



CLOSED USER GROUP MANAGEMENT PORTAL

GROUP F

Summer Internship 2024

[Github Repository Link](#)

MEET THE TEAM(F)



Kalinga Kumar Khatua
(OUTR)



Shankar Singh Mahanty
(CV RAMAN)



Soorjyakanta Sethy
(VSSUT)



Biswajeet Samal
(CV RAMAN)



S.B. Ashirbad
(CV RAMAN)



Arya Kumar Bhanja
(CV RAMAN)



Piyush Sahu
(VSSUT)



Sk Samim Quadri
(BIET)

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Admin Page



Dealer Page

TECHONLOGY STACK



Project Agenda

- Define the project's scope and stakeholder roles.
- Gather detailed requirements for Admin features (user/group management, access control) and Dealer functionalities (member management, communication tools).
- Design the system architecture and PHP webpages tailored to each role, and implement features according to specifications.
- Conduct rigorous testing to ensure functionality and security, followed by strategic deployment.

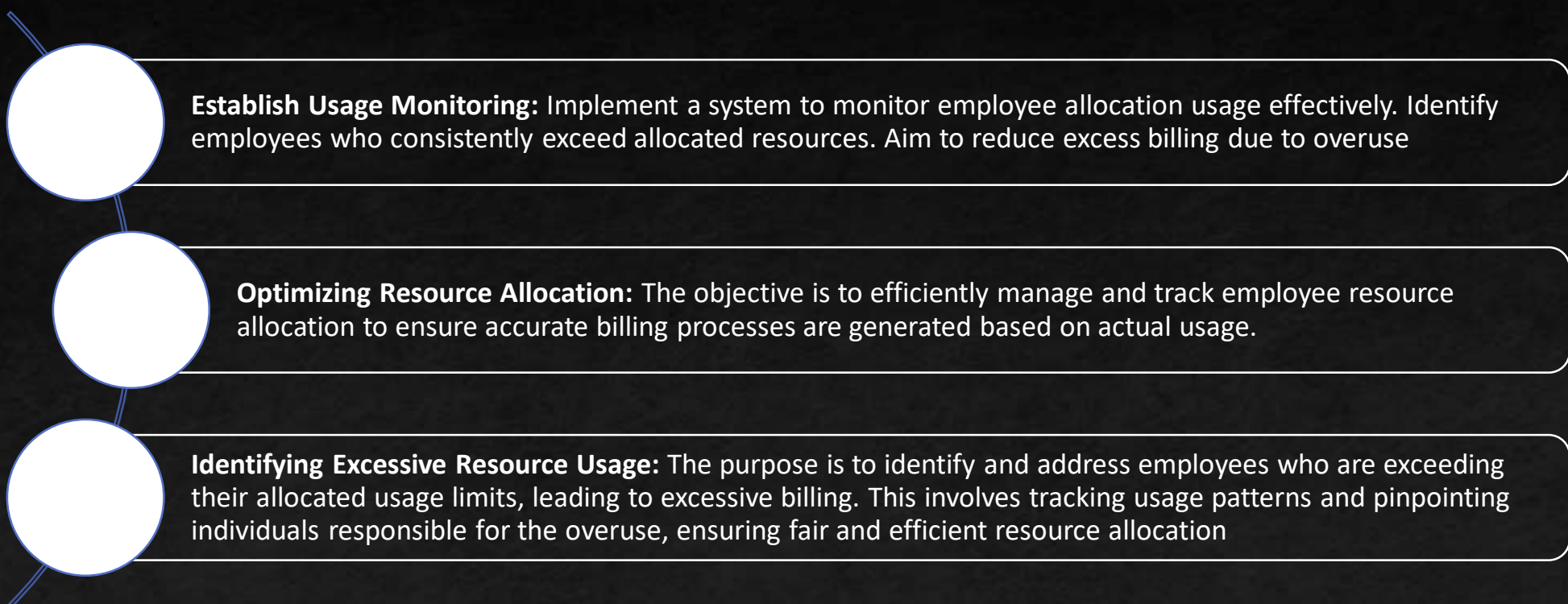
Project Overview

A Closed User Group (CUG) is a telecommunications service enabling a designated group of users to communicate at reduced rates based on their plan. It is frequently used by organizations to ensure efficient, cost-effective, and secure communication within the group.

The process of establishing a Close User Group involves:

- **Define Members:** The organization selects the users for the CUG.
- **Service Agreement:** An agreement is made with a telecom provider.
- **Setup:** The provider configures the network to include the specified members.
- **Activation:** The CUG is activated, allowing reduced-rate, secure communication within the group.

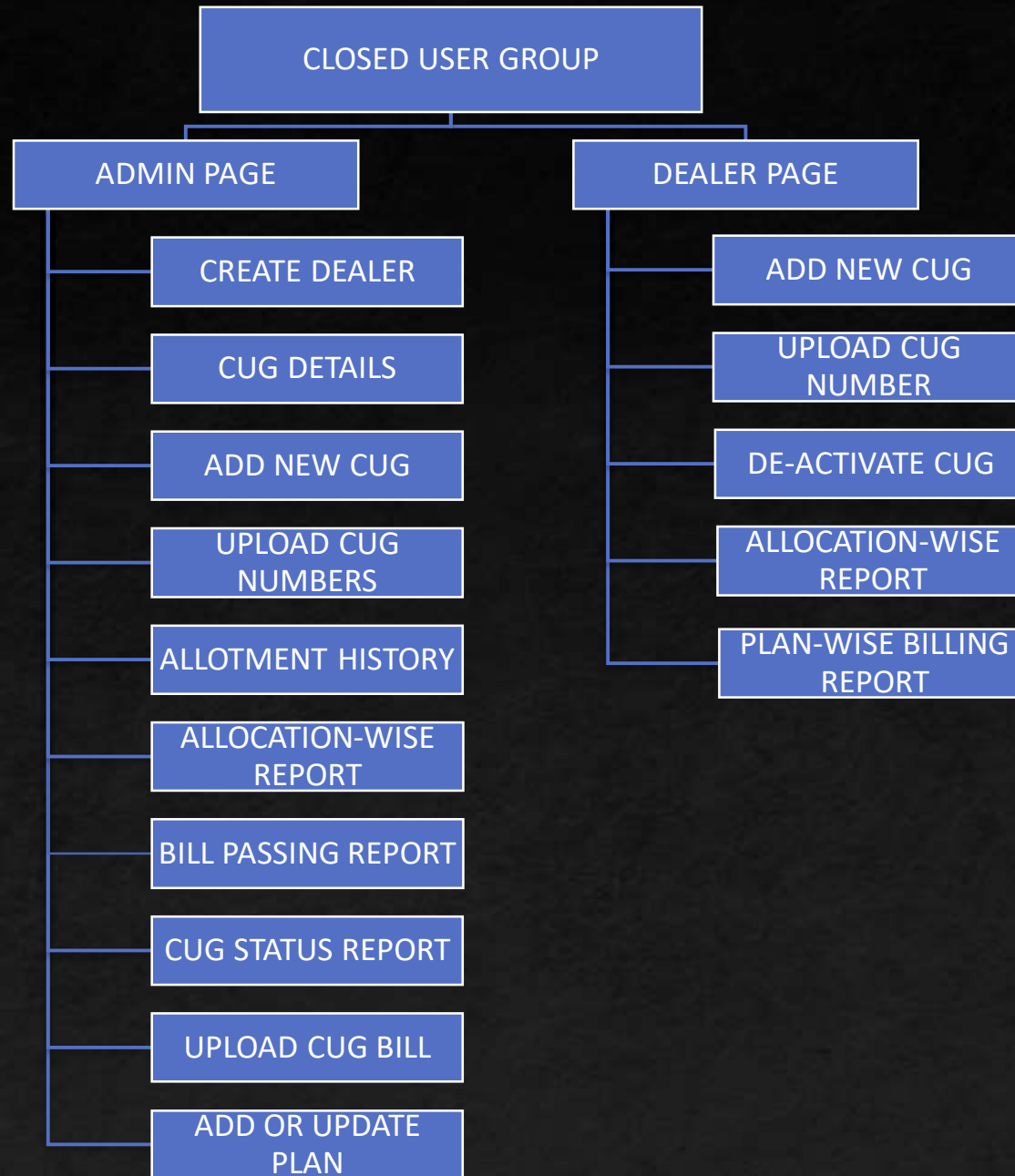
Project Objectives



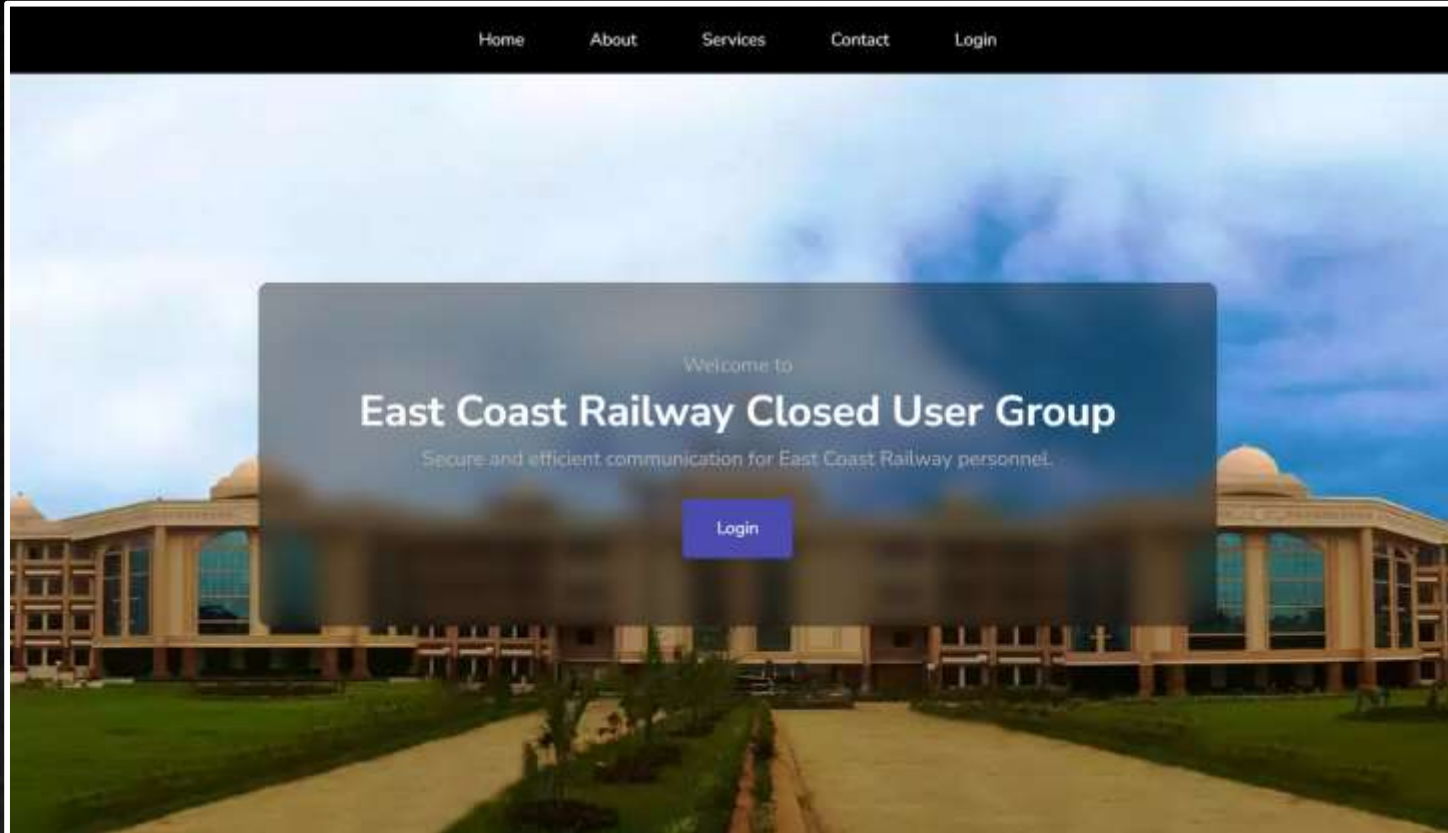
Establish Usage Monitoring: Implement a system to monitor employee allocation usage effectively. Identify employees who consistently exceed allocated resources. Aim to reduce excess billing due to overuse

Optimizing Resource Allocation: The objective is to efficiently manage and track employee resource allocation to ensure accurate billing processes are generated based on actual usage.

Identifying Excessive Resource Usage: The purpose is to identify and address employees who are exceeding their allocated usage limits, leading to excessive billing. This involves tracking usage patterns and pinpointing individuals responsible for the overuse, ensuring fair and efficient resource allocation

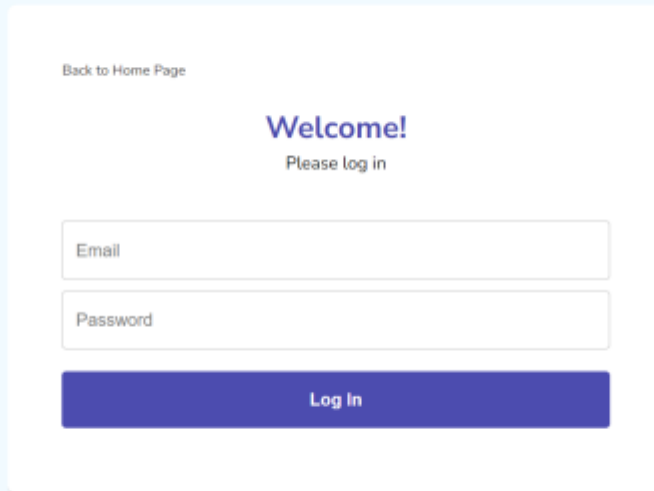


HOME PAGE



- The "East Coast Railway CUG" website presents a user-friendly interface with a navigation bar linking to sections like Home, About, Services, Contact and Login.
- Key metrics such as
 - employee counts
 - active and inactive CUG numbers
 - allocation details
 - bill numbers
 - plan informationare dynamically displayed in a summary table, sourced from a backend database.
- Additional sections include service offerings, a gallery of images, and a contact form, contributing to a comprehensive and engaging user experience.

LOGIN PAGE



Back to Home Page

Welcome!
Please log in

Email

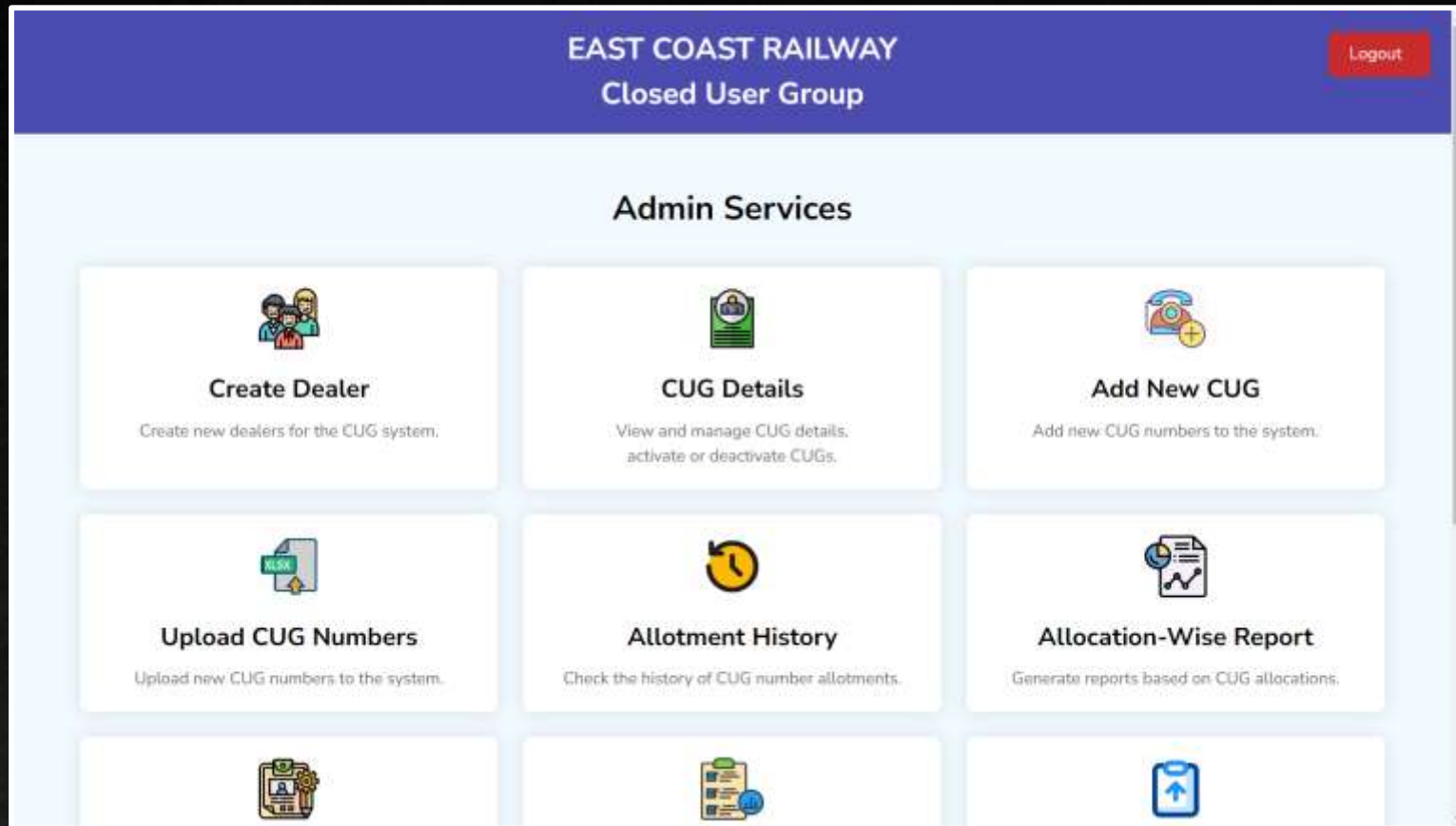
Password

Log In

- Safe login page for both dealers and administrators.
- Implements role-based access control to ensure users can only access features relevant to their responsibilities.

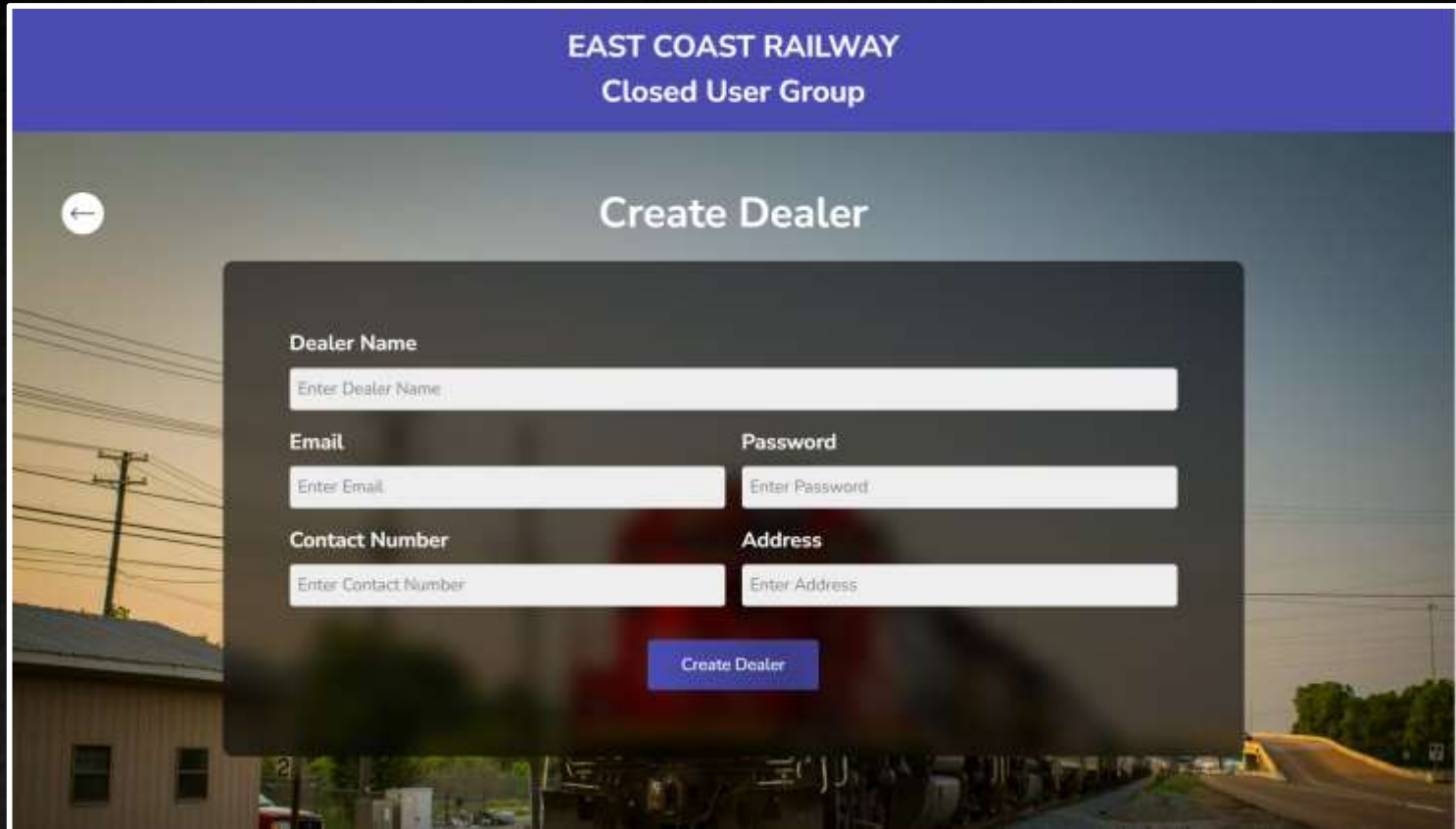
ADMIN CONTROL PAGE

ADMIN SERVICES



- After Login in as Admin it provides a navigation interface with admin services such as
 - Creating dealers
 - Managing CUG details
 - Adding new CUG numbers
 - Uploading CUG numbers and bills
 - Viewing allotment history
 - Generating allocation-wise reports
 - Adding new plans
 - A logout button

CREATE DEALER



EAST COAST RAILWAY
Closed User Group

← **Create Dealer**

Dealer Name
Enter Dealer Name

Email
Enter Email

Password
Enter Password

Contact Number
Enter Contact Number

Address
Enter Address

Create Dealer

- Administrators can create new dealer profiles by inputting details such as
 - Dealer name
 - Email
 - Password
 - Contact number
 - Addressthen clicking the create dealer button.
- The form validates and sanitizes inputs and inserts the data into the database if validation passes.
- Success or error messages is redirection to the form page.

CUG DETAILS

EAST COAST RAILWAY Closed User Group												
CUG DETAILS												
CUG Number	Employee Number	Employee Name	Designation	Unit	Department	Bill Unit No	Allocation	Operator	Plan	Status	Created At	Updated At
1014785798	365166527088	DALLAP KJMDR SDMDL	AA	CON	S & T	3106854	873106	JIO	C	Active	3:47 PM on 10th Jul, 24	3:47 PM on 10th Jul, 24
9677137458	362276237069	SUMDND MBPDNTY	FAnCAO/TRAFFIC	CON	ENGG	06025	873106	JIO	C	Active	3:47 PM on 10th Jul, 24	3:47 PM on 10th Jul, 24
9677141709	339555256153	SPDSPA KDNT MASPRD	FAnCAO	CON	ENGG	06287	873106	JIO	C	Active	3:47 PM on 10th Jul, 24	3:47 PM on 10th Jul, 24
9677141905	363155739851	Y.DNDND	FAnCAO/WnS	CON	S & T	06853	873106	JIO	C	Active	3:47 PM on 10th Jul, 24	3:47 PM on 10th Jul, 24
9677145886	365154987804	NARMDL CPDNDRD SDRDNGA	AFA	CON	ENGG	06287	873106	JIO	C	Active	3:47 PM on 10th Jul, 24	3:47 PM on 10th Jul, 24

- Administrators can view all Closed User Group (CUG) details in a table with columns for
 - CUG number
 - Employee details
 - Allocation
 - Operator plan
 - Status
 - Timestamps
- It fetches the CUG details from the database and displays them accordingly.
- A search bar allows users to dynamically filter the displayed CUG details based on their input.

ALLOTMENT OF NEW CUG

The screenshot shows a web application interface for the 'EAST COAST RAILWAY Closed User Group'. The main heading is 'Allotment Of New Cug'. The form contains the following fields:

- CUG No. (Text input)
- Name (Text input)
- Designation (Text input)
- Department (Dropdown menu)
- Allocation (Text input)
- Employee No. (Text input)
- Unit (Text input)
- Bill Unit No. (Text input)
- Operator (Text input)

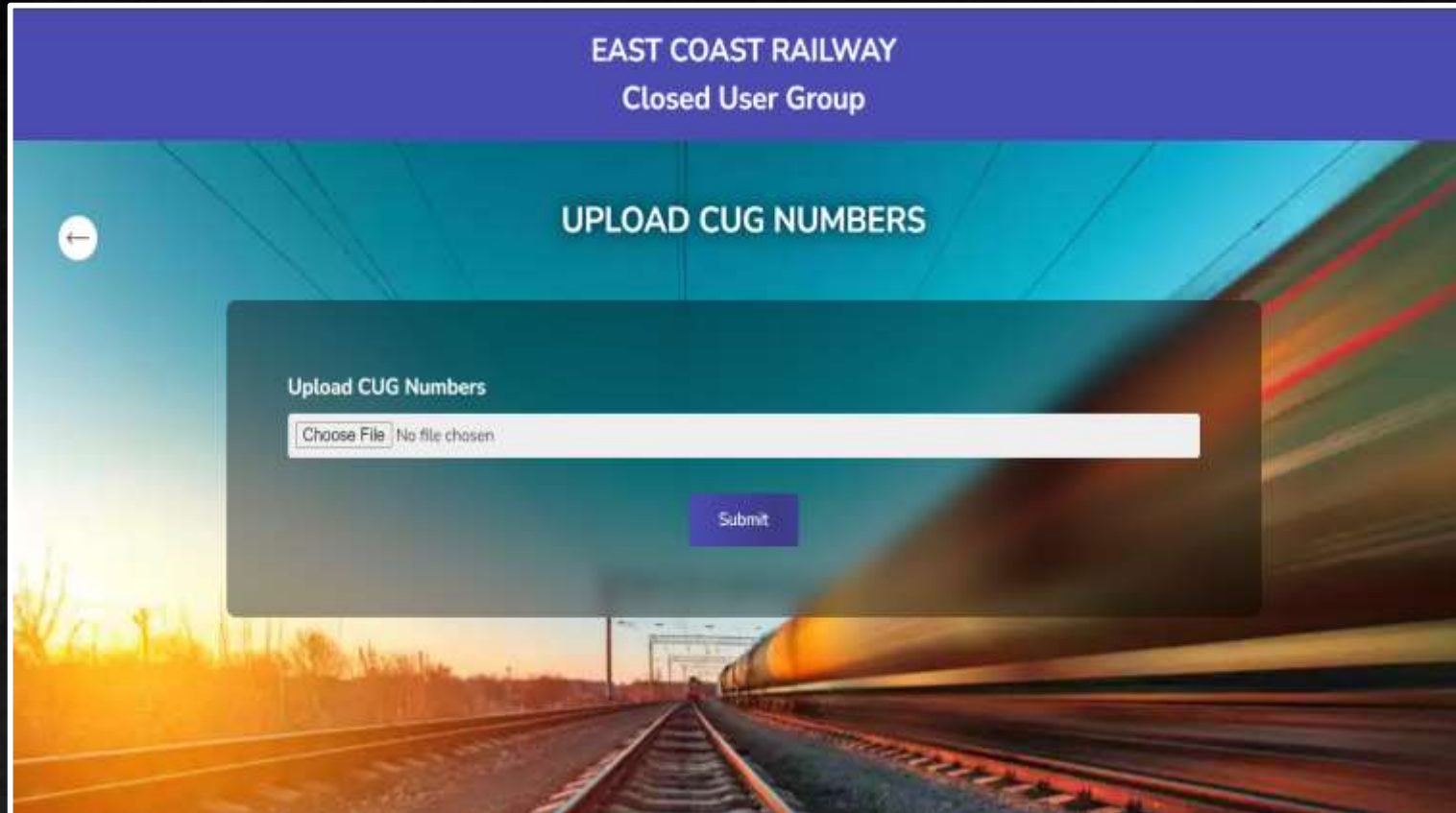
Below the form, there is a 'Choose a Plan' section with three options:

Plan A	Plan B	Plan C
₹74.61	₹59.05	₹39.90
Validity: 60 days	Validity: 60 days	Validity: 28 days
Data: 2.0GB/day	Data: 1.5GB/day	Data: 1.0GB/day
Toll-free: Unlimited	Toll-free: Unlimited	Toll-free: Unlimited
Select A	Select B	Select C

A 'Submit' button is located at the bottom center of the form.

- Administrations can allot a new Closed User Group (CUG) number by inputting necessary details and submitting the information via the submit button.
- The page displays a form for adding new CUG records and shows success or error messages based on the form submission results.
- It handles
 - Form submission
 - Validates input data
 - Inserts new CUG records into the database
 - Records transaction after successful insertion.

UPLOAD CUG NUMBERS

The screenshot shows a web application interface for the 'EAST COAST RAILWAY Closed User Group'. The background is a blurred image of a train on tracks at sunset. At the top, a purple header bar contains the text 'EAST COAST RAILWAY' and 'Closed User Group'. Below this, a teal banner displays 'UPLOAD CUG NUMBERS' in white. A white circular arrow icon is on the left. A dark grey modal box is centered, titled 'Upload CUG Numbers'. It features a file upload area with a 'Choose File' button and the text 'No file chosen'. Below this is a blue 'Submit' button.

EAST COAST RAILWAY
Closed User Group

←

UPLOAD CUG NUMBERS

Upload CUG Numbers

Choose File No file chosen

Submit

- Administers can upload an Excel file containing CUG (Closed User Group) numbers and related information.
- The web page provides a form for file upload and displays success or error messages based on the operation's outcome.
- It processes the uploaded file, updates or inserts records into the database and stores information about the uploaded file.

ALLOTMENT HISTORY



The screenshot shows a web application interface for the EAST COAST RAILWAY Closed User Group. The background is a scenic image of a steam locomotive pulling a passenger train through a forested landscape. The interface includes a blue header with the text "EAST COAST RAILWAY" and "Closed User Group". Below the header, the title "Allotment History" is displayed. A search form is centered on the page, featuring a red label "CUG NO.", a white input field with the placeholder text "Enter CUG No.", and a blue "GO" button. A back arrow icon is visible in the top left corner of the page.

- Administrators can search and view the history of CUG numbers.
- Upon entering a CUG number, the page retrieves and displays detailed records from the database, including employee details and activation dates.
- This functionality helps manage and track the allocation and usage history of CUG numbers effectively.

ALLOCATION REPORT

EAST COAST RAILWAY
Closed User Group

Allocation Report

Select Month: Select Year:

Allocation	Bill Dates	Amount
00873106	1-2024	Rs. 3,780.00
873106	1-2024	Rs. 1,055.00
Grand Total:		Rs. 4,835.00
CGST #		Rs. 435.15
SGST #		Rs. 435.15
Total Payable:		Rs. 5,705.30

- Administrators can view and filter allocation reports based on selected months and years.
- These reports includes allocation, bill dates, amount and calculates the overall cost associated with these allocations, providing a clear financial summary.
- The page includes role-based redirection mechanisms to ensure seamless navigation tailored for both administrators and dealers.
- It can generate PDF reports of the allocation details.

BILL PASSING REGISTER

EAST COAST RAILWAY
Closed User Group

Bill Passing Register

Select Month: January Select Year: 2024

Filter

Unit	Department	Bill Dates	Amount
CON			
	ENOC	1-2024	Rs. 2,870.00
	S & T	1-2024	Rs. 1,965.00
		Total for CON:	Rs. 4,835.00
		Grand Total:	Rs. 4,835.00
		CGST ₹	Rs. 435.15
		SGST ₹	Rs. 435.15
		Total Payable:	Rs. 5,705.30

Generate PDF

- Administrators can view and filter billing records based on selected months and years.
- Admin can see detailed billing information grouped by unit and department, with aggregated amounts and GST details for the chosen period.
- The page includes role-based redirection mechanisms to ensure seamless navigation tailored for both administrators and dealers.
- It can generate PDF reports of the billing data for further use.

CUG STATUS REPORT



CUG Number	Employee Number	Employee Name	Designation	Unit	Department	Bill Unit No	Allocation	Operator	Plan	Status	Created At	Updated At
1014785798	365166527088	DALLAP KUMDR SDMDL	AA	CON	S & T	3106854	873106	JIO	C	Active	3:48 PM on 10th Jul 24	3:48 PM on 10th Jul 24
9677141709	339555256153	SPDSPA KDNT MASPRD	FAnCAO	CON	ENGG	06287	873106	JIO	C	Active	3:48 PM on 10th Jul 24	3:48 PM on 10th Jul 24
9677137458	362276237069	SUMDND MBPDNTY	FAnCAO/TRAFFIC	CON	ENGG	06025	873106	JIO	C	Active	3:48 PM on 10th Jul 24	3:48 PM on 10th Jul 24
9677141905	363155739851	Y.DNDND	FAnCAO/WnS	CON	S & T	06853	873106	JIO	C	Active	3:48 PM on 10th Jul 24	3:48 PM on 10th Jul 24

- Administrator can view and filter closed user group details based on status
 - Active
 - Inactive
 - All
- Admin can filter the table contents using a dropdown menu and adjust visibility based on the selected status.
- It presents a table with comprehensive information such as
 - CUG number
 - Employee details
 - Billing unit
 - Allocation
 - Status
 - Timestamp fetched dynamically from the database.

UPLOAD BILL

EAST COAST RAILWAY
Closed User Group

←

UPLOAD BILL

Bill Month

Select Year:

Select Month

2024

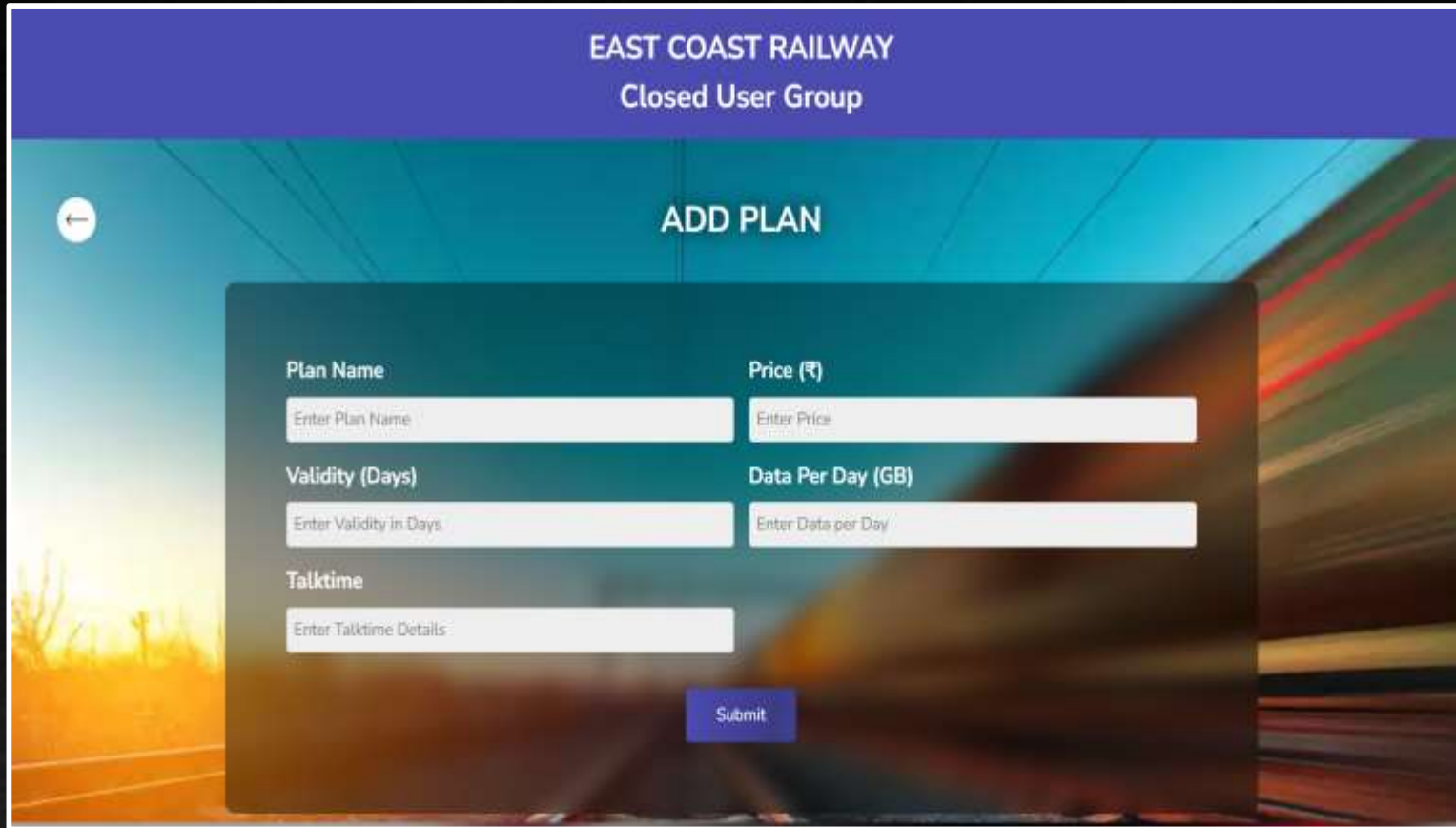
Upload CUG Bill

Choose File No file chosen

Submit

- Administrators can upload Excel files containing CUG billing data for processing and insertion into a database.
- Admin can select the billing month and year, upload the file, and feedback message gets displayed based on the success or failure of file uploaded.
- It includes validation checks for file type and size, and processes the uploaded file to extract billing details.

ADD PLAN



The screenshot shows a web interface for the 'EAST COAST RAILWAY Closed User Group'. The main heading is 'ADD PLAN'. The form is a dark blue overlay with white text and input fields. It contains the following fields:

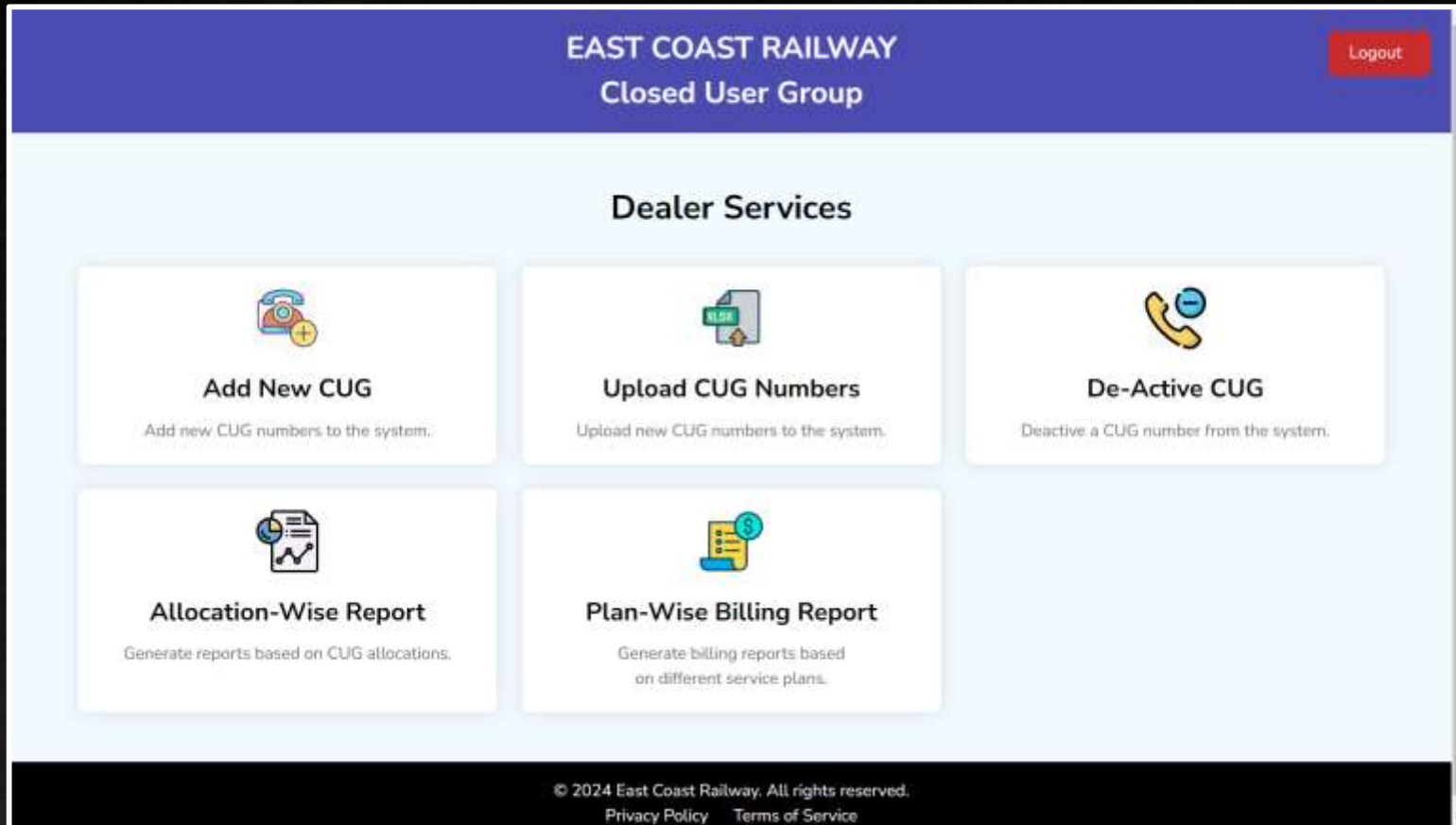
- Plan Name**: Input field with placeholder 'Enter Plan Name'.
- Price (₹)**: Input field with placeholder 'Enter Price'.
- Validity (Days)**: Input field with placeholder 'Enter Validity in Days'.
- Data Per Day (GB)**: Input field with placeholder 'Enter Data per Day'.
- Talktime**: Input field with placeholder 'Enter Talktime Details'.

A blue 'Submit' button is located at the bottom right of the form.

- Administrators can add or update plans of the cug service.
- It includes form validation for fields such as
 - Plan name
 - Price
 - Validity
 - Data allowance per day
 - Talk time
- Upon form submission it checks if the plan already exists in the database, and either updates the existing plan or inserts a new one accordingly.
- Feedback messages is displayed to inform the admin about the success or failure of the operation.

DEALER ACCESS PAGE

DEALER SERVICES



- After login as Dealer provides various services for dealers managing Closed User Group (CUG) services such as
 - Adding new CUG numbers
 - Uploading CUG numbers
 - Deactivating CUGs
 - Generating reports
- The page is accessible only to users authenticated as "dealer" through role-based authentication.

ADD NEW CUG

EAST COAST RAILWAY
Closed User Group

Allotment Of New Cug

CUG No.

Name

Employee No.

Designation

Unit

Department

Bill Unit No.

Allocation

Operator

Choose a Plan

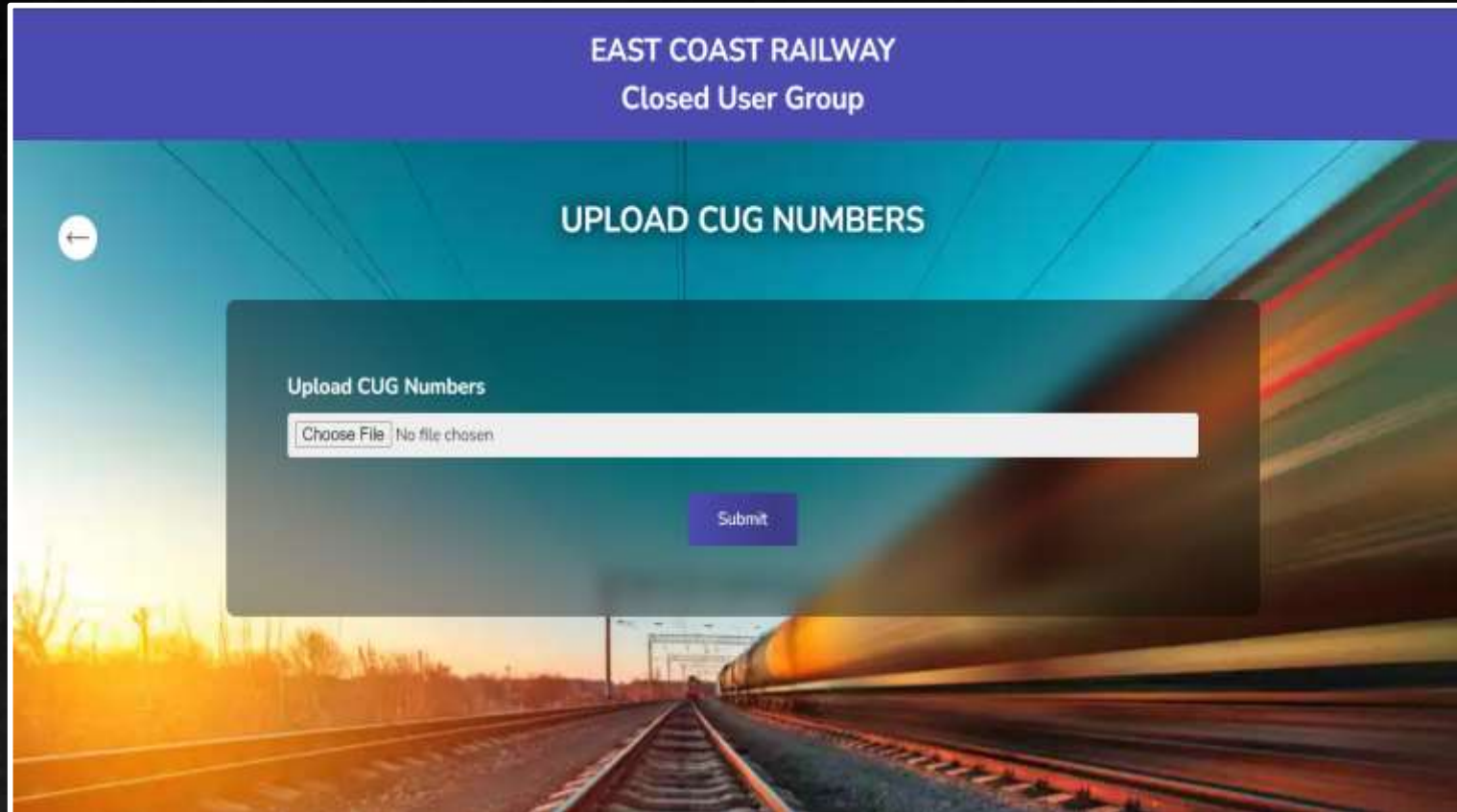
₹74.61
Validity: 6 days
Data: 2000km
Tariff: Unlimited

₹59.05
Validity: 5 days
Data: 1500km
Tariff: Unlimited

₹39.90
Validity: 3 days
Data: 1000km
Tariff: Unlimited

- Dealers can also allot a new Closed User Group (CUG) number by inputting necessary details and submitting the information via the submit button.
- The page displays a form for adding new CUG records and shows success or error messages based on the form submission results.
- It handles
 - Form submission
 - Validates input data
 - Inserts new CUG records into the database
 - Records transaction after successful insertion.

UPLOAD CUG NUMBERS



EAST COAST RAILWAY
Closed User Group

←

UPLOAD CUG NUMBERS

Upload CUG Numbers

Choose File No file chosen

Submit

- Dealers can also upload an Excel file containing CUG (Closed User Group) numbers and related information.
- The web page provides a form for file upload and displays success or error messages based on the operation's outcome.
- It processes the uploaded file, updates or inserts records into the database and stores information about the uploaded file.

DEACTIVATE CUG

- Dealers can search for and deactivate specific CUG numbers.
- Upon searching for a CUG number, detailed information is displayed including
 - Employee details
 - Allocation
 - Status
- Dealers can choose to deactivate active CUG numbers, which update its status to "Inactive" in the database.
- Messages inform the outcome of the deactivation attempts.



ALLOCATION REPORT

EAST COAST RAILWAY
Closed User Group

Allocation Report

Select Month: Select Year:

Allocation	Bill Dates	Amount
00873106	1-2024	Rs. 3,780.00
873106	1-2024	Rs. 1,055.00
Grand Total:		Rs. 4,835.00
CGST #		Rs. 435.15
SGST #		Rs. 435.15
Total Payable:		Rs. 5,705.30

- Dealers can also view and filter allocation reports based on selected months and years.
- These reports includes allocation, bill dates, amount and calculates the overall cost associated with these allocations, providing a clear financial summary.
- It can generate PDF reports of the allocation details.

PLAN WISE BILLING REPORT

- Dealers can select a specific month and year to generate a comprehensive billing report for each service plan used within the system.
- Calculations for GST components (CGST and SGST) are included, providing a complete view of payable amounts.
- Dealers can further generate a PDF report based on their selected month and year.

EAST COAST RAILWAY
Closed User Group

Plan Wise Billing Report

Select Month: Select Year:

Plan	Bill Dates	Amount
C	1-2024	Rs. 4,835.00
Grand Total :		Rs. 4,835.00
CGST ₹		Rs. 435.15
SGST ₹		Rs. 435.15
Total Payable :		Rs. 5,705.30

CONCLUSION

- The East Coast Railway Closed User Group (CUG) is a transformative platform designed to streamline communication and enhance operational efficiency.
- By fostering a secure and reliable environment for information exchange, the CUG ensures that all members are well-connected and informed.
- Join us in leveraging this innovative platform to drive excellence in our railway operations and achieve new heights of efficiency and collaboration.

This project emphasizes the benefits and transformative impact of the CUG while encouraging continued engagement and utilization of the platform.



THANK YOU

We would like to extend our heartfelt gratitude to the East Coast Railway Department for giving us the opportunity to work on this project.

Your support and collaboration have been invaluable in making this Closed User Group (CUG) a reality.

We are deeply grateful for your trust and for providing the resources and guidance needed to develop a system that will enhance the efficiency and transparency of managing Closed User Group (CUG) details.

Special thanks to all the team members who provided their insights, feedback, and encouragement throughout the development process. Your contributions were crucial in shaping this project.

THANK YOU ONCE AGAIN FOR THIS WONDERFUL OPPORTUNITY.

