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ABSTRACT

In an era where having a computer sing of your operations is a matter of prestige for some and necessity for others. Management of these projects is still an area which is ignored or done in traditional manner. We in a system called **CABLE MANAGEMENT SYSTEM** is integrated and automation software for cable operators. Cable operators will provide distributed channels to their customers.

This application provides most of the features required to manage the projects developed in a software development firm. To maintain their customers and number of users this software provides automation. In this System they can also maintain their staff member's details and their customer details. By using this system, they can meet their business requirements. This volume presents the manner in which the software was developed and how the various problems are tackled at the different levels to convince the user.

We hope that this package would prove to be an excellent environment for simpler for end user.

INTRODUCTION

2.1 Motivation :-

- I. **Problem Solving:** Developing a cable management system presents numerous challenges that require creative and innovative solutions. Overcoming these challenges can be intellectually stimulating and rewarding.
- II. **Real-World Impact:** Cable management systems play a crucial role in organizing and maintaining networks, both in residential and commercial settings. Knowing that your project could contribute to improving efficiency and reducing downtime in various industries can be highly motivating.
- III. **Learning Opportunity:** Building this system allows you to gain hands-on experience with web development, database management, user authentication, and more. Every step of the development process provides an opportunity to learn new skills and technologies.
- IV. **Personal Growth:** Successfully completing a project of this scale can boost your confidence and sense of accomplishment. It's a tangible demonstration of your abilities and can serve as a powerful addition to your portfolio or resume.
- V. **Community Contribution:** A well-designed cable management system can benefit not only yourself but also your community or workplace. By sharing your project with others, you have the potential to make a positive impact on their lives or work environments.
- VI. **Entrepreneurial Spirit:** If you're interested in entrepreneurship, this project could serve as a foundation for starting your own business. You could offer cable management solutions as a service or develop and sell the software to companies in need.
- VII. **Networking and Collaboration:** Working on this project may provide opportunities to collaborate with others, whether it's classmates, colleagues, or industry professionals. Building connections and networking can open doors to future opportunities and collaborations.
- VIII. **Future Career Prospects:** Experience gained from working on a real-world project like this can significantly enhance your employability. Whether you're seeking a job in software development, IT management, or another related field, the skills and knowledge acquired from this project will be valuable assets.

2.2 Problem Statement:-

- I. **Optimizing Cable Layout:** One challenge could involve designing algorithms to determine the most efficient layout for cables within a given space. This might involve minimizing cable length, reducing interference, and ensuring easy access for maintenance.
- II. **Handling Large Data Sets:** As the system grows and accumulates more data about cables, connections, and network devices, efficiently managing and querying large datasets becomes crucial. Implementing database optimizations and indexing strategies can help improve performance.
- III. **Ensuring Compatibility:** The system may need to support various types of cables, connectors, and network devices from different manufacturers. Ensuring compatibility and seamless integration between different components can be a complex problem to solve.
- IV. **Security and Access Control:** Implementing robust security measures to protect sensitive network information and prevent unauthorized access is critical. This involves designing authentication mechanisms, role-based access control, and encryption protocols to safeguard data integrity and privacy.
- V. **Fault Detection and Recovery:** Developing mechanisms to detect and diagnose cable faults or network outages and automatically re-route traffic to maintain connectivity is essential. This might involve implementing monitoring tools, fault-tolerant routing algorithms, and automated recovery procedures.
- VI. **Scalability and Performance:** As the system scales to accommodate larger networks and higher data volumes, ensuring scalability and maintaining optimal performance becomes challenging. Employing distributed computing techniques, load balancing strategies, and caching mechanisms can help address these issues.
- VII. **User Interface Design:** Designing an intuitive and user-friendly interface for managing cables, network devices, and configurations is crucial for user adoption and satisfaction. Addressing usability issues, gathering user feedback, and iterating on the design are essential steps in solving this problem.
- VIII. **Documentation and Training:** Providing comprehensive documentation and training materials to users and administrators on how to use the system effectively is essential. Developing clear, concise documentation and interactive training modules can help address this challenge.

2.3 Purpose/Goal:

Purpose

The purpose of this project is to provide client easy way to store data of all customers, reduce the cost spent on buying a large amount of papers and improve space utilization. The Client can maintain computerized customers record and able to send the notifications or updates about the offers generated by client and can give the reminders for upcoming monthly charges. The system is able to control the security means that only authorized persons can have access to it. System is suitable for client to help them to keep database of their customer and to keep the track of the stocks. The project aims to building a computerized cable operator management system that would be more effective and efficient than existing manual system. This proposed system will eliminate all the manual interventions and increase the speed of whole process and will provide a well build software to run the cable service.

Goals

- I. **Efficient Cable Management:** The primary goal is to enable administrators to organize and manage cables in a structured and efficient manner, reducing clutter, minimizing cable length, and optimizing connectivity.
- II. **Accurate Documentation:** The system aims to provide accurate and up-to-date documentation of cable connections, network topology, and device configurations. This documentation serves as a valuable reference for troubleshooting, planning expansions, and performing audits.
- III. **Enhanced Visibility:** By providing visual representations of cable layouts and network diagrams, the system enhances visibility into the network infrastructure, enabling administrators to quickly identify issues, plan changes, and make informed decisions.
- IV. **Streamlined Maintenance:** The system facilitates proactive maintenance by tracking cable usage, monitoring performance metrics, and generating alerts for potential issues such as cable degradation or network congestion. This helps minimize downtime and optimize resource utilization.
- V. **Improved Collaboration:** Collaboration features allow multiple users to collaborate on cable management tasks, share documentation, and coordinate changes to the network infrastructure. This fosters teamwork and ensures consistency across different teams and departments.
- VI. **Scalability and Flexibility:** The system is designed to scale effortlessly to accommodate growing network infrastructures and evolving business

needs. Flexible configurations and customizable workflows enable adaptation to different environments and use cases.

- VII. **User-Friendly Interface:** A user-friendly interface with intuitive navigation and informative dashboards makes the system accessible to users with varying levels of technical expertise. Providing comprehensive documentation and training resources further enhances usability and adoption.

2.4 Literature Survey: -

In This Project We Help Local Cable Operator For Survey and Study How This System and Management Work For Local User and How They Handel This Things In Day To Day Routing . This help Us To knowing Which Things We Want To Add and Which Things Necessary For Design In Starting We Add The Certification That Gives By The Cable Operator.

2.5 Project Scope and Limitation

Project Scope:

- I. **Cable Inventory Management:** The system will allow users to create and maintain an inventory of cables, including details such as cable type, length, location, and connectivity.
- II. **Network Topology Visualization:** Users will be able to generate visual representations of network topologies, including cable connections, devices, and their interconnections.
- III. **Documentation and Reporting:** The system will provide tools for documenting cable layouts, network configurations, and generating reports for auditing, planning, and troubleshooting purposes.
- IV. **Configuration Management:** Users can manage configurations of network devices, including switches, routers, and servers, to ensure compatibility and optimize performance.
- V. **Alerts and Notifications:** The system will monitor cable health, network performance, and other relevant metrics, generating alerts and notifications for potential issues or abnormalities.
- VI. **Collaboration and Access Control:** Users can collaborate on cable management tasks, share documentation, and define access controls to ensure data integrity and security.
- VII. **Integration with Existing Systems:** The system will support integration with existing network management tools, databases, and third-party applications to facilitate data exchange and interoperability.

Limitations:

- I. **Hardware Dependency:** The system's effectiveness may be limited by the availability and compatibility of hardware devices such as sensors, switches, and routers required for monitoring and management.
- II. **Complexity of Network Infrastructure:** Managing complex network infrastructures with a large number of cables, devices, and connections may pose challenges in terms of scalability and performance.
- III. **Human Error:** Despite automation and safeguards, human error in data entry, configuration, or troubleshooting may still occur, leading to inaccuracies or inefficiencies in cable management.
- IV. **Resource Constraints:** Limited resources such as time, budget, and manpower may restrict the extent to which the system can be implemented, customized, or maintained effectively.

- V. **Security Risks:** The system may be vulnerable to security threats such as unauthorized access, data breaches, or cyberattacks, necessitating robust security measures and regular updates to mitigate risks.
- VI. **Regulatory Compliance:** Compliance with industry regulations and standards related to data privacy, security, and environmental sustainability may impose constraints on system design and operation.
- VII. **Training and Adoption:** User adoption and proficiency in using the system may vary based on factors such as technical expertise, training, and organizational culture, affecting the system's overall effectiveness and ROI.
- VIII. **Geographical Constraints:** Remote or distributed network locations may present logistical challenges in terms of connectivity, communication, and access to the system, impacting its coverage and utility.

System Analysis

3.1 Existing System:-

- I. **Manual Documentation:** Network administrators often rely on manual documentation methods, such as spreadsheets, text documents, or handwritten notes, to record cable connections, equipment inventory, and network configurations. This approach can be time-consuming, error-prone, and lacks real-time visibility into network changes.
- II. **Physical Labeling:** Cables and network devices are often labeled with identifiers or tags to indicate their purpose, location, or connectivity. While physical labeling helps with cable identification and troubleshooting, it requires manual effort and may become outdated or inaccurate over time.
- III. **Lack of Centralized Management:** In larger networks or distributed environments, the lack of centralized management tools makes it challenging to maintain consistency, enforce standards, and track changes across the network. Administrators may struggle to keep track of cable inventories, monitor network health, and ensure compliance with industry regulations.

3.2 Scope and Limitation of Existing System.

Scope of Existing System:

- I. **Basic Cable Management:** The existing system allows for basic cable management tasks, including documentation of cable connections, labeling, and visual inspection.
- II. **Manual Troubleshooting:** It supports manual troubleshooting processes, such as visually tracing cables and checking connections, to identify and resolve network issues.
- III. **Physical Inventory Management:** The system enables physical inventory management of network devices and cables through manual documentation and labeling.
- IV. **Limited Automation:** There may be some level of automation for repetitive tasks, but it is typically limited in scope and may not cover all aspects of cable management.
- V. **Network Stability:** Despite its limitations, the existing system helps maintain network stability by ensuring that cables are properly connected and devices are correctly configured.

Limitations of Existing System:

- I. **Time-Consuming Manual Processes:** The manual nature of cable management processes makes them time-consuming and labor-intensive, leading to inefficiencies and delays in network operations.
- II. **Error-Prone:** Manual documentation and visual inspection are prone to errors, such as inaccuracies in cable records, mislabeled connections, and overlooked configurations, which can result in network downtime and service disruptions.
- III. **Limited Scalability:** As networks grow in size and complexity, manual cable management becomes increasingly challenging to scale, leading to difficulties in maintaining consistency and ensuring proper documentation.
- IV. **Dependency on Tribal Knowledge:** The system relies heavily on the knowledge and expertise of individual technicians, leading to risks associated with the loss of institutional knowledge due to employee turnover or retirement.
- V. **Lack of Real-Time Visibility:** There is a lack of real-time visibility into network changes, making it difficult to track modifications, identify issues promptly, and enforce standard practices across the network.
- VI. **Difficulty in Compliance:** Compliance with industry standards and regulations may be challenging to achieve due to the manual and decentralized nature of cable management processes, leading to potential compliance risks.

3.3 Project Perspective and Features

Project Perspective:

The Cable Management System aims to provide a comprehensive solution for organizing, documenting, and managing network cables and devices within an organization's infrastructure. It serves as a vital tool for network administrators, IT technicians, and maintenance personnel to streamline cable management processes, improve network reliability, and enhance operational efficiency. The system offers a centralized platform for documenting cable connections, tracking inventory, troubleshooting network issues, and ensuring compliance with industry standards and regulations.

Features:

- I. **Centralized Documentation:** The system allows for centralized documentation of cable connections, including details such as cable types, lengths, locations, and connections to network devices.
- II. **Inventory Management:** It facilitates inventory management of network devices, cables, and related components, enabling users to track stock levels, monitor usage, and manage replacements effectively.
- III. **Visual Mapping:** Users can visually map cable connections using interactive diagrams and floor plans, providing a clear overview of network infrastructure and facilitating troubleshooting.
- IV. **Automated Discovery:** The system supports automated discovery of network devices and connections, reducing manual effort and ensuring accurate documentation of network topology.
- V. **Alerts and Notifications:** It provides alerts and notifications for critical events, such as cable faults, equipment failures, or deviations from standard configurations, allowing for timely intervention and resolution.
- VI. **Compliance Monitoring:** The system enables compliance monitoring with industry standards and regulations, such as cable labeling requirements, safety guidelines, and data protection laws.
- VII. **Integration Capabilities:** It offers integration capabilities with existing network management systems, asset databases, and ticketing systems, ensuring seamless data exchange and workflow integration.
- VIII. **User Access Control:** Role-based access control mechanisms ensure that only authorized personnel can view, modify, or delete sensitive network information, enhancing security and data integrity.
- IX. **Reporting and Analytics:** The system provides comprehensive reporting and analytics capabilities, allowing users to generate custom reports, track performance metrics, and identify trends for continuous improvement.

- X. **Scalability and Flexibility:** Built-in scalability and flexibility enable the system to accommodate the evolving needs of organizations, supporting both small-scale deployments and large enterprise networks.
- XI. **User-Friendly Interface:** An intuitive and user-friendly interface ensures ease of use for all stakeholders, minimizing training requirements and promoting widespread adoption across the organization.

3.4 Stakeholder

Customer
Admin

3.5 Requirement Analysis

Functional Requirement

- I. User Management:
 - a. Register and manage user accounts.
 - b. Authenticate and authorize users.
 - c. Allow users to update their profiles.
- II. Cable Inventory Management:
 - a. Add, edit, and delete cable records.
 - b. Search and filter cables by various criteria.
 - c. Support barcode or QR code scanning for identification.
- III. Network Device Management:
 - a. Record details of network devices.
 - b. Associate devices with cables and locations.
 - c. Manage device configurations.
- IV. Troubleshooting and Maintenance:
 - a. Log and report cable faults and maintenance activities
 - b. .Provide notification alerts for critical events.
 - c. Integrate with diagnostic tools for network monitoring.
- V. Security and Access Control:
 - a. Implement role-based access control.
 - b. Encrypt sensitive data.
 - c. Maintain audit logs for security monitoring.

Non Functional Requirement

- I. Performance:
 - a. The system should respond to user interactions promptly, with minimal latency.
 - b. It should handle a large volume of data efficiently without degradation in performance.
- II. Scalability:
 - a. The system should be scalable to accommodate an increasing number of users, cables, and devices.
 - b. It should support horizontal and vertical scaling as per demand.
- III. Reliability:
 - a. The system should be highly reliable, ensuring minimal downtime and data loss.
 - b. It should have mechanisms for backup and disaster recovery.
- IV. Compatibility:
 - a. The system should be compatible with various operating systems, browsers, and devices to ensure accessibility for all users.
 - b. It should support integration with existing network management tools and systems.
- V. Availability:
 - a. The system should be available 24/7, with high uptime and minimal scheduled maintenance windows.
 - b. It should have failover mechanisms and redundancy to ensure continuous operation.
- VI. Maintainability:
 - a. The system should be easy to maintain and upgrade, with clear documentation and modular architecture.
 - b. It should support automated testing and deployment processes.

4.System Design

4.1 Design Constraints:

- I. Technical Constraints:
 - a. Technology Stack: The Project Utilizes Java For Application Logic, Swing For GUI Development,And JDBC For Database Connectivity, Imposing Constraints On The System's Adaptability ToAlternative Technologies.
 - b. Compatibility: The System's Compatibility Is Tied To The Java Platform, Potentially LimitingInteroperability With Certain Operating Systems Or Environments.
- II. Time Constraints:
 - a. Project Timeline: The Development Process Is Constrained By Time Considerations, Impacting TheDepth And Extensiveness Of Features That Can Be Incorporated.
 - b. Resource Availability: The Availability Of Resources, Including Developers And Testing Personnel,May Impose Limitations On The Project's Timeline.
- I. Security Constraints:
 - a. Data Security: While The Code Does Not Explicitly Address Security Measures, The Project ShouldConsider Implementing Secure Practices To Protect Sensitive Data.
 - b. Authentication Mechanism: The System May Benefit From An Enhanced AuthenticationMechanism To Address Potential Security Vulnerabilities.

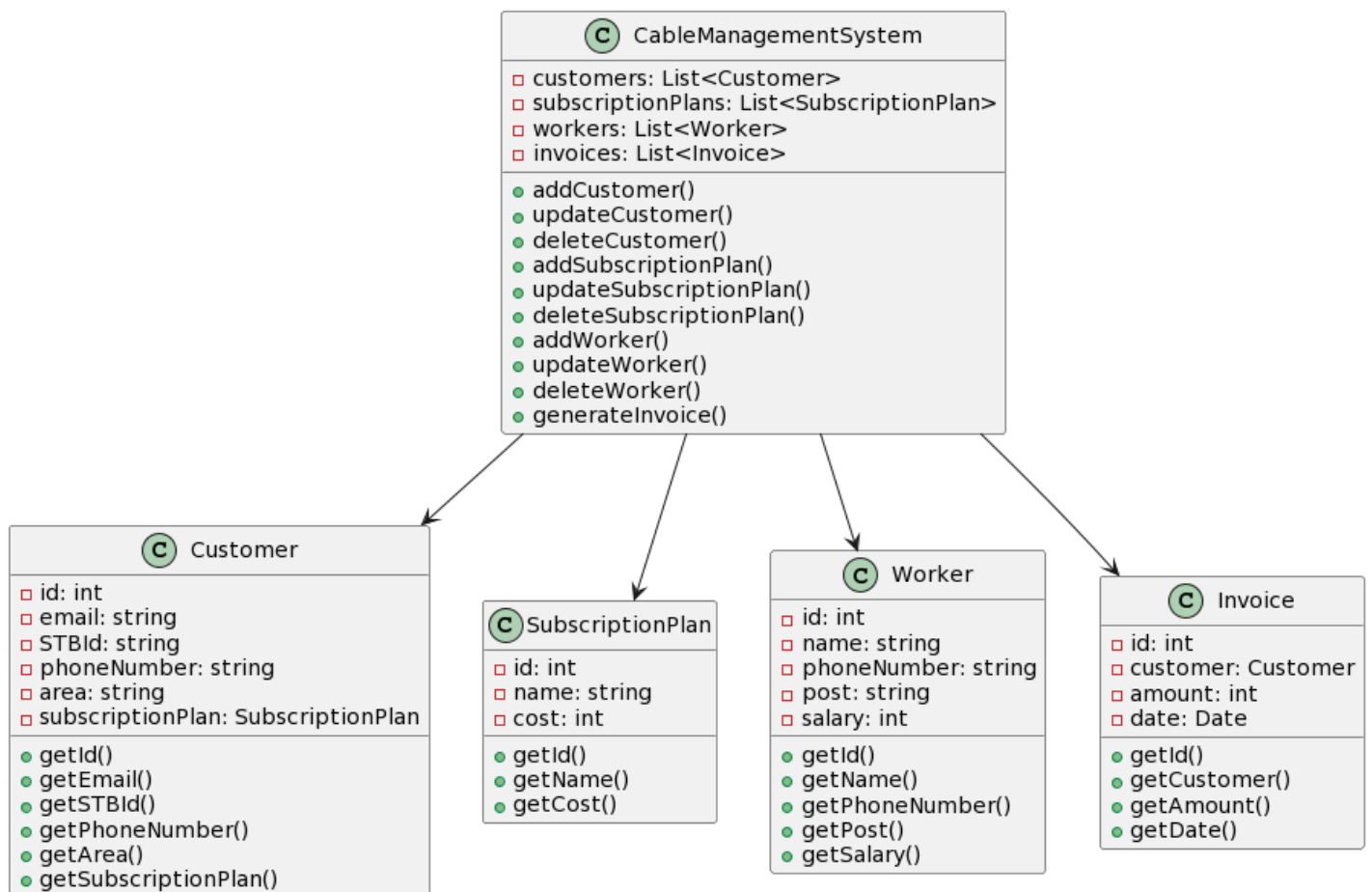
4.2 System Model: Using OOSE (Object-Oriented Software Engineering)

Object-Oriented Analysis (OOA):

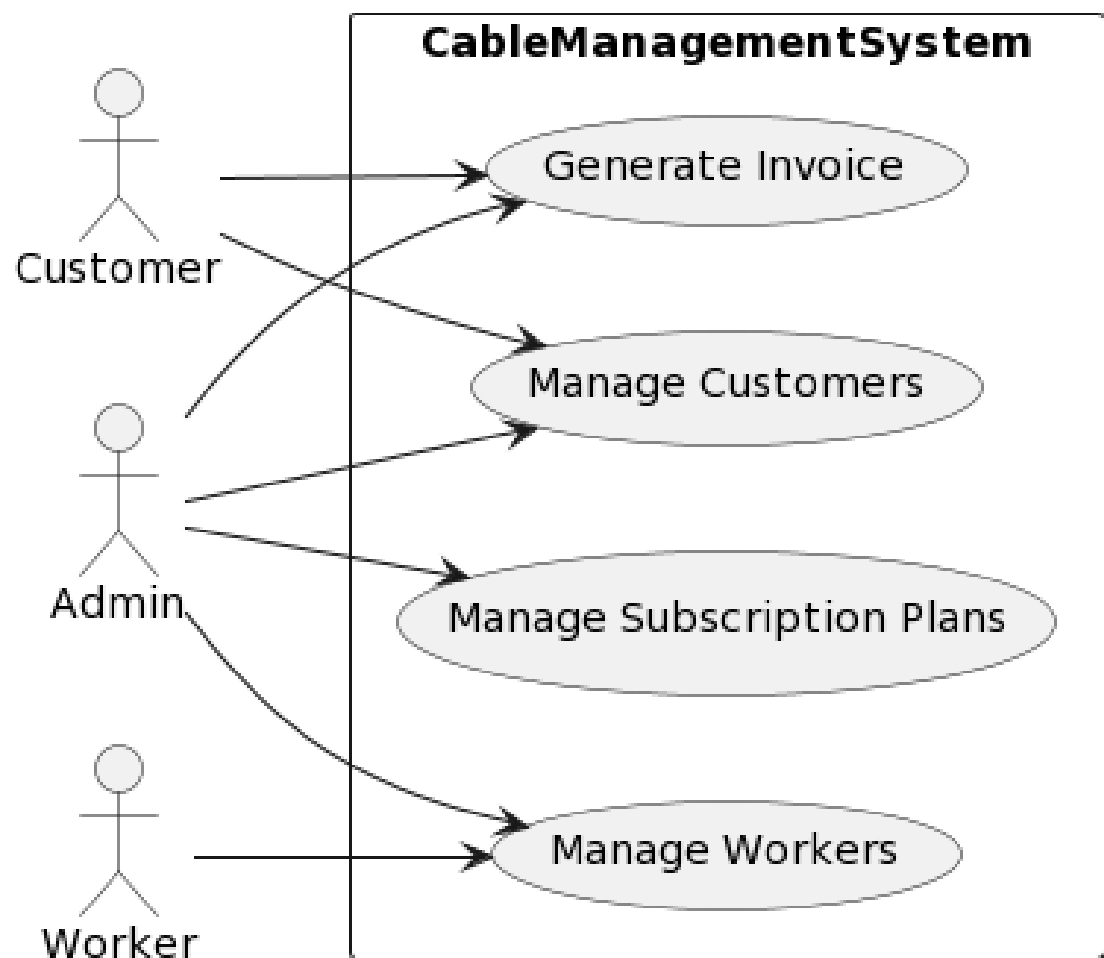
Identification Of Objects: Objects Like Addteacher, Addstudent, And Others Represent Key Entities Within The System.Specification Of Object Behavior: The Behavior Of Objects Is Represented Through Methods Like Actionperformed For User Interactions

ULM Diagrams:-

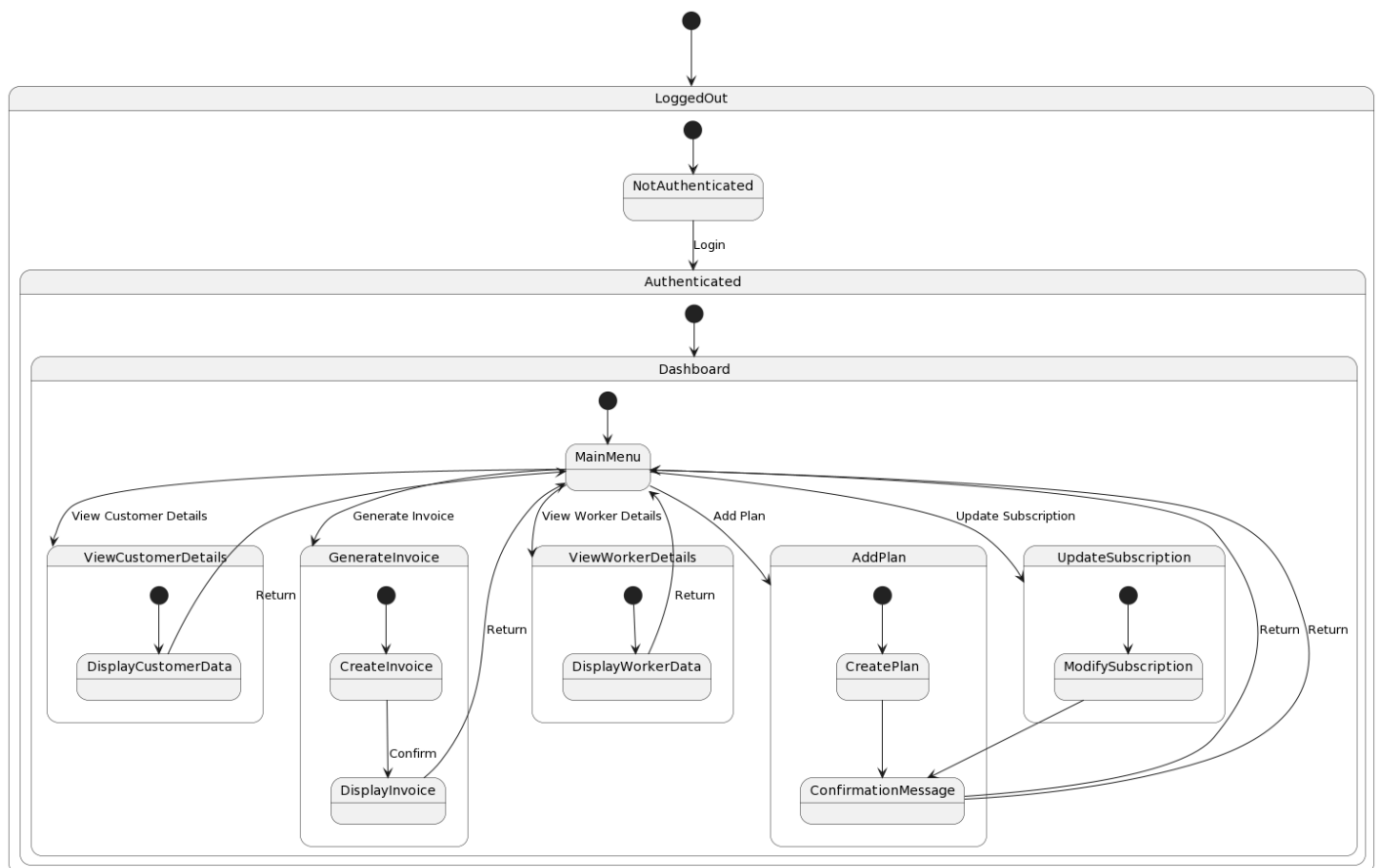
▪ Class Diagram



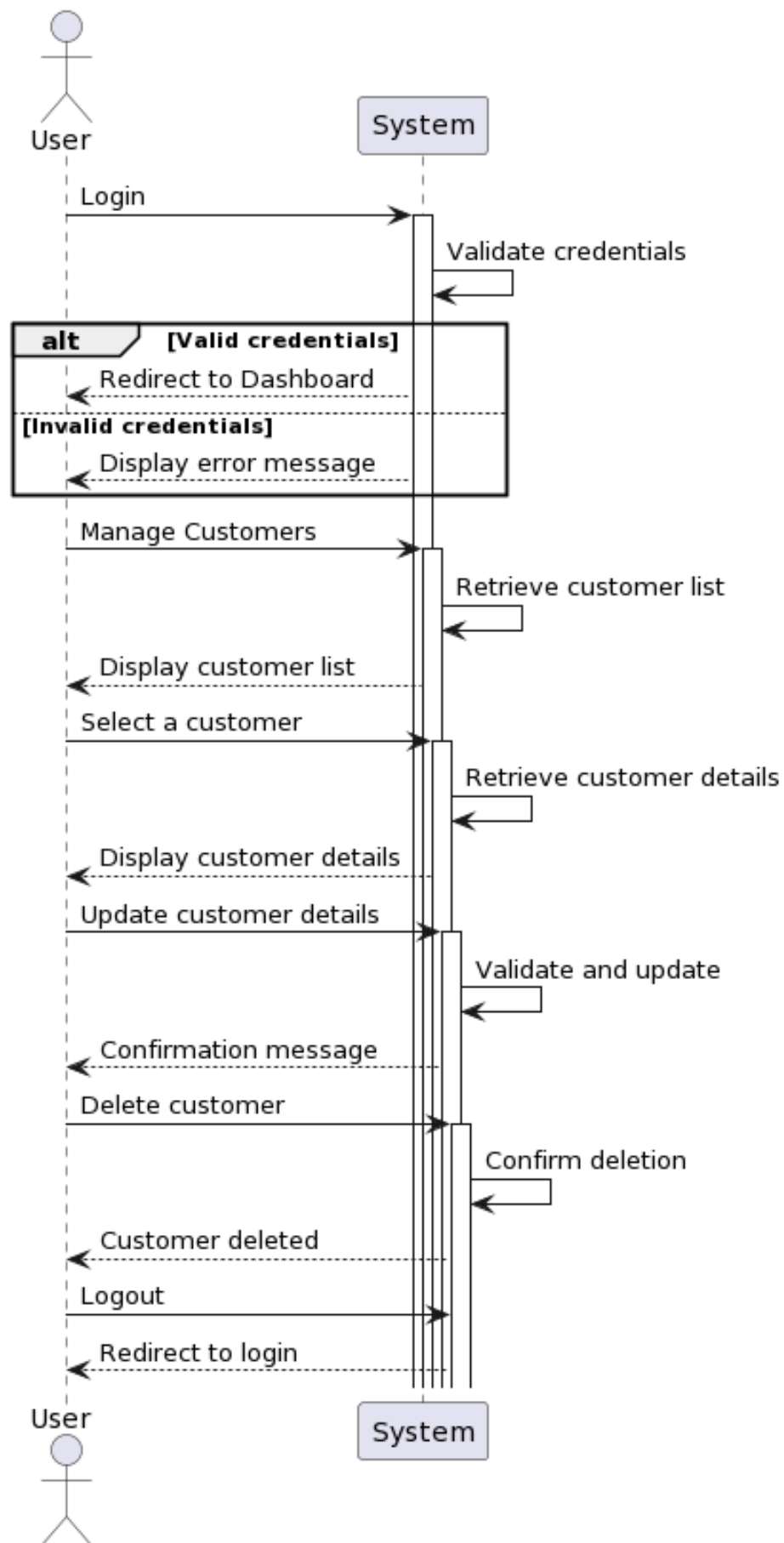
- Use Case Diagram



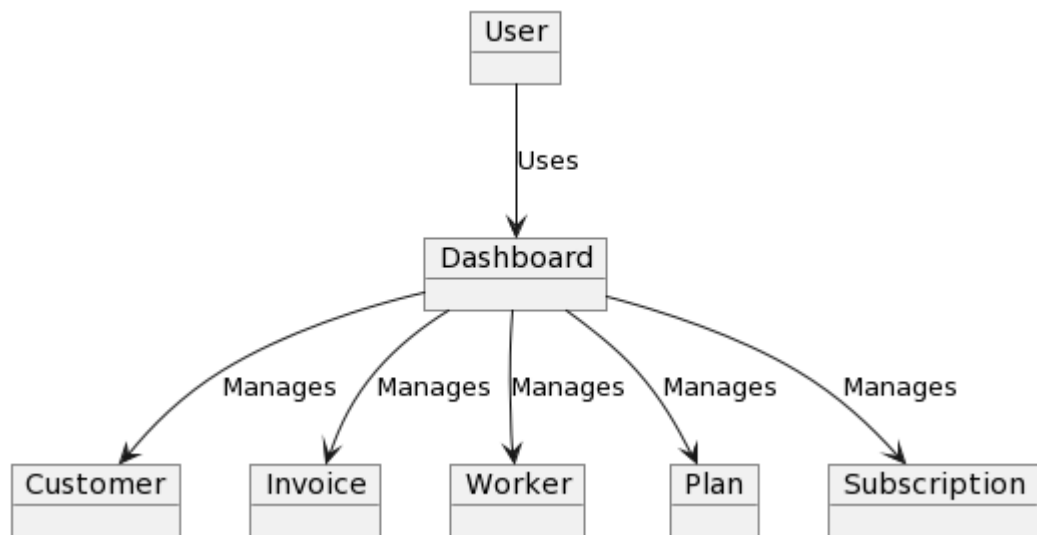
■ State Chart Diagram



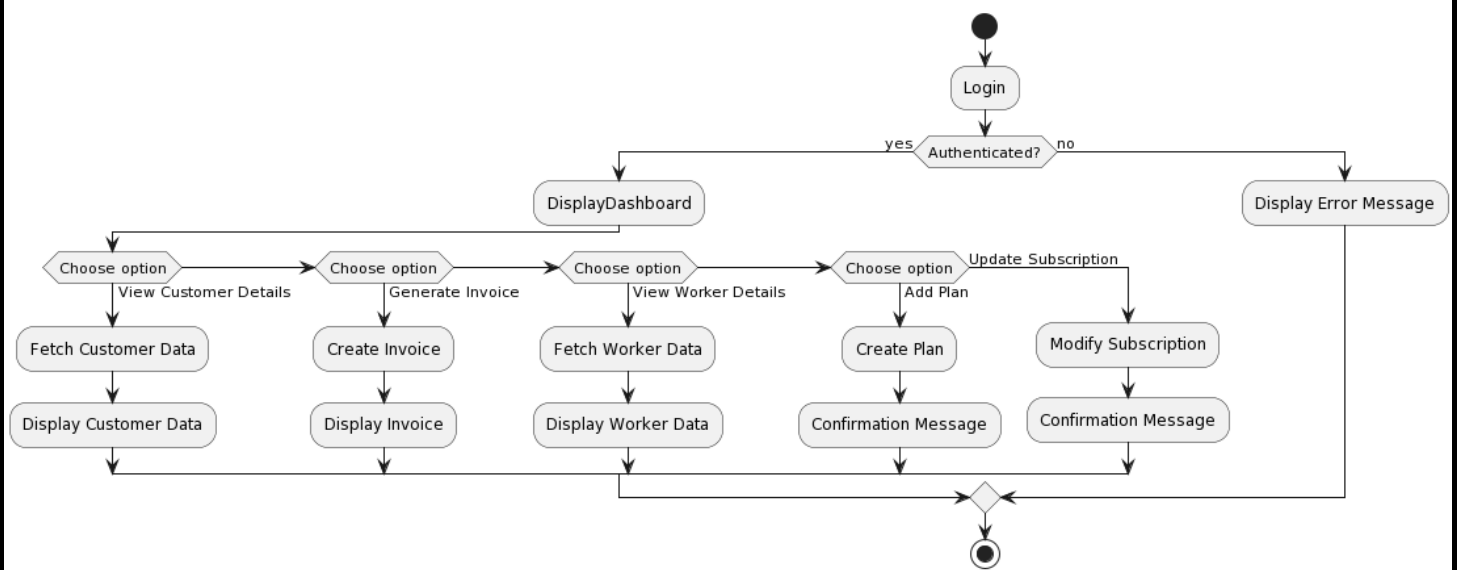
▪ **Sequence Diagram:-**



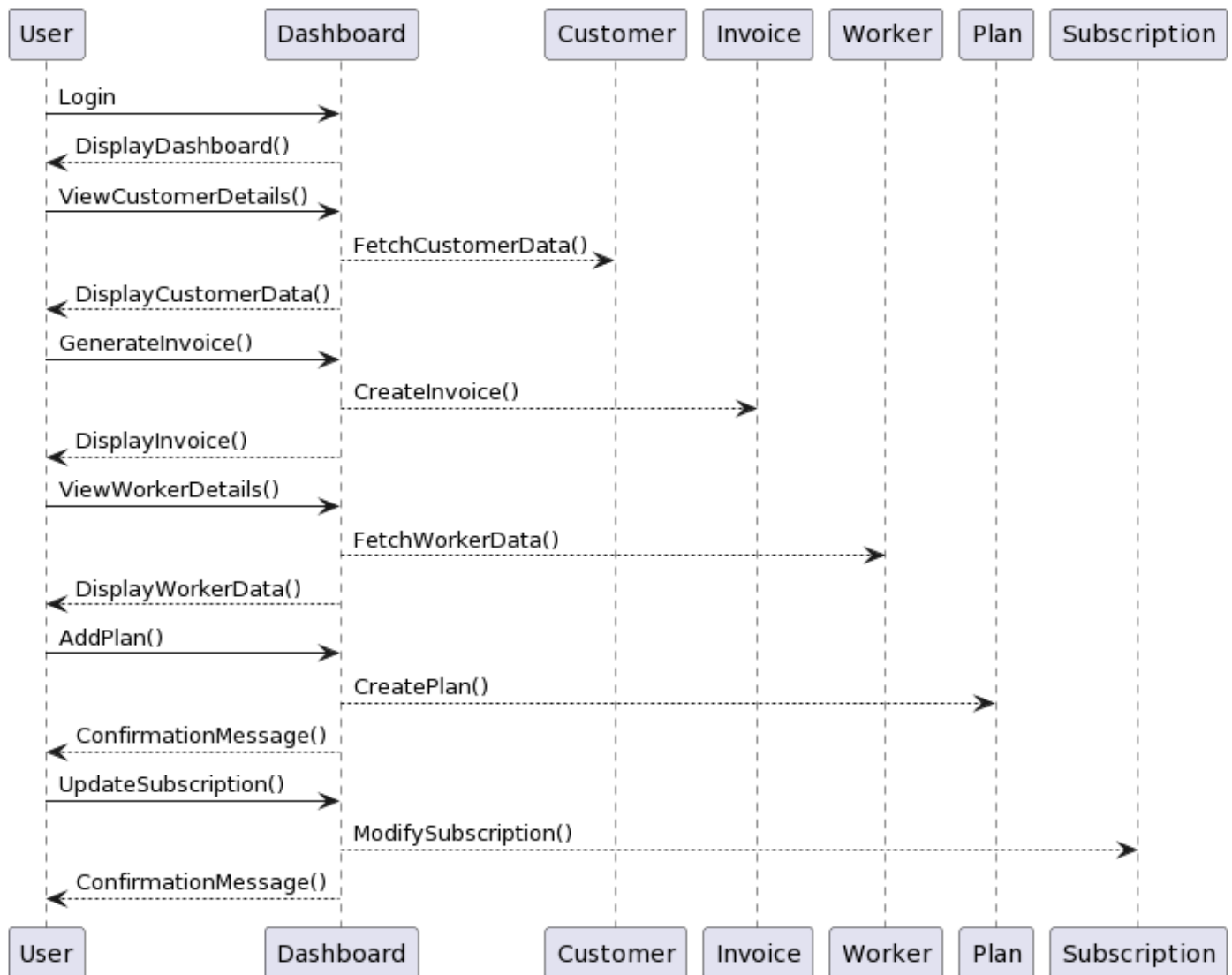
▪ Object Diagram



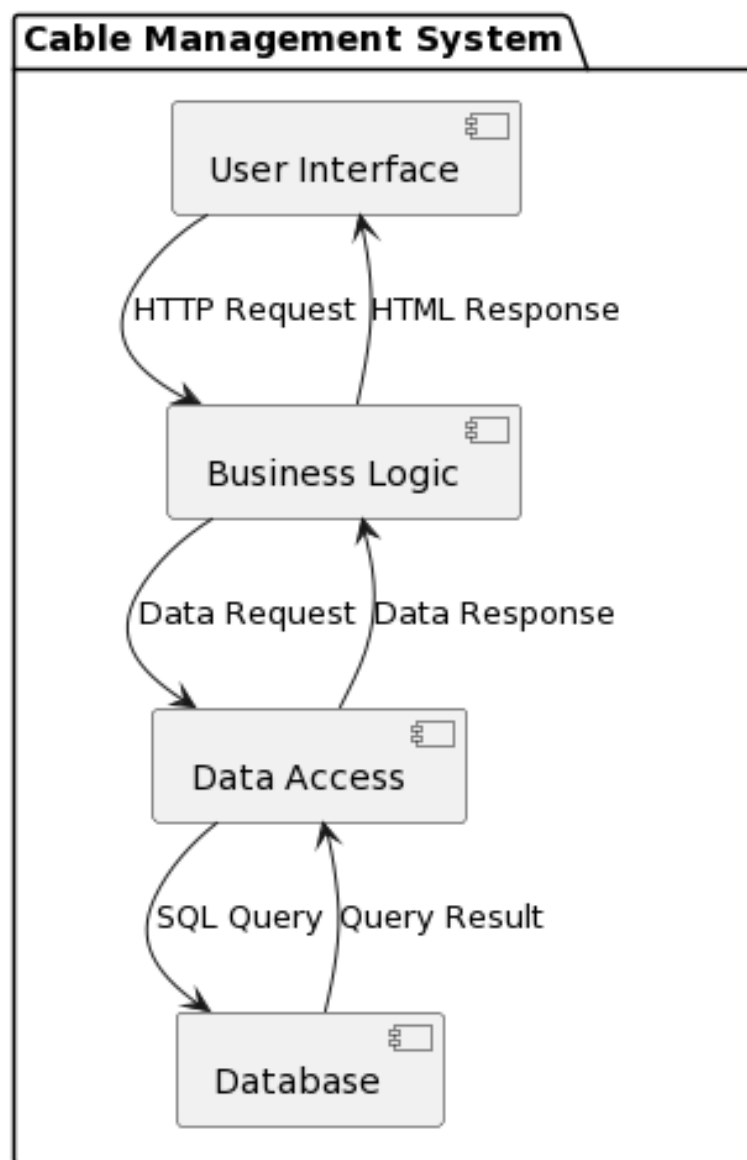
▪ Activity Diagram



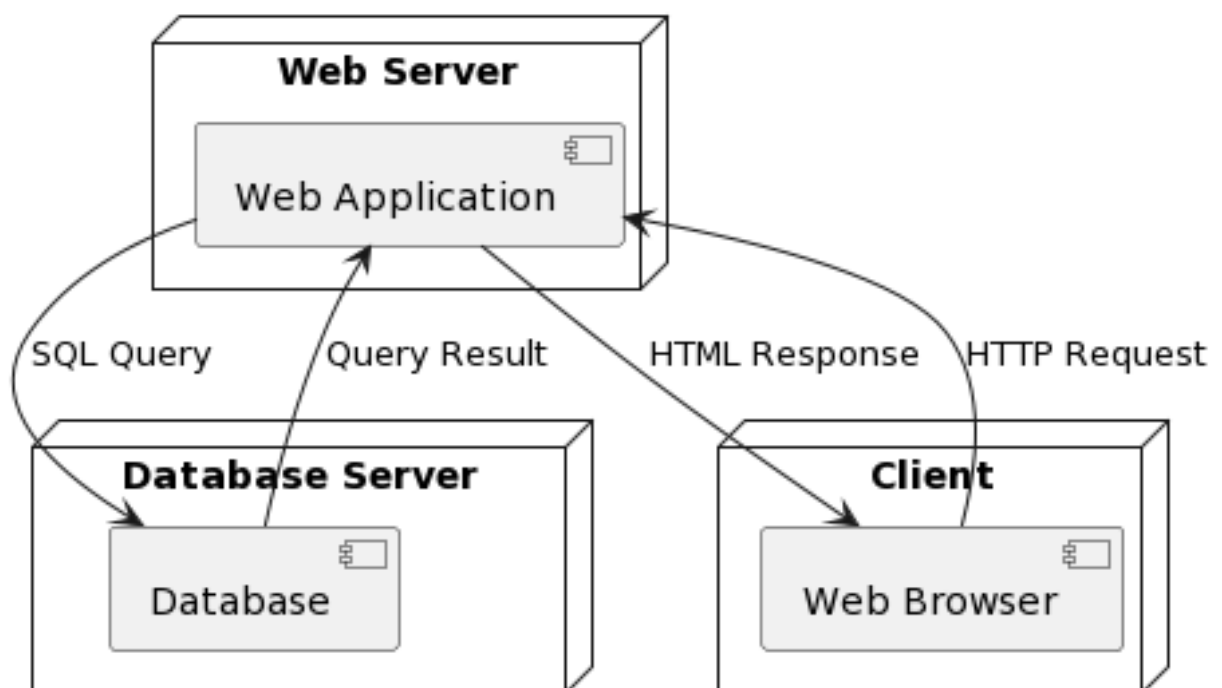
▪ Collaboration Diagram



- **Component Diagram**



- **Deployment Diagram**



4.3 Database Model: -

By using the data design designer determines what data must be stored and how the data elements interrelate. Database design involves classifying the data and identifying the relationships.

1) Customer Login Page :-

Fields	Data Types	Key
Customer_Id	Varchar(25)	Primary key
Customer_name	Varchar(25)	Not Null
STB-Id	Varchar(25)	Unique
Phone Number	Int(10)	Not Null
Area	Varchar(25)	Not Null
Username	Varchar(25)	Not Null
Password	Varchar(25)	Not Null

2) Admin Login Page :-

Fields	Data Types	Key
Operator_Id	Varchar(25)	Primary key
Password	Varchar(25)	Not Null

3) Subscription table :-

Fields	Data Types	Key
Pack_Id	Int(20)	Primary key
Pack_name	Varchar(20)	Not Null

Pack_price	Int(10)	Not Null
Pack_quality	Varchar(20)	Not Null

4) Plans table :-

Fields	Data Types	Key
Plan_Id	Int(20)	Primary Key
Plan_name	Varchar(20)	Not Null
Plan_code	Varchar(20)	Not Null
Plan_price	Int(10)	Not Null

5) Invoice table:-

Fields	Data Types	Key
Invoice_id	Varchar(25)	Primary key
Customer_Id	Varchar(25)	Foreign key
STB_Id	Varchar(25)	Foreign key
Customer_name	Varchar(25)	Not Null
Phone Number	Int(10)	Not Null
Area	Varchar(25)	Not Null
Pack_name	Varchar(20)	Not Null
Plan_name	Varchar(20)	Not Null
Plan_price	Int(10)	Not Null

Test Case Design: -

Sr. no.	Action	Input	Expected output	Actual Output	Test result	Test comment
1.	Launch application	Click on software	Login page	Login page	Pass	Successful
2.	Enter correct username and password	Username: abc Password:****	Home page	Home page	Pass	Homepage will display
3.	If username and password are incorrect	Username: abc Password:****	“login failed”	“Login Failed”	Fail	Invalid username and password
4.	If email is not in correct format	Enter email in correct format	“Invalid email”	“Invalid email”	Fail	Unsuccessful
5.	If email is in correct format	Enter Email id	No error message	No error message	Pass	Successful
6.	If entered Name is in Number Format	Enter Employee Name	“Invalid Name”	“Invalid Name”	Fail	Unsuccessful
7.	If entered Name is in Character Format	Enter Employee Name	No error message	No error message	Pass	Successful
8.	If entered Mobile No. is character format	Enter Mobile No	“Invalid Mobile No”	“Invalid Mobile No”	Fail	Unsuccessful

Event Table:

Event	Source	Description	Trigger	Destination
Admin Login	Admin	Cable Operator Logged In	Login Successfully	Admin
Customer Login	Customer	Logged in if already registered	Login successful	Customer
Manage Customers	Admin	Add,Delete,Update Customer	Add/Update/Delete Customer successfully	Admin
Manage Plans	Admin	Add,Delete,Update Plans	Add/Update/Delete Plan successfully	Admin
Invoice Management	Admin	Print Invoice of Customer	Invoice Created and printed	Admin
Plans selection	Customer	Add and select plans	Plan added successfully	Customer
Update Details	Customer	Update registered details of Customer	Update Records Successful	Customer
Admin Logout	Admin	Logging out	Logout successful	Admin
Customer Logout	Customer	Logging out	Logout successful	Customer

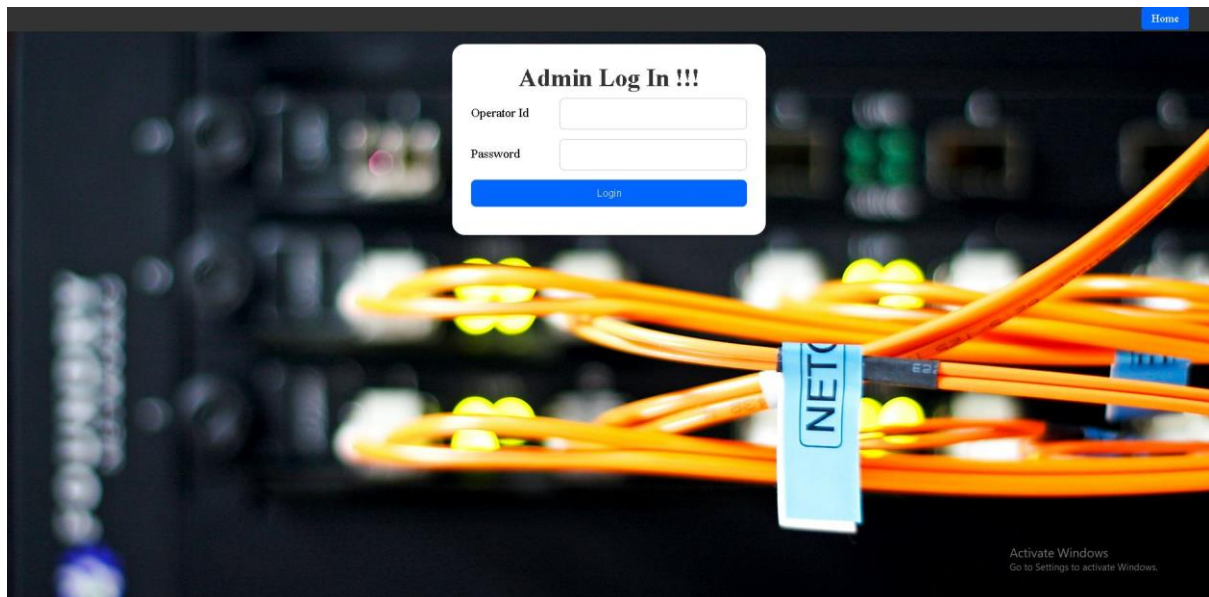
4.4 USER INTERFACE

Start the Application and such interface will appear for customer

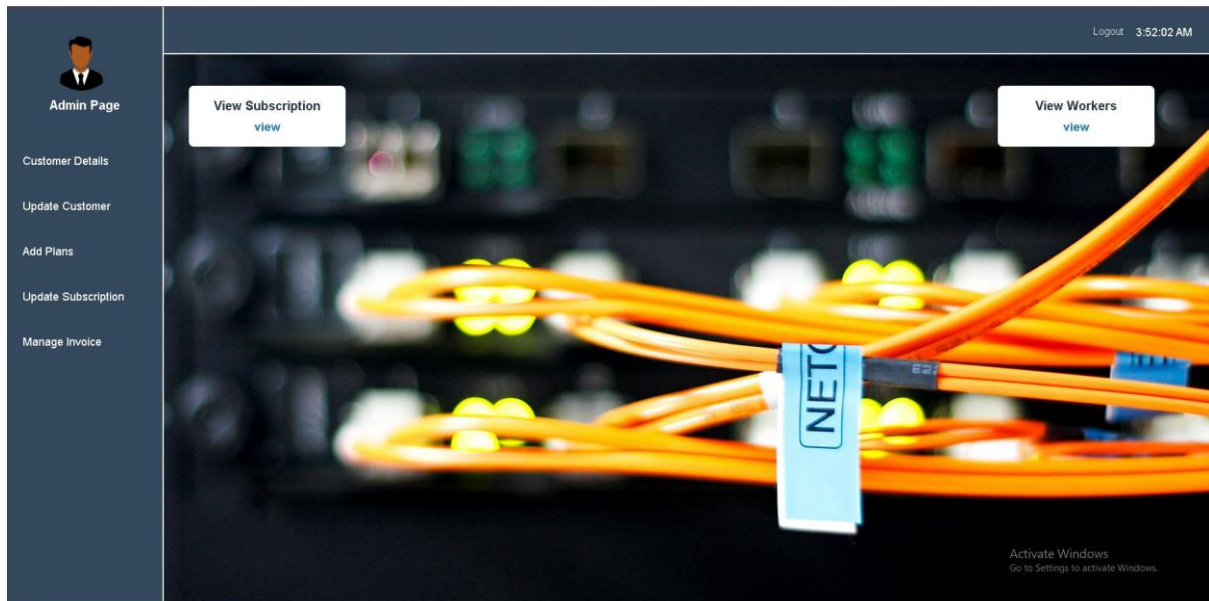
Login:



For Admin Login:



If Username and Password matches. (For Admin Page):



On clicking Customer Details this will appear:

Displaying all records

Return

ID	Email id	STB-Id id	Phone Number	Area	Subscription	Username	Password
2	om@gmail.com	123651	9823565241	Khopat	Premium Pack	Om@123	Om@12345
6	Harshal@123	458563	4585659823	ShivajiNagar	Premium Pack	Harshal@123	Harshal@123

Activate Windows
Go to Settings to activate Windows.

On clicking Update Customer this will appear:

Return

Displaying all records

Id	Email id	STB-Id id	Phone Number	Area	Subscription	Username	Password	Operations
2	om@gmail.com	123651	9823565241	Khopat	Premium Pack	Om@123	Om@12345	Update Delete
6	Harshal@123	456563	4565659823	ShivajiNagar	Premium Pack	Harshal@123	Harshal@123	Update Delete

Activate Windows
Go to Settings to activate Windows.

On clicking Add plans this will appear:

Return Logout

Which plan you have to add

Gold Pack
[Add](#)

Premium Pack
[Add](#)

Activate Windows
Go to Settings to activate Windows.

On clicking Manage Invoice:

Return

Displaying all records

Id	User ID	UPI Name	Package Name	Month	Mode Name	Price	Transaction ID	Payment Status	Operations
17	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	4521456	Pending	Generate
18	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	85452365415	Pending	Generate
19	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	856954521	Pending	Generate
20	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	856954521	Pending	Generate
21	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	8569545214565465	Pending	Generate
22	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	8569545214565465	Pending	Generate
23	2	omgawali-1@okaxis	Premium Pack	06	Monthly	650	8569545214565465	Pending	Generate
24	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	8569545214565465	Pending	Generate
25	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	4521456	Pending	Generate
26	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	4521456	Pending	Generate
27	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	85452365415	Pending	Generate
28	2	omgawali-1@okaxis	Premium Pack	01	Monthly	650	4521456	Pending	Generate

Activate Windows
Go to Settings to activate Windows.

After Generating Invoice:

12/12/2024, 3:58 AM Invoice

Invoice

Field	Details
User ID	2
UPI Name	omgawali-1@okaxis
Package Name	Premium Pack
Month	01
Mode Name	Monthly
Price	650
Transaction ID	4521456
Payment Status	Paid

[Print Invoice](#)

PAID

Microsoft Word 2024\invoice print\form-17 1/1

Print 1 sheet of paper

Destination: [Microsoft Print to PDF](#)

Pages: All

Layout: Portrait

Color: Color

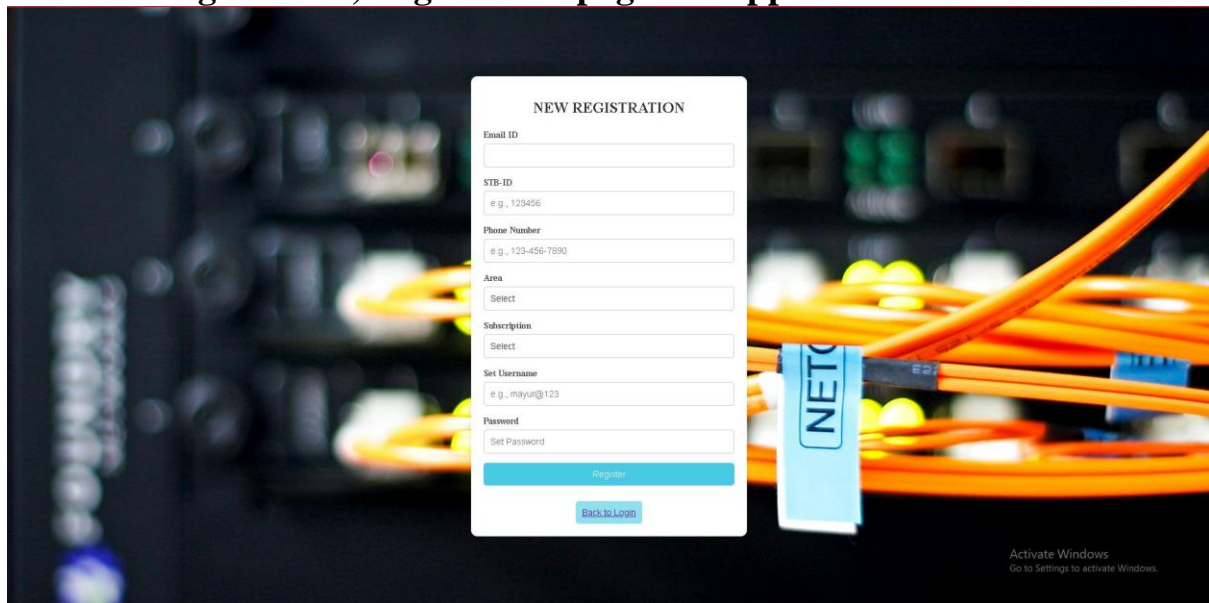
More settings

[Print](#) [Cancel](#)

Activate Windows
Go to Settings to activate Windows.

For Customer Page: -

For New Registration, Registration page will appear:

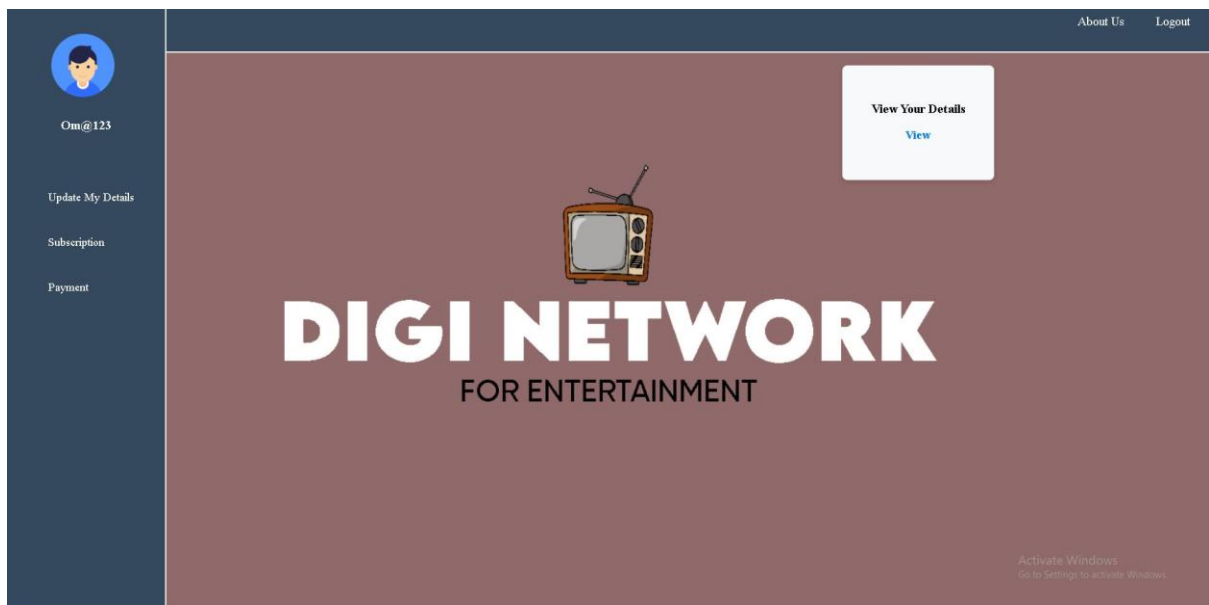


The image shows a 'NEW REGISTRATION' form overlay on a background of server racks with orange network cables. The form contains the following fields and buttons:

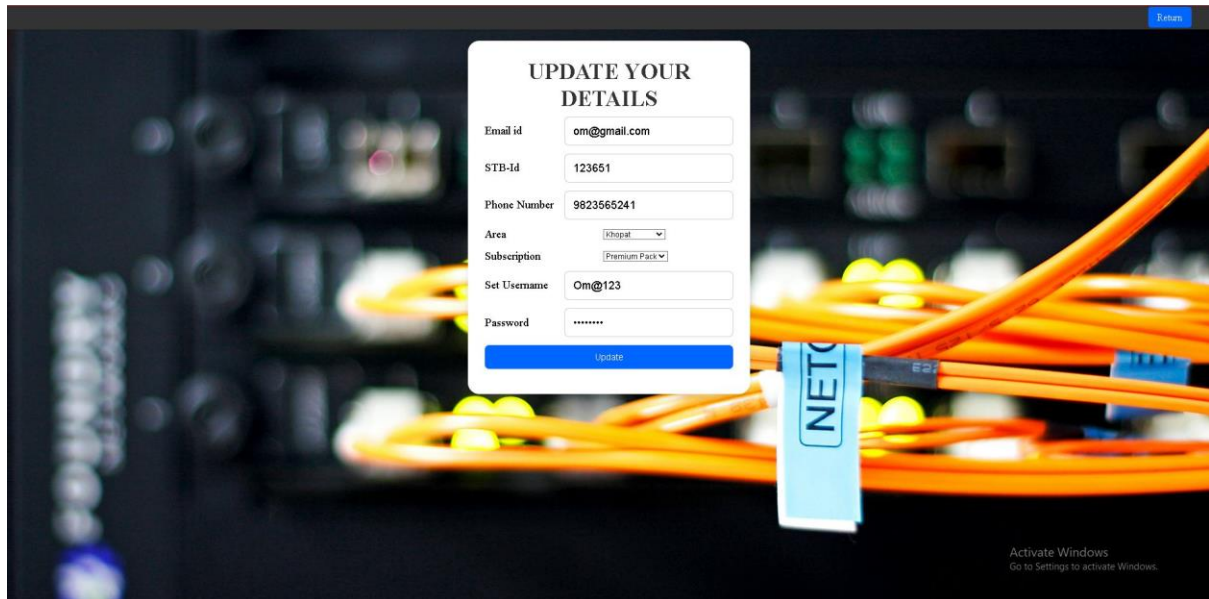
- NEW REGISTRATION**
- Email ID:
- STB-ID: (e.g., 123456)
- Phone Number: (e.g., 123-456-7890)
- Area: (Select)
- Subscription: (Select)
- Set Username: (e.g., mayur@123)
- Set Password:
- [Register](#) (blue button)
- [Back to Login](#) (blue button)

Activate Windows
Go to Settings to activate Windows.

If Customer enters correct username and password:



If Customer wants to Update his Details:



UPDATE YOUR DETAILS

Email id

STB-Id

Phone Number

Area

Subscription

Set Username

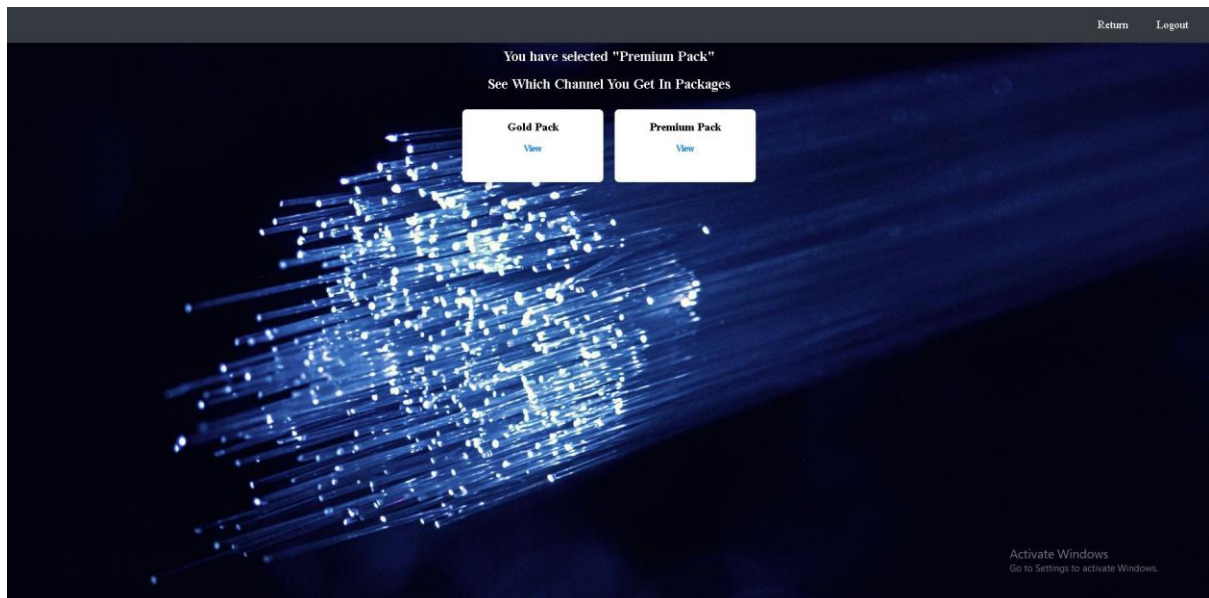
Password

[Update](#)

[Return](#)

Activate Windows
Go to Settings to activate Windows.

If Customer wants to update his Subscription:



[Return](#) [Logout](#)

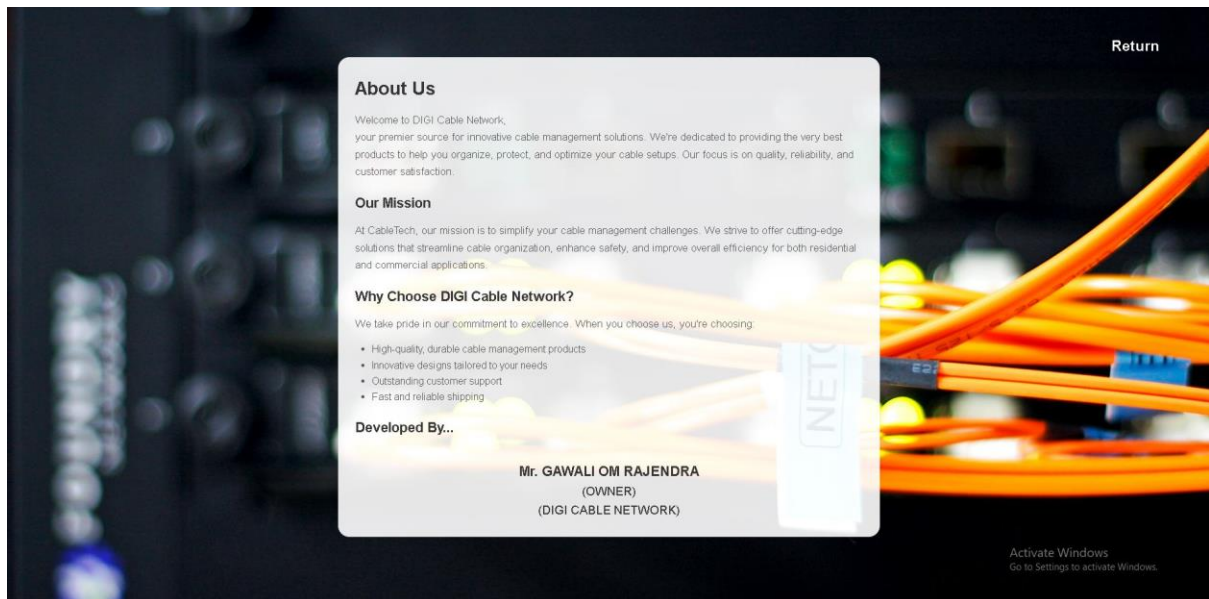
You have selected "Premium Pack"

See Which Channel You Get In Packages

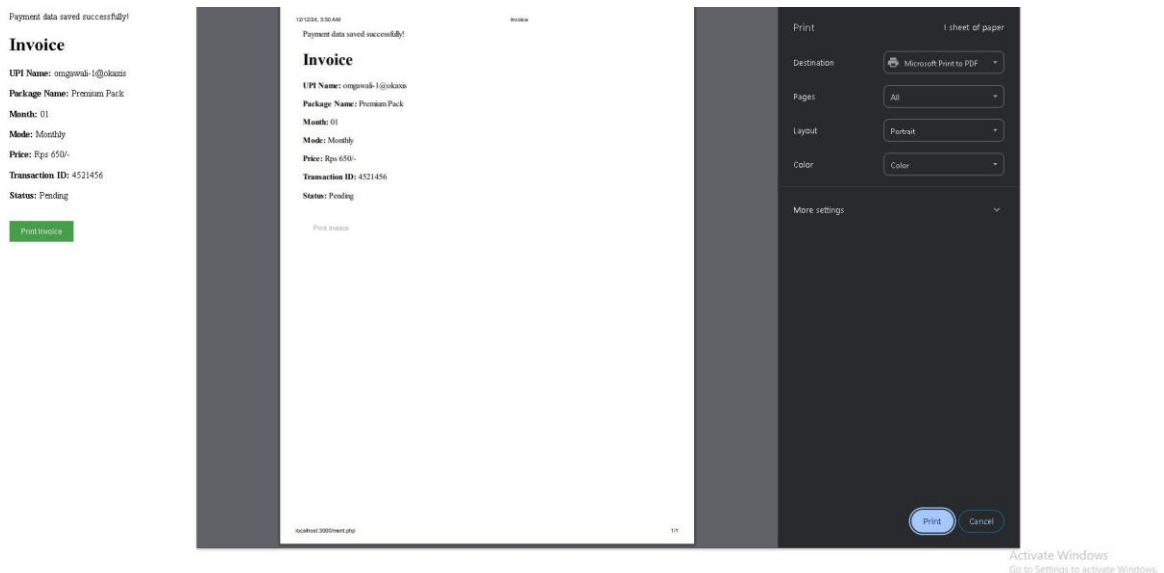
[Gold Pack View](#) [Premium Pack View](#)

Activate Windows
Go to Settings to activate Windows.

On Clicking About Us Section:



On Clicking Payment section for Customers:



Form Validation: -

If there is any empty field remaining

NEW REGISTRATION

Email ID

STB-ID

e.g., 123456

Phone Number

e.g., 123-456-7890

Area

Select

Subscription

Select

Set Username

e.g., mayur@123

Password

Set Password

Register

Back to Login

Please fill out this field.

If Password is too weak

NEW REGISTRATION

Email ID

xyz@123

STB-ID

452653

Phone Number

856457856

Area

Shivaji Nagar

Subscription

Premium Pack

Set Username

Xyz@123

Password

Please match the requested format.

Password must contain at least 8 characters, including uppercase, lowercase, number, and special character

Back to Login

If entered an invalid Stb Id:

NEW REGISTRATION

Email ID

STB-ID

Phone Number

Area

Subscription

Set Username

Password

Register

[Back to Login](#)

Implementation Details

5.1 Software and Hardware Specification

Software Requirements: -

Operating System: Windows 8 and higher

Front-end: HTML ,CSS, BOOTSTRAP, JAVASCRIPT

Back-end: PHP, MYSQL

Hardware Requirements: -

Hard disk: Minimum 12 GB

Processor: Minimum 32-bit processor

Memory: Minimum 2 GB RAM

5.2 System Maintenance:

Software maintenance is the process of changing, modifying, and updating software to keep up with customer needs. Software maintenance is done after the product has launched for several reasons including improving the software overall, correcting issues or bugs, to boost performance, and more.

The Cable Management system application software will undergo various changes after getting delivered to the client for use. Changes may occur because of some unexpected input values into the system. The main purpose of software maintenance is to modify and update software applications after delivery to correct faults and to improve performance. Software Maintenance must be performed in order to: Correct faults. Improve the design in software maintenance, we will be doing the following things:

1. Fix bugs in the software if something does not work according to the expectations.
2. Checking the working of software at regular intervals from time to time.
3. Minor changes in the system which are desired by the client in the future.

4. Making use of existing and new technologies and tools to make the system better.

Outputs And Report Testing

System Testing Is The Stage Of Implementation, Which Is Aimed At Ensuring That The System Works Accurately And Efficiently Before Live Operation Commences. Testing Is The Process Of Executing The Program With The Intent Of Finding Errors And Missing Operations And Also A Complete Verification To Determine Whether The Objectives Are Met And The User Requirements Are Satisfied. The Ultimate Aim Is Quality Assurance.

Unit Testing

The Software Units In A System Are Modules And Routines That Are Assembled And Integrated To Perform A Specific Function. Unit Testing Focuses First On Modules, Independently Of One Another, To Locate Errors. This Enables, To Detect Errors In Coding And Logic That Are Contained Within Each Module. This Testing Includes Entering Data And Ascertaining If The Value Matches To The Type And Size Supported By Java. The Various Controls Are Tested To Ensure That Each Performs Its Action As Required.

Integration Testing

Data Can Be Lost Across Any Interface, One Module Can Have An Adverse Effect On Another, Sub Functions When Combined, May Not Produce The Desired Major Functions. Integration Testing Is A Systematic Testing To Discover Errors Associated Within The Interface. The Objective Is To Take Unit Tested Modules And Build A Program Structure. All The Modules Are Combined And Tested As A Whole. Here The Server Module And Client Module Options Are Integrated And Tested. This Testing Provides The Assurance That The Application Is Well Integrated Functional Unit With Smooth Transition Of Data.

User Acceptance

Testing User Acceptance Of A System Is The Key Factor For The Success Of Any System. The System Under Consideration Is Tested For User Acceptance By Constantly Keeping In Touch With The System Users At Time Of Developing And Making Changes Whenever Required.

CONCLUSION

An Attempt is made in all ways possible towards the successful completion of the project, the system is verified with valid as well as invalid data.

The system is user friendly.

Although I have put my best efforts to make the software flexible, easy to operate but limitations cannot be ruled even by me:

Lists of limitations which is available in the Cable Management Software are:

- Manually people will generate all the bills of customer and all the records are maintained and stored is depends on paper-based system.
- Since Software is Desktop application so customer cannot place their online or at their home and unfortunately customer have to visit office in any case.

7.1 Advantages over Current System: -

In the Existing system the work is done only manually but in proposed system we can do us with computerized system using this application. Existing system includes following points: -

Lack of security of data.

More man powers.

Time consuming.

Consumes large volume of pare work.

Needs manual calculations.

No direct role for the higher officials

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

Security of data.

Ensure data accuracies.

Proper control of the higher officials.

Minimize manual data entry.

Minimum time needed for the various processing.

Greater efficiency.

Better service.

User friendliness and interactive.

Minimum time required.

At the end it is concluded that we have made effort on following points...

- A description of the background and context of the project and its relation to work already done in the area.
- The description of Purpose, Scope, and applicability.
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.
- We understand the problem domain and produce a model of the system, which Describes operations that can be performed on the system.

Future Scope

As we all know that nothing in this world is permanent or constant. Change is the only constant. In the same way, Cable Management web application system also has some future enhancements which will be made in future to make it better.

Future Enhancements of the software are as follows:

- This could be modified suitably to work on a network, protecting database integrity and ensuring integrity and ensuring consistency of data if it is distributed across multiple locations
- Also Creating a secured Online Payment system for each pack and automated price.
- Keeping a Record of Payment Status and Details of transaction.
- Maintain attendance details of employee.
- Maintain Mobile Details.
- Alerts the clients when bill is generated for a month via SMS and e-mail. Also, will be having remainder alerts.
- Other possibilities

Bibliography and References

I express my sincere gratitude to all those people who helped me in gathering the information while preparing the project. To prepare this project I required information regarding how to develop efficient and proper software to manage all the customer needs as per requirement and to mention it in the software.

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