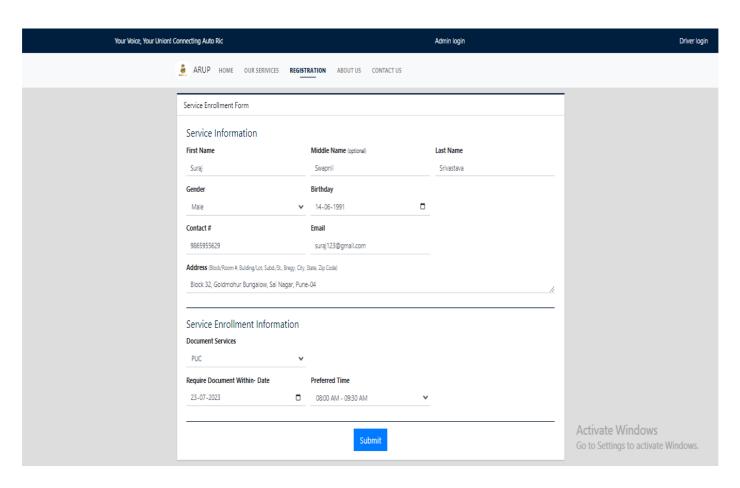
WELCOME SCREEN



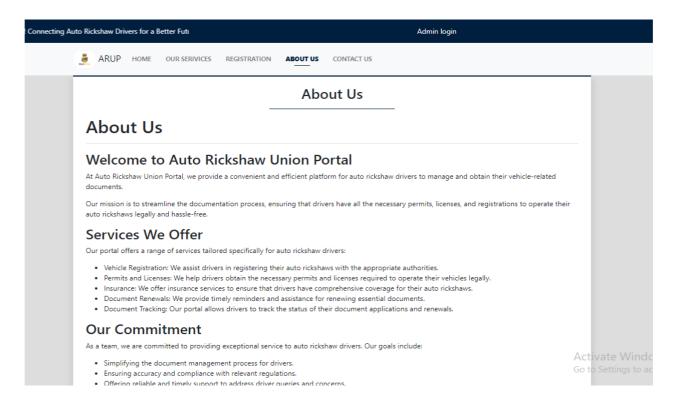
SERVICE PAGE – Our Services



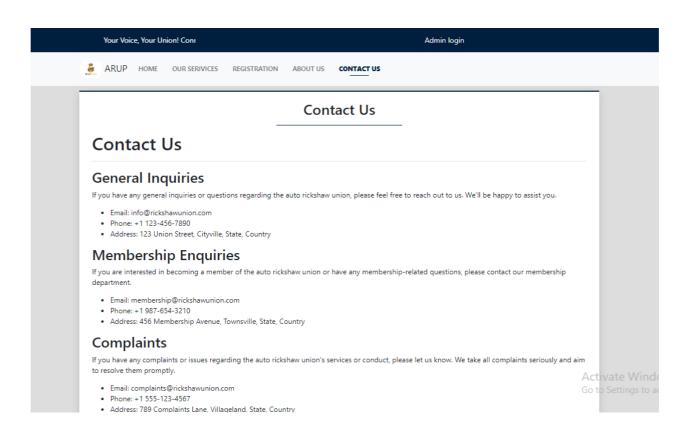
REGISTRATION - Service Enrollment Form



ABOUT US



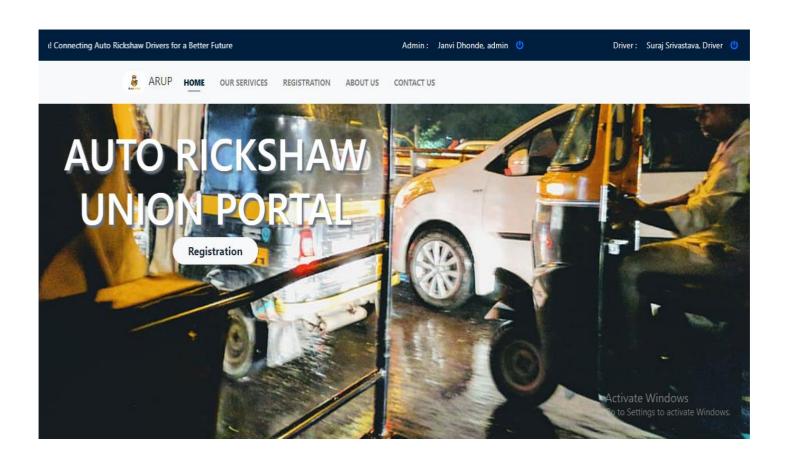
CONTACT US



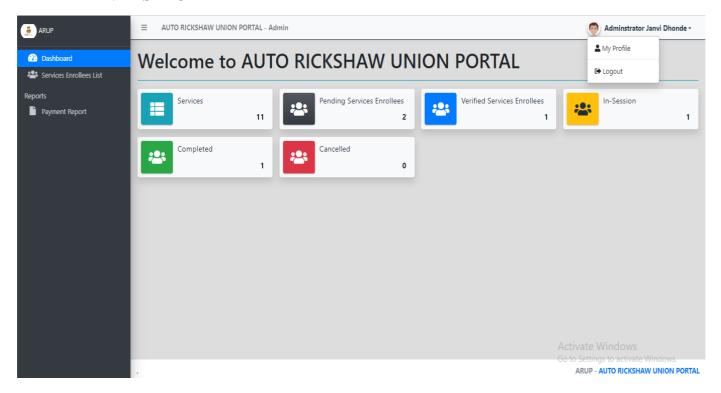
LOGIN PAGE: ADMIN



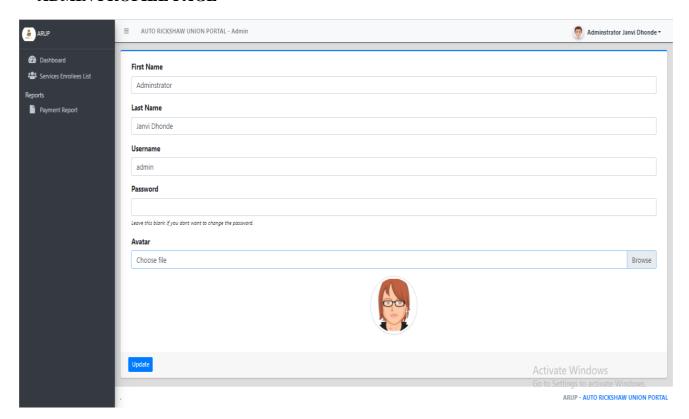
ADMIN LOGIN SUCCESSFULL



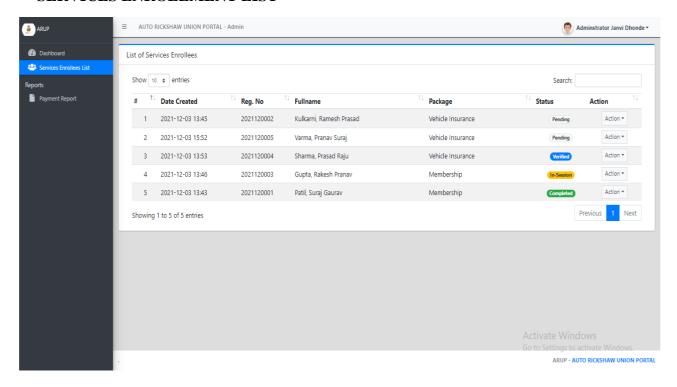
ADMIN DASHBOARD



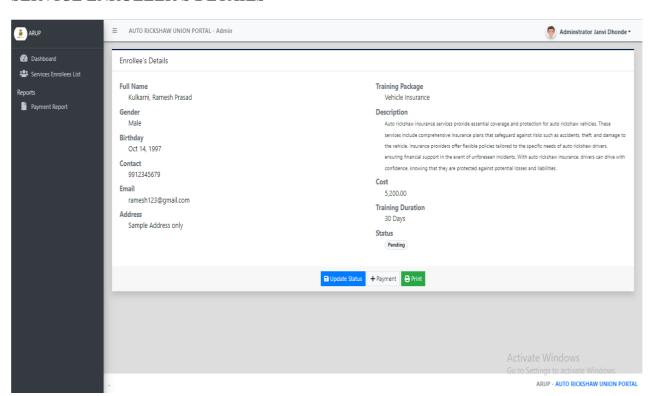
ADMIN PROFILE PAGE



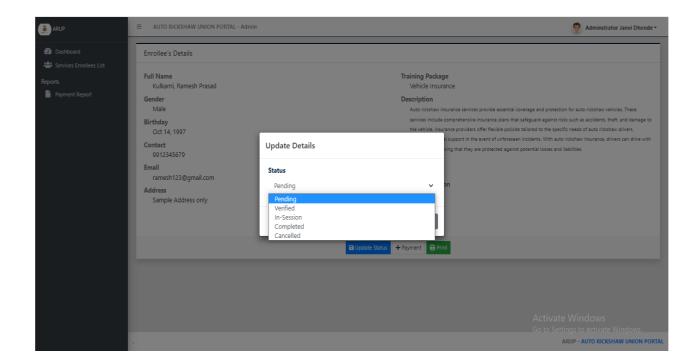
SERVICES ENROLLMENT LIST



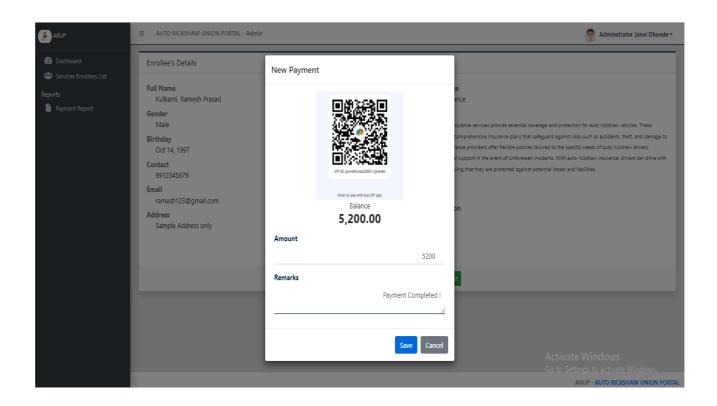
SERVICE ENROLLER'S DETAILS



SERVICE ENROLLER'S DETAILS UPDATE



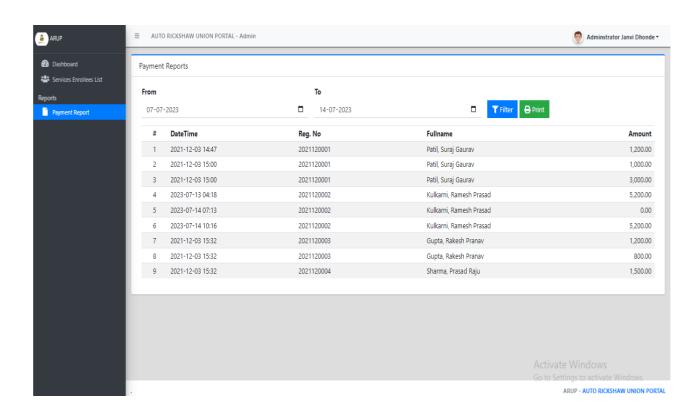
SERVICE PAYMENT: QR CODE



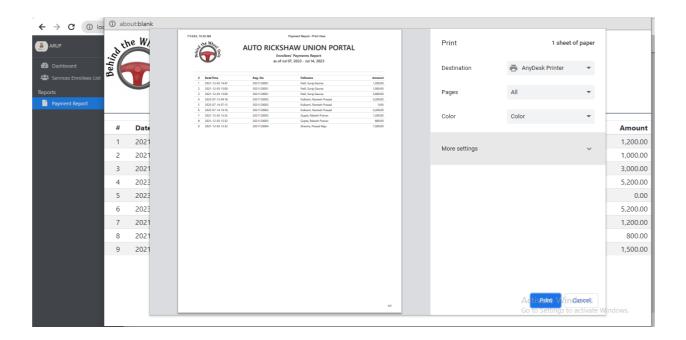
SERVICES REPORT



PAYMENT REPORT LIST



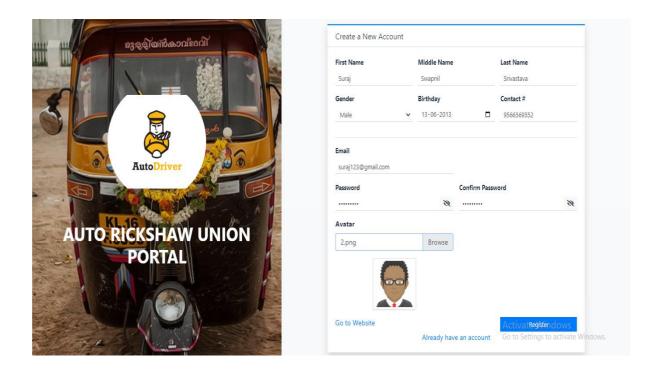
PAYMENT REPORT



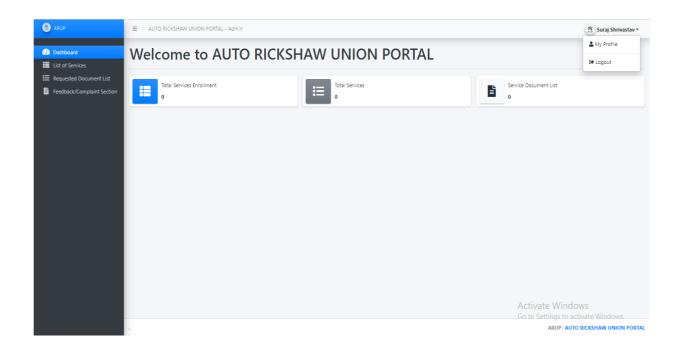
LOGIN PAGE: DRIVER



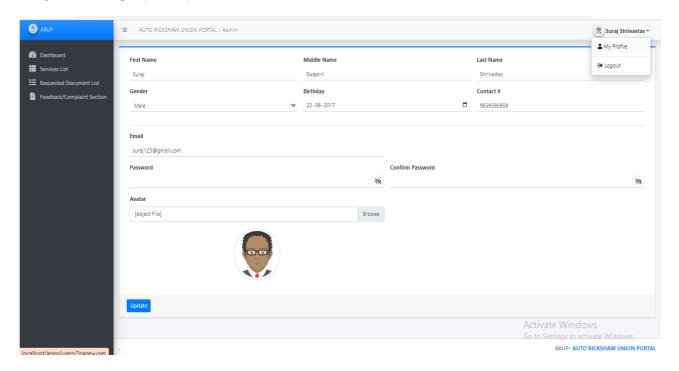
REGISTRATION PAGE



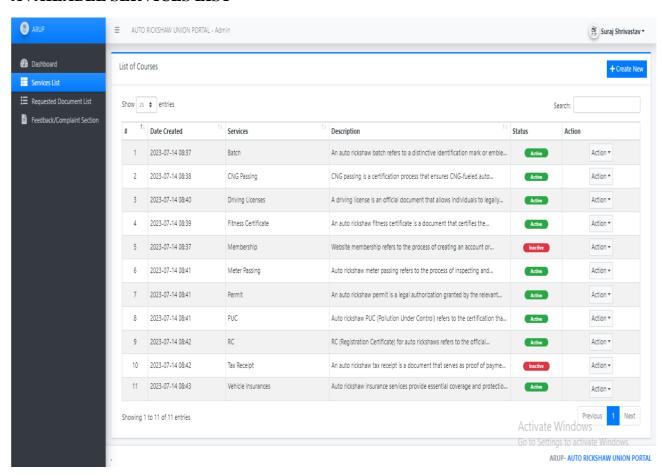
DASHBOARD: DRIVER



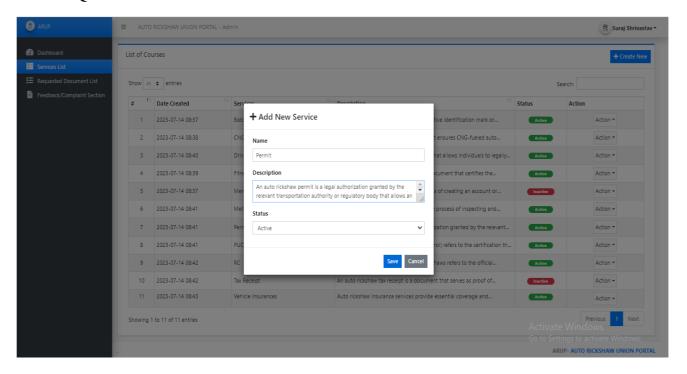
PROFILE PAGE: DRIVER



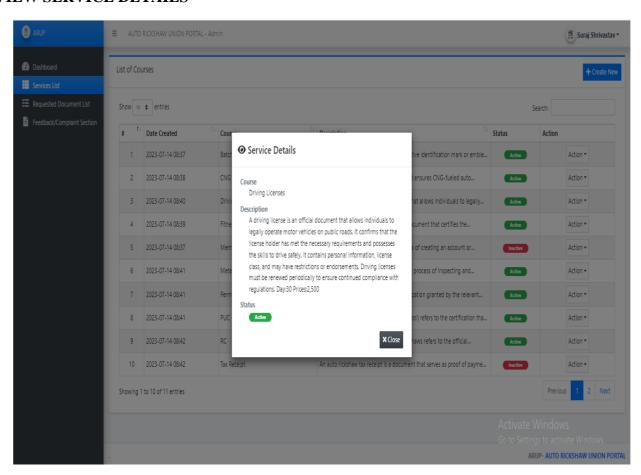
AVAILABLE SERVICES LIST



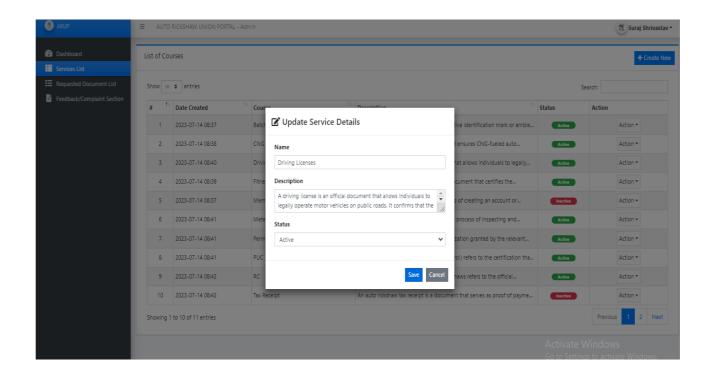
ADD REQUIRE DOCUMENT SERVICES



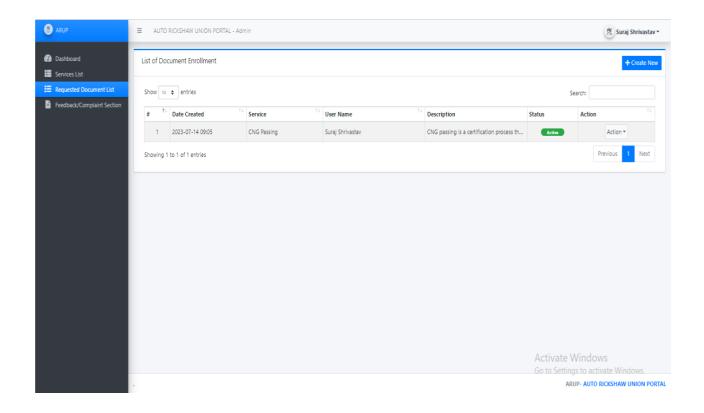
VIEW SERVICE DETAILS



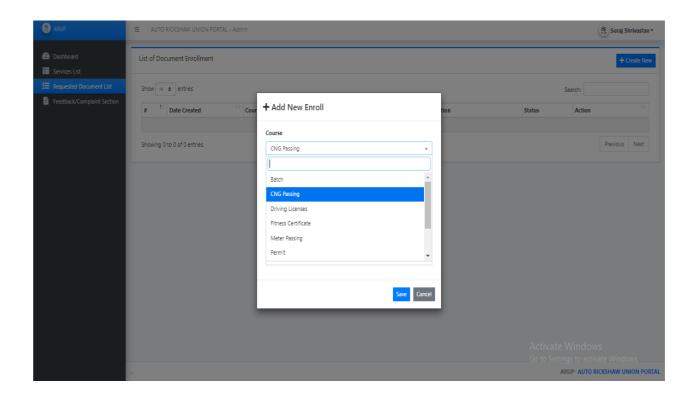
UPDATE SERVICE DETAILS



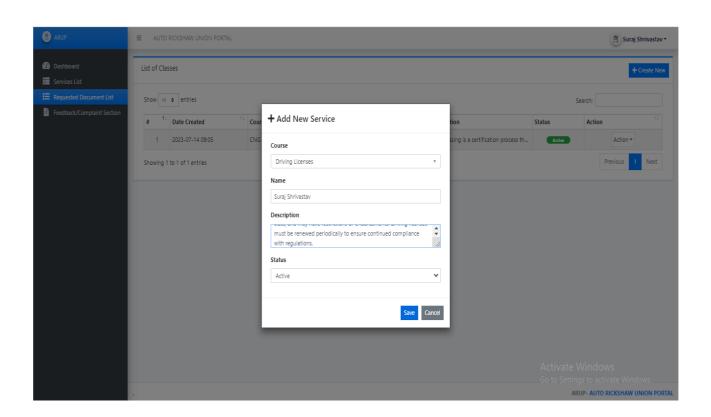
REQUESTED DOCUMENT LIST



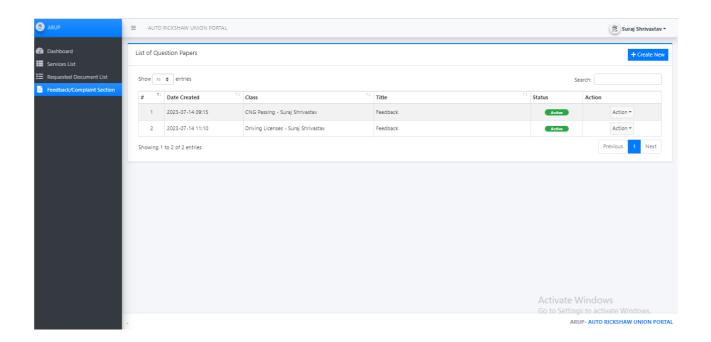
ADD NEW REQUEST DOCUMENT



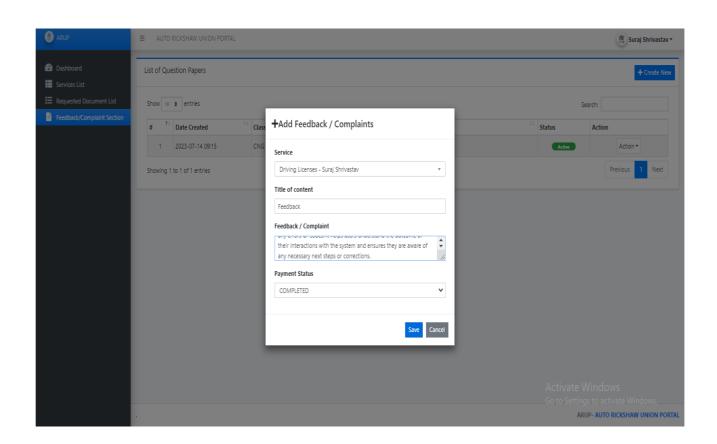
ADD NEW SERVICES



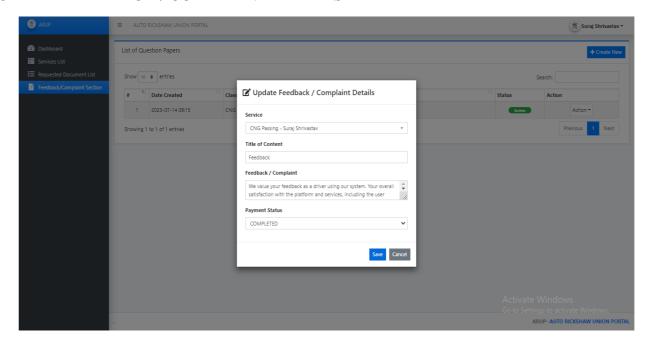
FEEDBACK / COMPLAINT FORM



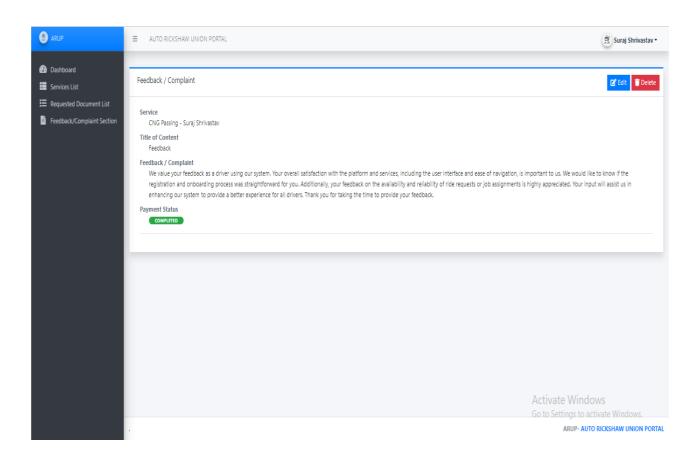
ADD FEEDBACK / COMPLAINTS



UPDATE FEEDBACK / COMPLAINT DETAILS



FEEDBACK / COMPLLAINTS REPORT



CHAPTER 4: CODING Sample code

```
index.php
<?php require_once('../config.php'); ?>
<!DOCTYPE html>
<html lang="en" class="" style="height: auto;">
<?php require_once('inc/header.php') ?>
 <body class="sidebar-mini layout-fixed control-sidebar-slide-open layout-navbar-fixed"
sidebar-mini-md sidebar-mini-xs" data-new-gr-c-s-check-loaded="14.991.0" data-gr-ext-
installed="" style="height: auto;">
  <div class="wrapper">
   <?php require_once('inc/topBarNav.php') ?>
   <?php require_once('inc/navigation.php') ?>
   <?php $page = isset($_GET['page']) ? $_GET['page'] : 'home'; ?>
   <?php if($_settings->chk_flashdata('success')): ?>
   <script>
    alert_toast("<?php echo $_settings->flashdata('success') ?>",'success')
   </script>
  <?php endif;?>
   <!-- Content Wrapper. Contains page content -->
   <div class="content-wrapper pt-3" style="min-height: 567.854px;">
    <!-- Main content -->
     <section class="content">
      <div class="container-fluid">
       <?php
        if(!file_exists($page.".php") && !is_dir($page)){
           include '404.html';
        }else{
         if(is_dir($page))
           include $page.'/index.php';
         else
           include $page.'.php';
        }
      </div>
```

```
</section>
    <!-- /.content -->
 <div class="modal fade" id="confirm_modal" role='dialog'>
  <div class="modal-dialog modal-md modal-dialog-centered" role="document">
   <div class="modal-content rounded-0">
    <div class="modal-header">
    <button type="button" class="btn btn-primary btn-sm rounded-0" id='confirm'
onclick="">Continue</button>
    <button type="button" class="btn btn-secondary btn-sm rounded-0" data-
dismiss="modal">Close</button> </div>
 <div class="modal fade" id="uni modal" role='dialog'>
  <div class="modal-dialog modal-md modal-dialog-centered" role="document">
   <div class="modal-content rounded-0">
    <div class="modal-header">
    <h5 class="modal-title"></h5>
    <button type="button" class="btn btn-primary btn-sm rounded-0" id='submit'
onclick="$('#uni_modal form').submit()">Save</button>
    <button type="button" class="btn btn-secondary btn-sm rounded-0" data-
dismiss="modal">Cancel</button>
 <div class="modal fade" id="uni_modal_right" role='dialog'>
  <div class="modal-dialog modal-full-height modal-md" role="document">
   <div class="modal-content rounded-0">
    <div class="modal-header">
    <h5 class="modal-title"></h5>
    <button type="button" class="close" data-dismiss="modal" aria-label="Close">
      <span class="fa fa-arrow-right"></span>
   <div class="modal-body">
 <div class="modal fade" id="viewer_modal" role='dialog'>
  <div class="modal-dialog modal-md" role="document">
   <div class="modal-content rounded-0">
        <button type="button" class="btn-close" data-dismiss="modal"><span class="fa fa-
times"></span></button>
 </body>
</html>
```

CHAPTER 5: LIMITATIONS OF SYSTEM

- 1. Technical Constraints: The system's functionality may be limited by the available technology infrastructure, such as internet connectivity, hardware capabilities, or compatibility with certain devices or browsers.
- 2. User Adoption and Digital Literacy: The success of the system relies on the active participation and adoption by auto rickshaw drivers. Some drivers may have limited experience with technology or low digital literacy, which could pose challenges in their ability to fully utilize the system's features and benefits.
- 3. Connectivity and Reliability: The system heavily relies on internet connectivity for users to access and interact with it. In areas with poor or unreliable internet connections, users may face difficulties in using the system consistently and efficiently.
- 4. Data Accuracy and Integrity: The system's effectiveness depends on accurate and up-to-date data input by auto rickshaw drivers and administrators. Any errors, omissions, or inconsistencies in the data entered into the system can impact the reliability and integrity of the information and reports generated.
- 5. Security Risks: The system needs to have robust security measures in place to protect user data and prevent unauthorized access. However, there is always a risk of security breaches, hacking attempts, or data theft, which could compromise the confidentiality and privacy of user information.
- 6. Maintenance and Support: The system requires regular maintenance and support to ensure smooth operation, address any technical issues, and provide user assistance. Limited availability of technical resources or delays in support response times could affect the system's overall performance and user experience.

It's important to identify and address these limitations during the planning and implementation phases of the system. Regular evaluation, feedback gathering, and continuous improvement efforts can help mitigate these limitations and enhance the overall performance and usability of the Auto Rickshaw Union Portal system.

CHAPTER 6: PROPOSED ENHANCEMENTS

- 1. Real-time Chat and Discussion Forum: Implement a real-time chat feature or a discussion forum within the portal to facilitate direct communication and collaboration among auto rickshaw drivers
- 2. Training and Skill Development: Expand the system to include an e-learning platform or a dedicated section for training resources. Provide interactive training modules, videos, and quizzes to help drivers enhance their skills, improve customer service.
- 3. Feedback and Rating System: Incorporate a feedback and rating system where passengers can provide feedback on their auto rickshaw journeys. This feedback will help drivers monitor their performance, identify areas for improvement, and maintain a high level of service quality.
- 4. Integration with Digital Payment Services: Enable integration with popular digital payment services to allow auto rickshaw drivers to accept digital payments from passengers. This will provide a convenient and secure payment option, reducing the dependence on cash transactions and enhancing financial inclusion.
- 5. Multi-language Support: Extend language support to accommodate multiple languages commonly spoken by auto rickshaw drivers and passengers. This feature will enhance accessibility, usability, and inclusivity, allowing a wider range of users to benefit from the system.
- 6. Social Media Integration: Integrate the system with popular social media platforms to enable easy sharing of union updates, news, and events. This integration will help reach a broader audience, increase engagement, and promote the union's initiatives within the larger community.

By implementing these proposed enhancements, the Auto Rickshaw Union Portal system can become even more valuable and effective in supporting the needs of auto rickshaw drivers, fostering community engagement, and improving overall union operations.

CHAPTER 7: CONCLUSION

In conclusion, the Auto Rickshaw Union Portal project has been designed to revolutionize the way auto rickshaw unions operate and support the needs of auto rickshaw drivers. The system offers a comprehensive platform that enhances communication, streamlines processes, and empowers drivers within the union.

Throughout the project, we have focused on addressing the unique challenges faced by auto rickshaw drivers and providing them with a user-friendly and efficient portal. The system facilitates membership management, grievance submission and resolution, document management, news and announcements, and optional payment management. These functionalities contribute to better communication, transparency, and accountability within the union.

By leveraging technology, we have aimed to enhance the drivers' experience and provide them with convenient access to essential services. The proposed system encourages driver participation, fosters a sense of unity, and empowers drivers to actively contribute to the betterment of their industry.

Through continuous user feedback and iterative improvements, we have strived to create a system that adapts to the evolving needs of the auto rickshaw community. Proposed enhancements such as a mobile application, real-time chat, GPS integration, and training resources will further enhance the system's functionality and usability.

The Auto Rickshaw Union Portal project aims to improve the overall welfare of auto rickshaw drivers, create a stronger sense of community, and promote a fair and sustainable auto rickshaw sector. By providing a centralized platform for communication, collaboration, and support, the system empowers drivers and ensures their voices are heard.

As the project concludes, we remain committed to providing ongoing support, maintenance, and future enhancements to ensure the Auto Rickshaw Union Portal continues to meet the evolving needs of the auto rickshaw community.

CHAPTER 8: BIBLIOGRAPHY

Book References:

- 1. Introducing HTML5 Bruce Lawson, Remy Sharp
- 2. Node.js in Action, 2ed by Alex Young, Bradley Meck
- 3. Mastering Node.js by Pasquali Sandro
- 4. Angular Essentials by Kumar Dhananjay
- 5. Complete Ref. PHP

Web References:

- 1. https://www.w3schools.com/
- 2. https://www.php.net/manual/en/index.php
- 3. https://phptherightway.com/
- 4. https://www.tutorialspoint.com/php/php_useful_resources.htm
- 5. https://www.w3schools.com/php
- 6. http://www.java2s.com/
- 7. https://stackoverflow.com/
- 8. https://docs.oracle.com/en/java/
- 9. https://www.mysql.com/
- 10. https://www.youtube.com/