

## PASSENGER INFORMATION SYSTEM

### Intorduction

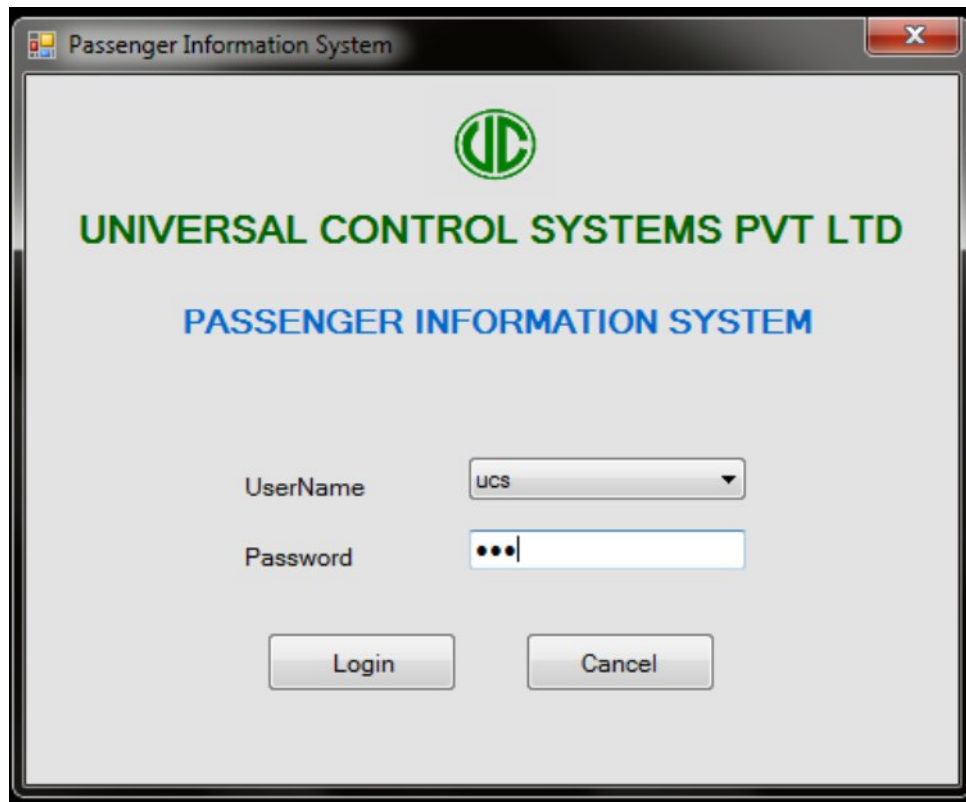
Passenger Information System is an important aspect of passenger amenity. Information about train location, next halting station and late running status of train, this system will help in enhancing passenger comfort.

This Front end Software application will help to communicate with PIS embedded unit, which placed inside the train coach.

The proposed system deals with the programming language using C#.Net and MS-Access database.

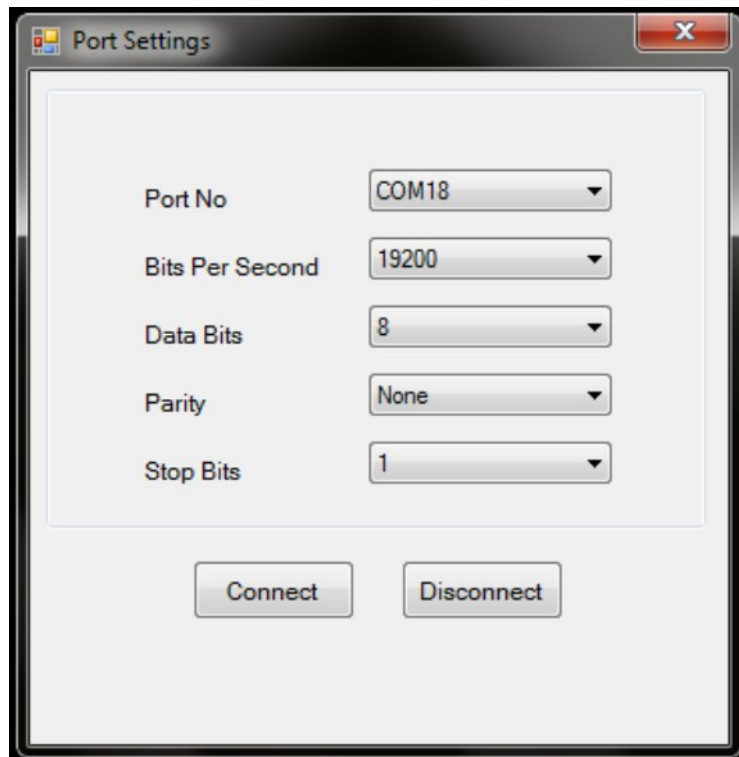
### Login Screen

By using below user login screen, user can login into the application, and for maintaining the users data we are using MS-Access database .



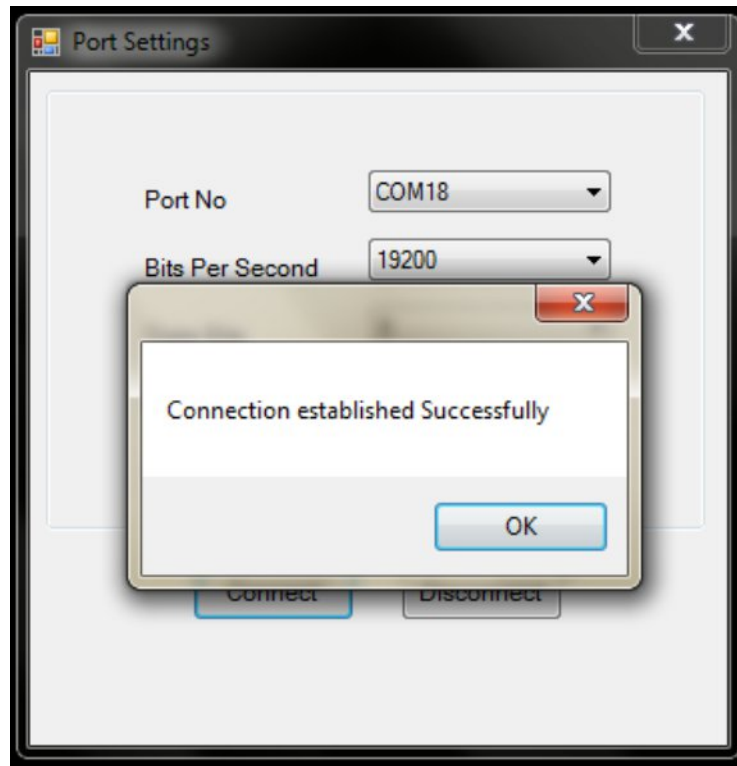
The screenshot shows a Windows-style application window titled "Passenger Information System". The window has a standard title bar with a minimize button, a maximize button, and a close button (X). The main content area has a light gray background. At the top center, there is a green circular logo with the letters "UCS" inside. Below the logo, the text "UNIVERSAL CONTROL SYSTEMS PVT LTD" is displayed in green, bold, uppercase letters. Underneath that, "PASSENGER INFORMATION SYSTEM" is displayed in blue, bold, uppercase letters. The login section consists of two labels: "UserName" and "Password". The "UserName" label is to the left of a dropdown menu that currently shows "UCS". The "Password" label is to the left of a text box that contains three black dots, indicating a password mask. At the bottom of the login section, there are two buttons: "Login" and "Cancel", both with a light gray gradient and a thin black border.

- Enter a valid Username and Password and click on “Login” button. After successfully logging into the application below screen will display, where user can connect with the “serial Port” communication.



- Before setting the port details, check with “GSM Modem” configuration and set the port details. Click on “Connect” button.

- Once a connection is established successfully, below message will display.

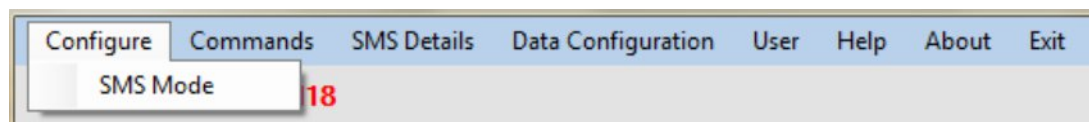


- After successful connection established below window will display.

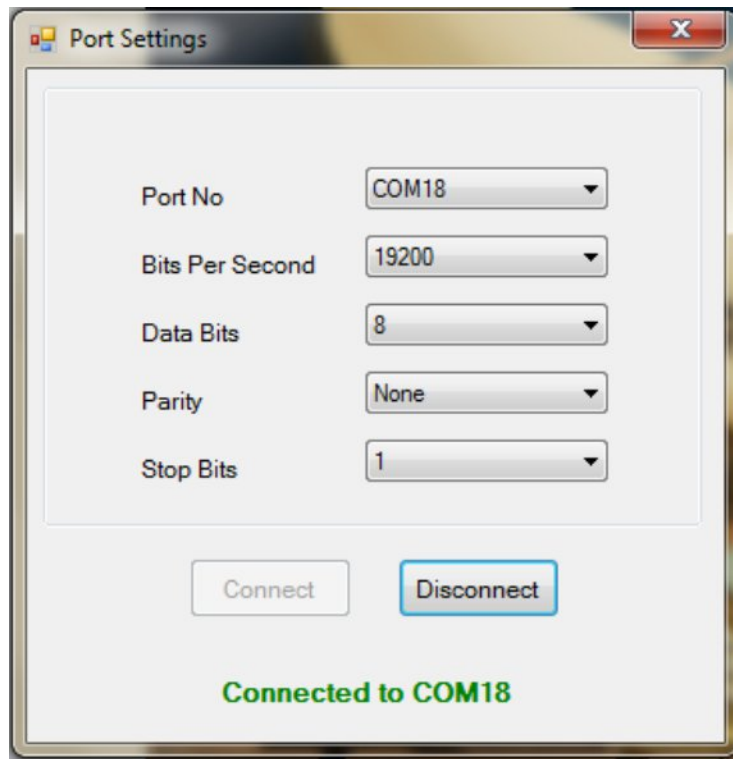


- Here in menu list we will have 8 menus.
  1. Configure
  2. Commands
  3. SMS Details
  4. Data Configuration
  5. User
  6. Help
  7. About
  8. Exit

### CONFIGURE MENU



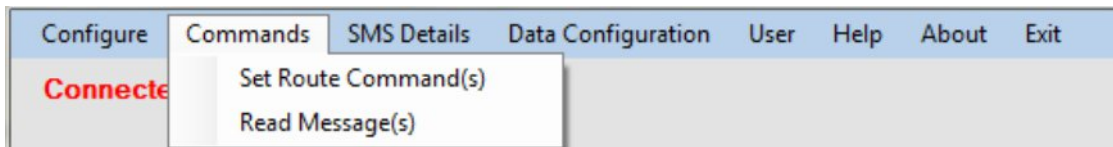
- Select "SMS Mode" and click on it, below window will display. Where the user can change/ Disconnect the port connection.



## COMMANDS MENU

Under commands menu, we have 2 menus.

1. Set Route Command(s)



### Set Route Command(s)

Click on "Set Route Command(s)" menu. Below window will display.

The 'Set Route' dialog box is shown. It contains a 'Train No' dropdown menu set to '12723 - Hyderabad Express'. Below this is a section titled 'COACH DETAILS' with an 'ALL' checkbox. A table lists available coaches for selection.

Select	Coach No	PIS Unit No	SIM No	Status
<input checked="" type="checkbox"/>	CH0002	PIS0002	+917331153865	
<input type="checkbox"/>	CH0003	PIS0003	+917331153866	

Below the table is a 'COMMANDS' section with three radio buttons: 'Select Route' (selected), 'Deselect Route', and 'Route Status'. At the bottom right are 'Send' and 'Cancel' buttons.

- To get the Train and Coach details, user can maintain Train and Coach details in database.
- Select the Train from "Train No", which will display Coach details of selected train.
- To send the messages/commands to coaches, select Coach by using checkbox as given below. OR user can select all coaches using "ALL" checkbox.
- From Commands, select the command to send the particular message.
- Select "Send" button and click on it.
- After Successfully message sent to the particular coach/ SIMNo, Status will update for particular coach as a "Msg Sent".
- If application is unable to send the message to particular coach/ SIMNo, it will update status as a "Fail".

Set Route

Train No

12724 - Delhi Express

COACH DETAILS

☐ ALL

Select	Coach No	PIS Unit No	SIM No	Status
<input type="checkbox"/>	4	4	+918019307630	
<input type="checkbox"/>	5	5	+919000612081	
<input type="checkbox"/>	6	6	+919885495296	
<input checked="" type="checkbox"/>	7	7	+917331153863	Msg Sent
<input type="checkbox"/>	8	8	+918374655934	
<input type="checkbox"/>	9	9	+919908209454	

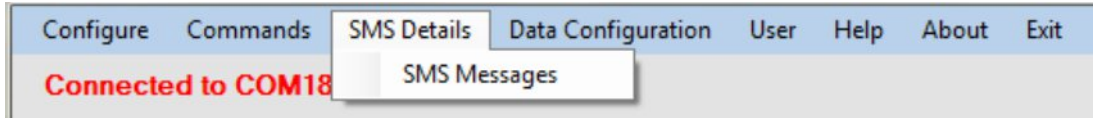
COMMANDS

☐ Select Route
☐ Deselect Route
☒ Route Status

Send

Cancel

- All the application Sent messages and Received messages will save into database. To see all the messages, go to "SMS Messages" under "SMS Details" menu and click on it.



SMS DETAILS				
Sent Messages				
SMSDate	SMSTime	CoachNo	SIMNo	
04/03/2016	10:49:54	9	+919908209454	
04/03/2016	10:49:49	8	+918374655934	
04/03/2016	10:49:44	7	+917331153863	
04/03/2016	10:49:38	6	+919885495296	
04/03/2016	10:49:33	5	+919000612081	
04/03/2016	10:49:28	4	+918019307630	
04/03/2016	10:49:23	3	+918885212132	
04/03/2016	10:49:18	2	+919676014499	
04/03/2016	10:49:13	1	+919642343212	
04/03/2016	10:43:35	7	+917331153863	
04/03/2016	10:39:43	8	+918374655934	
04/03/2016	10:39:17	8	+918374655934	
Received Messages				
SMSDate	SMSTime	CoachNo	SIMNo	State
03/03/2016	13:52:53	C0005	+917331153863	State
03/03/2016	13:47:10	C0005	+917331153863	State
03/03/2016	13:45:59	C0005	+917331153863	State
03/03/2016	13:39:28	C0005	+917331153863	State
03/03/2016	13:38:14	C0005	+917331153863	State
04/03/2016	11:40:25	7	+917331153863	
04/03/2016	11:32:04	7	+917331153863	

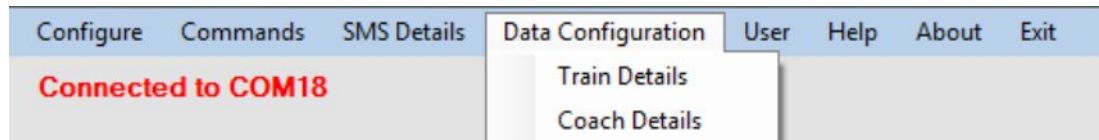


## Data Configuration menu

Under “Data Configuration” menu, we find two menus.

1. Train Details
2. Coach Details

- Only “Admin” can enter/ modify these details.



Click on “Train Details”

Route Information

Train No

From Time

13:51:23

Train Name

To Time

13:51:23

No of Coaches

No of Hours

Source

Distance

Destination

Via

Save

New

Cancel

Add Coaches

ROUTE DETAILS

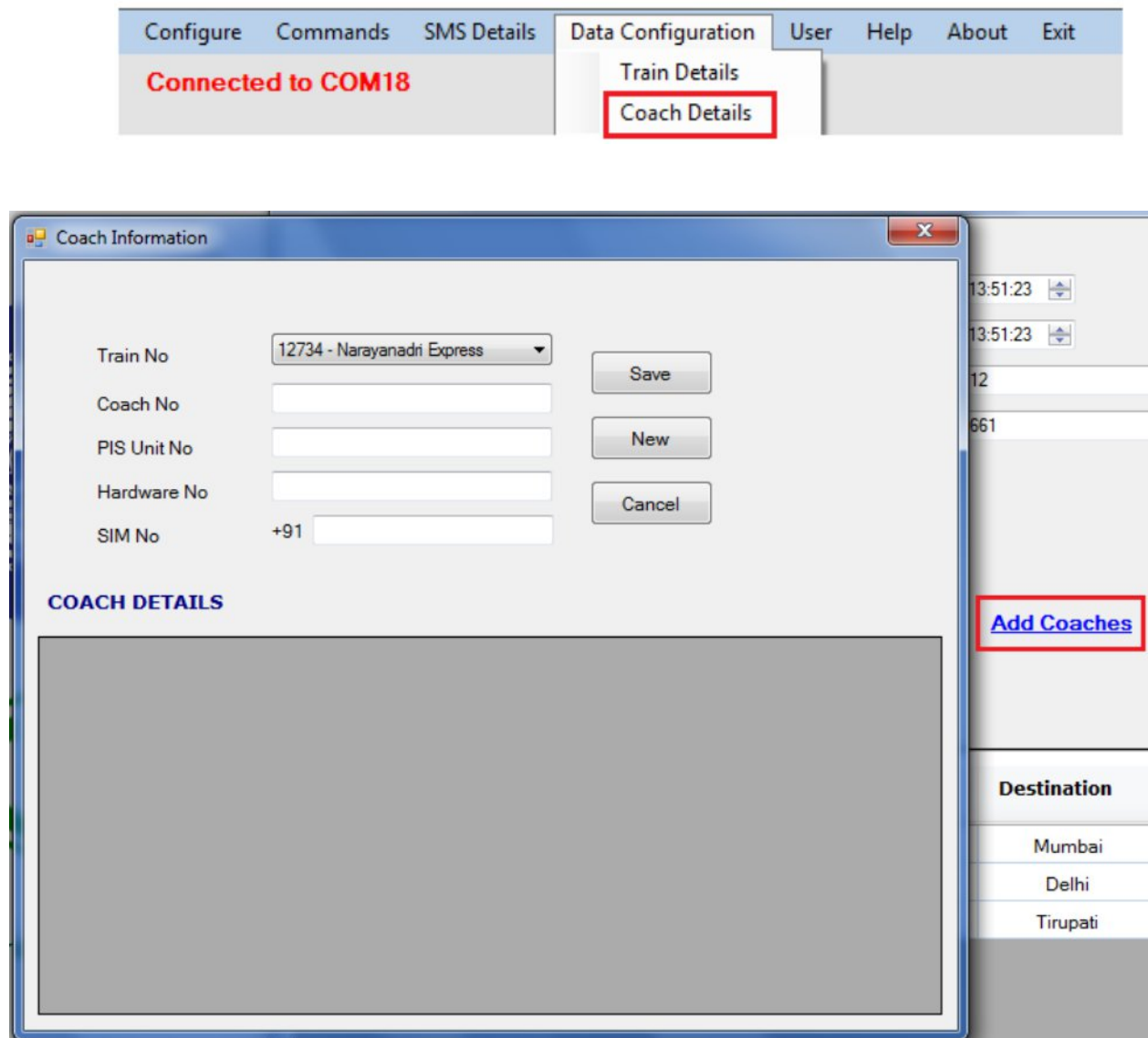
SNo	Train No	Train Name	No of Coaches	Source	Destination	Edit	Delete
1	12723	Hyderabad	12	Hyderabad	Mumbai	<a href="#">Edit</a>	<a href="#">Delete</a>
2	12724	Delhi Express	10	Hyderabad	Delhi	<a href="#">Edit</a>	<a href="#">Delete</a>

- Enter the Train details and click on "Save" button which will save data into database, below Successful message will display.

The screenshot shows a 'Route Information' window with a form for entering train details. The form includes fields for Train No, Train Name, No of Coaches, Source, Destination, Via, From Time, To Time, No of Hours, and Distance. A modal dialog box is displayed in the center with the message 'Train/Route details saved Successfully' and an 'OK' button. Below the form, there is a section titled 'ROUTE DETAILS' containing a table with columns: SNo, Train No, Train Name, No of Coaches, Source, Destination, Edit, and Delete. The table contains two rows of data.

SNo	Train No	Train Name	No of Coaches	Source	Destination	Edit	Delete
1	12723	Hyderabad	12	Hyderabad	Mumbai	<a href="#">Edit</a>	<a href="#">Delete</a>
2	12724	Delhi Express	10	Hyderabad	Delhi	<a href="#">Edit</a>	<a href="#">Delete</a>

- For Editing selected Train/Route details, click on "Edit" link, which fill above input boxes with selected train details.
- For Deleting selected Train/Route details, click on "Delete" link, which will delete the details from database.
- To add Coaches for current train, Click on "Add Coaches" link. Which will display "Coach Information" window.
- Another way to display "Coach Information" window is, Under "Data Configuration" menu click on "Coach Details".
- Only "Admin" can enter/ modify these details.



- Enter the coach details and click on “Save” button, which will save coach details into database , below Successful message will display.

The screenshot shows a software window titled "Coach Information". Inside, there are five input fields with labels: "Train No" (a dropdown menu showing "12734 - Narayanadri Express"), "Coach No" (text box with "CH0011"), "PIS Unit No" (text box with "PIS0011"), "Hardware No" (text box with "H00011"), and "SIM No" (text box with "+91 8985674569"). To the right of these fields are three buttons: "Save", "New", and "Cancel". Below the input fields, there is a section titled "COACH DETAILS" which is currently empty. Overlaid on top of the "COACH DETAILS" section is a small dialog box with the title bar "Coach details saved Successfully" and an "OK" button.

- For Editing selected Coach details, click on “Edit” link, which fill above input boxes with selected coach details.
- For Deleting selected Coach details, click on “Delete” link, which will delete the details from database.

- For clearing the details click on "New" button. Which will clear the details.

Coach Information

Train No

12734 - Narayanadri Express

Coach No

CH0011

PIS Unit No

PIS0011

Hardware No

H00011

SIM No

+91 8985674569

Save

New

Cancel

COACH DETAILS

SNo	Coach No	PIS Unit No	SIM No	Hardware No	Edit	Delete
1	CH0011	PIS0011	+918985674569	H00011	<a href="#">Edit</a>	<a href="#">Delete</a>

Train No

12734 - Narayanadri Express

Coach No

PIS Unit No

Hardware No

SIM No

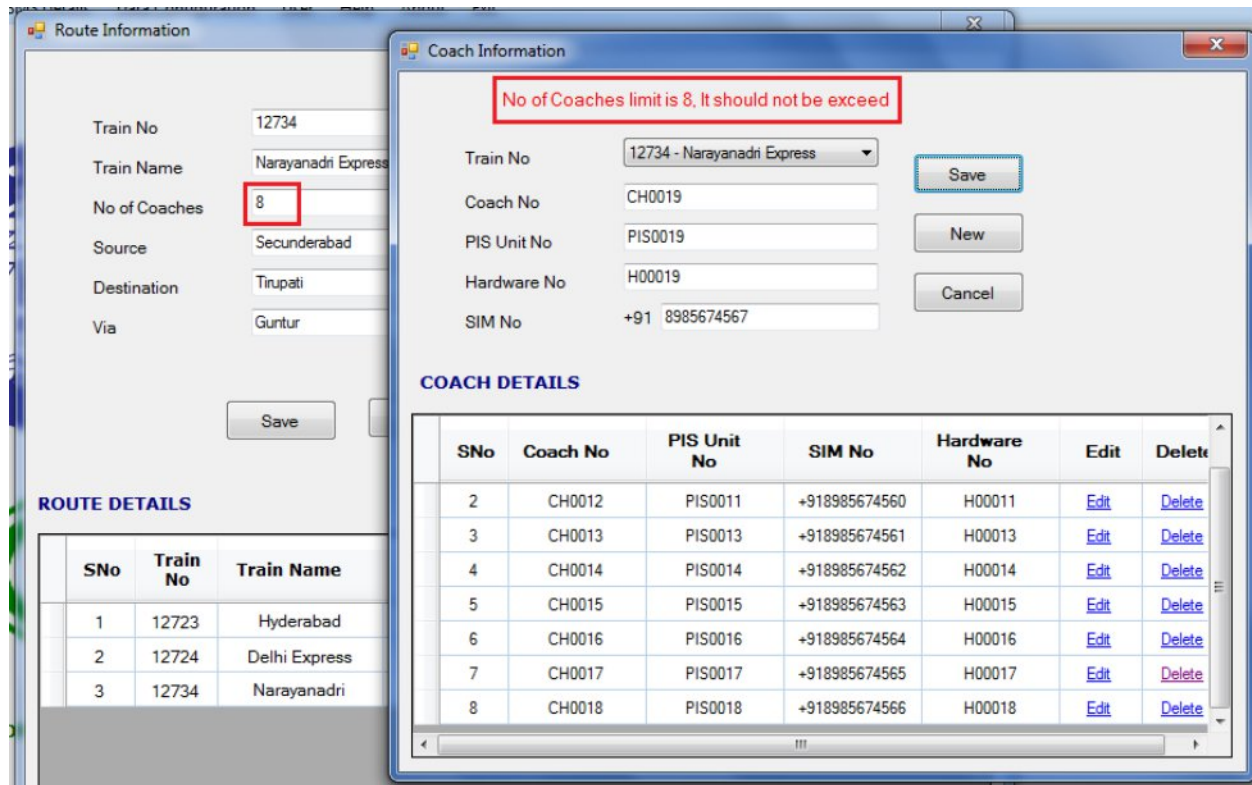
+91

Save

New

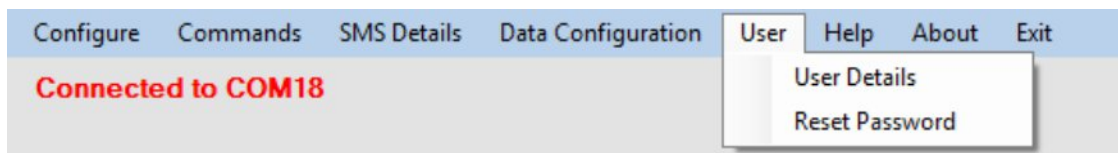
Cancel

- If user tried to enter more than “No of coaches” (which was already declared in “Route Information”), below validation message will display.



## User Menu

- Under “User ” menu, Select “User Details” and click on it.
- This link will enable only for “Admin” user.



Below “Users” window will display.

- Only “Admin” can enter/ modify these details.
- Enter the User details and click on “Save” which will save data into database.
- Click on “New” button, which will clear the input boxes/ data.

- Click on "Cancel" button, which will close the window.
- For Editing selected User details, click on "Edit" link, which fill above input boxes with selected user details.
- For Deleting selected User details, click on "Delete" link, which will delete the details from database.

First Name

Last Name

Role

Contact No +91

UserName

Password

Confirm Password

Save

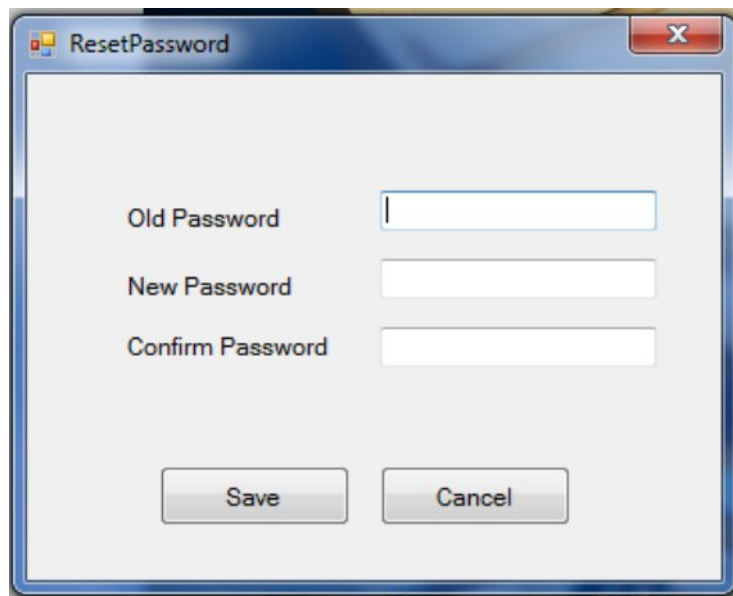
New

Cancel

**USER DETAILS**

SNo	First Name	Last Name	Role	Contact No	UserName	Edit	Delete
1	ucs	ucs	Admin	1234567890	ucs	<a href="#">Edit</a>	<a href="#">Delete</a>
2	swati	pujari	User	8374655934	swati	<a href="#">Edit</a>	<a href="#">Delete</a>

- Now select "Reset password" menu under "User" menu.
- User can modify current password with the the new password.



A screenshot of a Windows-style dialog box titled "ResetPassword". The dialog has a standard title bar with a close button (X) in the top right corner. The main area contains three text input fields, each preceded by a label: "Old Password", "New Password", and "Confirm Password". Below these fields are two buttons: "Save" and "Cancel".

Field Label	Input Field
Old Password	<input type="text"/>
New Password	<input type="text"/>
Confirm Password	<input type="text"/>

Buttons:



- Enter different New password and Confirm Password, click on "Save" it will generate below message

New Password and Confirm password should be same

Old Password	<input type="password"/>
New Password	<input type="password"/>
Confirm Password	<input type="password"/>

- Enter Valid New Password and Confirm Password, click on "Save" it will generate "Password updated Successfully" message.