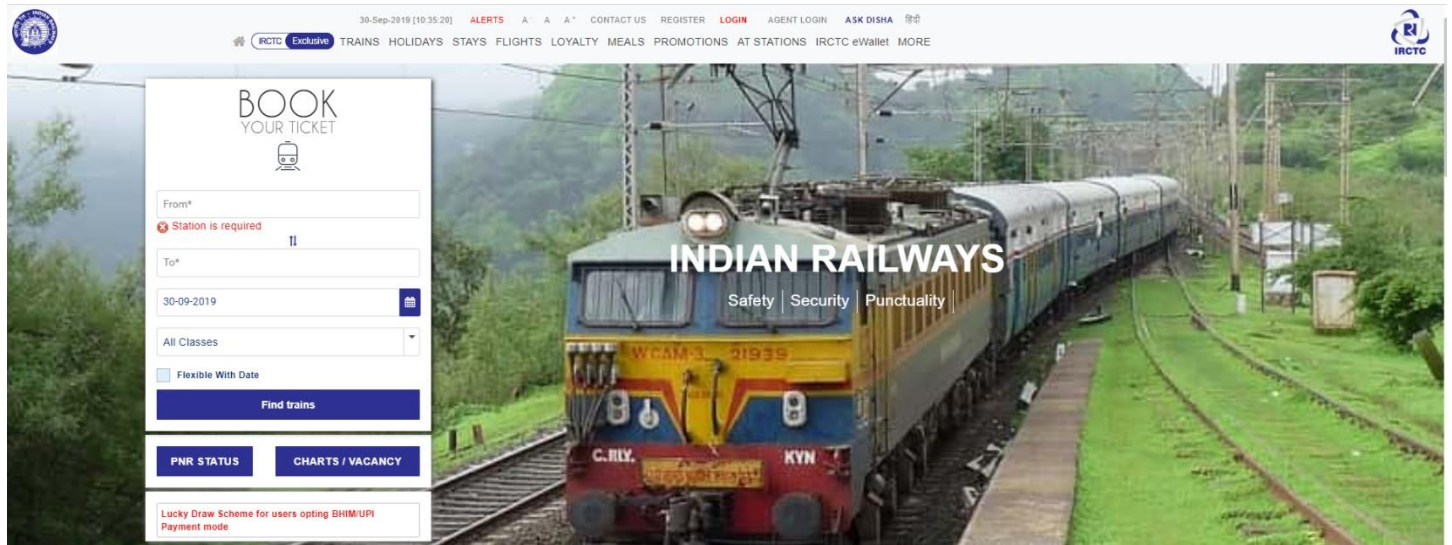


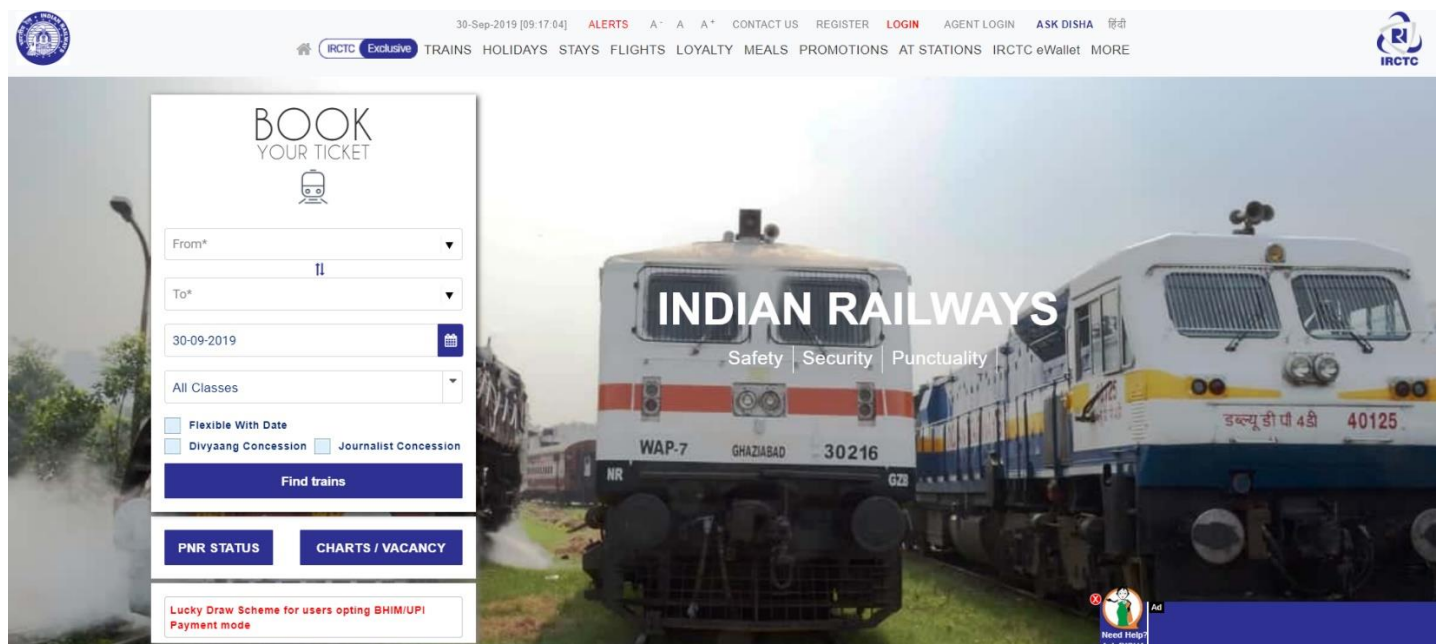
## MAJOR ISSUES OF IRCTC LOGIN PORTAL AND THEIR PROPOSED SOLUTIONS:

- No drop-down menu (list) is provided for selecting the source and destination stations. This creates a compulsion for the user to enter the stations manually, which could lead to further errors such as spelling mistakes, etc. Hence, a drop-down menu containing the list of stations must be provided.

### Existing design:



### Proposed Design:



This drop-down list displays the available stations:

BOOK YOUR TICKET

From\*

To\* aligarh

30-09-2019 allahabad

All Classes

☐ Flexible With Date

☐ Divyaang Concession ☐ Journalist Concession

Find trains

PNR STATUS CHARTS / VACANCY

Lucky Draw Scheme for users opting BHIM/UPI Payment mode

INDIAN RAILWAYS

Safety | Security | Punctuality

WAP-7 GHAZIABAD 30216

डब्ल्यू डी पी 4 40125

- The users are not provided autofill suggestions. This feature can be added using regular-expressions (JavaScript). Here, as the user types 'm', he is shown the possible list of stations, like, Mumbai, etc.

### Existing design:

BOOK YOUR TICKET

m

Station is required

To\*

30-09-2019 allahabad

All Classes

☐ Flexible With Date

Find trains

PNR STATUS CHARTS / VACANCY

Lucky Draw Scheme for users opting BHIM/UPI Payment mode

INDIAN RAILWAYS

Safety | Security | Punctuality

WCM-3 21939

C.R.I.Y. KYN



## Proposed Design:

30-Sep-2019 [09:17:04] ALERTS A A A CONTACT US REGISTER LOGIN AGENT LOGIN ASK DISHA हिंदी

IRCTC Exclusive TRAINS HOLIDAYS STAYS FLIGHTS LOYALTY MEALS PROMOTIONS AT STATIONS IRCTC eWallet MORE

BOOK YOUR TICKET

From\* m

To\* mumbai

30-09-2019

All Classes

☐ Flexible With Date

☐ Divyang Concession ☐ Journalist Concession

Find trains

PNR STATUS CHARTS / VACANCY

Lucky Draw Scheme for users opting BHIM/UPI Payment mode

INDIAN RAILWAYS

Safety | Security | Punctuality

WAP-7 GHAZIABAD 30216

डब्ल्यू डी पी 40125

Need Help? ASK DISHA

- Disabled persons and journalists are eligible for discounts(concessions). However, they have to provide an ID proof document for verifying their eligibility. There is no option to provide the verification document online – this creates the compulsion for the user to submit the ID proof offline. Hence, a feature to upload the verification document as well as to verify it online must be provided (this can be done using JavaScript and PHP form validation).

## Existing design:

30-Sep-2019 [09:41:17] ALERTS A A A CONTACT US REGISTER LOGIN AGENT LOGIN ASK DISHA हिंदी

IRCTC Exclusive TRAINS HOLIDAYS STAYS FLIGHTS LOYALTY MEALS PROMOTIONS AT STATIONS IRCTC eWallet MORE

BOOK YOUR TICKET

From\* m

To\* mumbai

30-09-2019

All Classes

☐ Flexible With Date

☐ Divyang Concession ☒ Journalist Concession

Find trains

PNR STATUS CHARTS / VACANCY

Lucky Draw Scheme for users opting BHIM/UPI Payment mode

INDIAN RAILWAYS

Safety | Security | Punctuality

WAP-7 GHAZIABAD 30216

डब्ल्यू डी पी 40125

Need Help? ASK DISHA

Confirmation

Specially abled or Journalist passengers availing the concession need to carry Photo Identity card Issued by Railways which is to be produced for On-board / off-board verification during journey. Escort passengers also need to carry photo identity card mentioned at the time of booking.

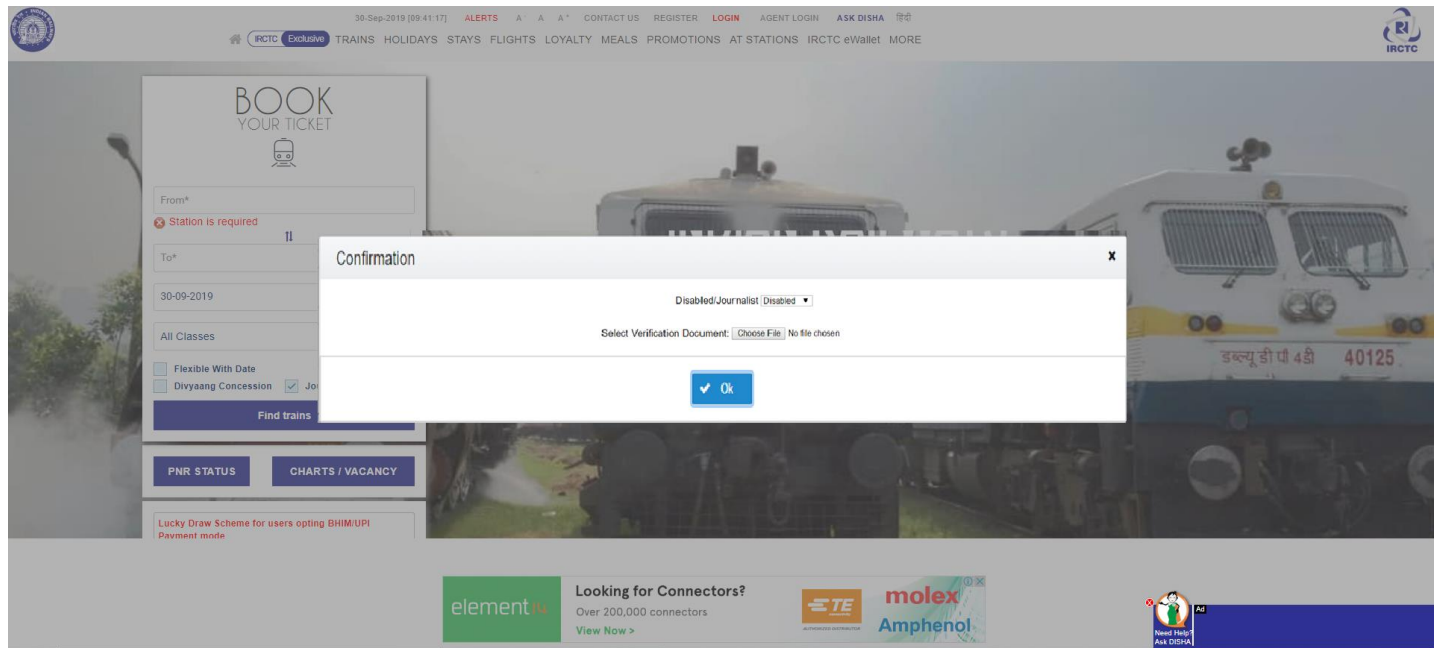
Ok

element Looking for Connectors? Over 200,000 connectors View Now >

TE mox Amphenol

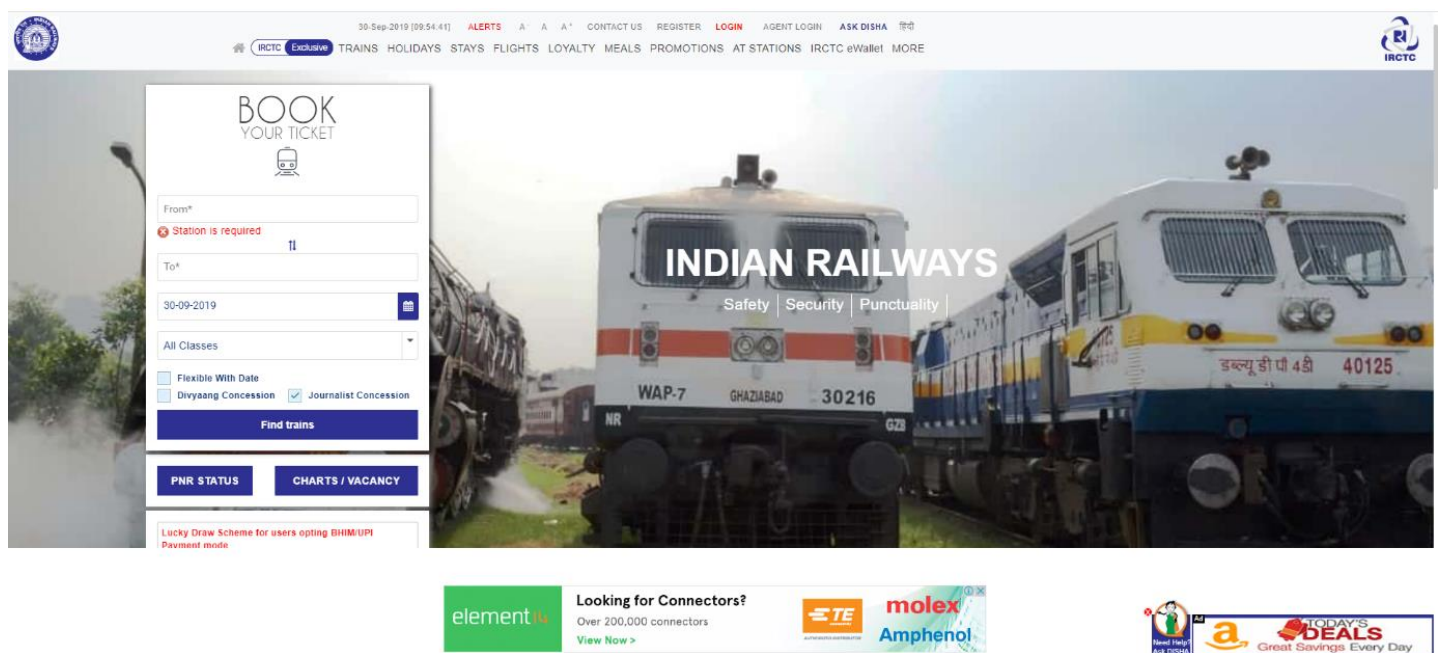
Need Help? ASK DISHA

## Proposed Design:



- The advertisements on the website have been displayed in a cluttered and unattractive manner. Instead, they must be displayed on one side of the page in an organised way. (This can be done using HTML tables and containers).

## Existing design:



## Proposed Design:

The proposed design features a booking form on the left and a large image of a train on the right. The form includes fields for 'From\*', 'To\*', and '30-09-2019'. It also has checkboxes for 'Flexible With Date', 'Divyaang Concession', and 'Journalist Concession'. A 'Find trains' button is present. Below the form are links for 'PNR STATUS' and 'CHARTS / VACANCY'. A footer note mentions a 'Lucky Draw Scheme for users opting BHIM/UPI Payment mode'. The train image shows a locomotive with the text 'INDIAN RAILWAYS' and 'Safety | Security | Punctuality' overlaid. The locomotive number is 'WAP-7 GHAZIABAD 30216'. The top navigation bar includes links for 'IRCTC Exclusive', 'TRAINS', 'HOLIDAYS', 'STAYS', 'FLIGHTS', 'LOYALTY', 'MEALS', 'PROMOTIONS', 'AT STATIONS', 'IRCTC eWallet', and 'MORE'. The top right corner has a date '30-Sep-2019 [09:54:41]' and links for 'ALERTS', 'A', 'A+', 'CONTACT US', 'REGISTER', 'LOGIN', 'AGENT LOGIN', and 'ASK DISHA'. The bottom right corner has an 'ADVERTISEMENTS' section with logos for 'a', 'element', 'molex', and 'Amphenol'.

- There is no provided virtual-calendar to choose the date, the date needs to be entered manually. A virtual-calendar icon must be provided. (This change can be done using HTML and CSS).

## Existing design:

The existing design features a booking form on the left and a large image of a train on the right. The form includes fields for 'From\*', 'To\*', and '30-09-2019'. It also has checkboxes for 'Flexible With Date', 'Divyaang Concession', and 'Journalist Concession'. A 'Find trains' button is present. Below the form are links for 'PNR STATUS' and 'CHARTS / VACANCY'. A footer note mentions a 'Lucky Draw Scheme for users opting BHIM/UPI Payment mode'. The train image shows a locomotive with the text 'INDIAN RAILWAYS' and 'Safety | Security | Punctuality' overlaid. The locomotive number is 'WAP-7 GHAZIABAD 30216'. The top navigation bar includes links for 'IRCTC Exclusive', 'TRAINS', 'HOLIDAYS', 'STAYS', 'FLIGHTS', 'LOYALTY', 'MEALS', 'PROMOTIONS', 'AT STATIONS', 'IRCTC eWallet', and 'MORE'. The top right corner has a date '30-Sep-2019 [11:16:05]' and links for 'ALERTS', 'A', 'A+', 'CONTACT US', 'REGISTER', 'LOGIN', 'AGENT LOGIN', and 'ASK DISHA'. The bottom right corner has an 'ADVERTISEMENTS' section with logos for 'a', 'element', 'molex', and 'Amphenol'.

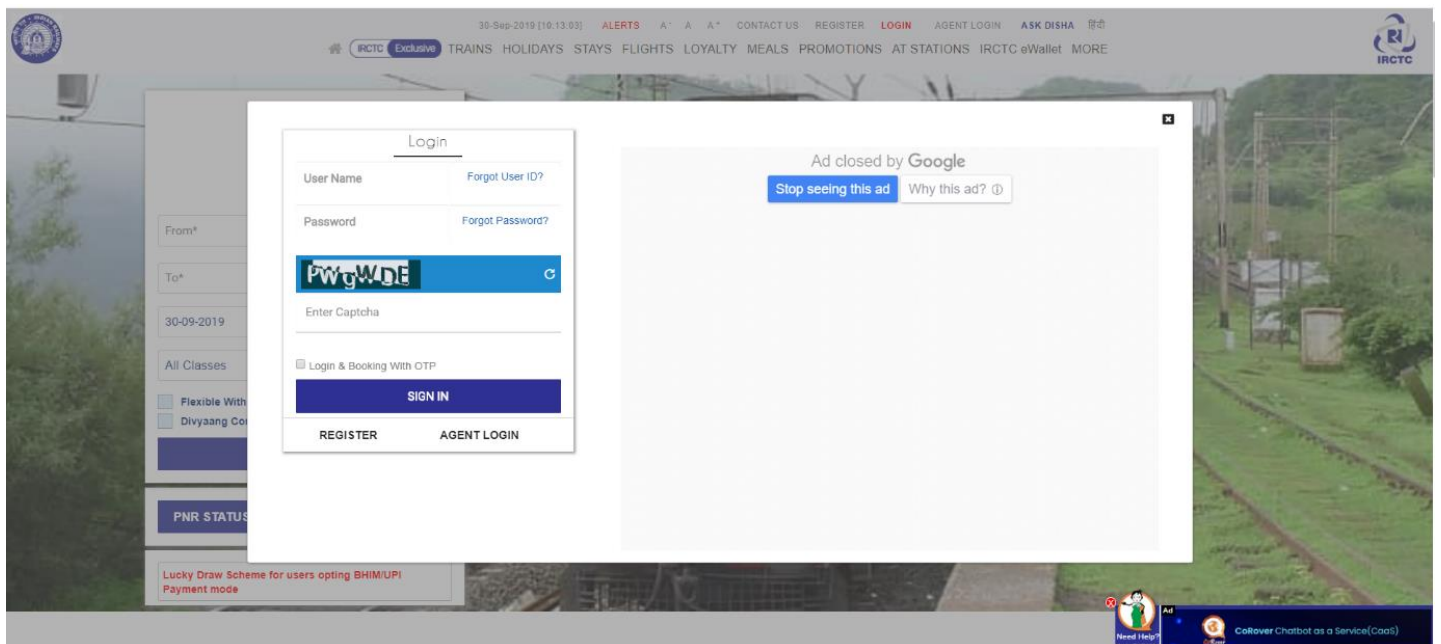


## Proposed Design:



- In order to login, the end users need to enter the CAPTCHA code displayed. However, this is extremely uncomfortable for the visually-impaired (blind) persons. Hence, the feature of audio-CAPTCHA must be added, where the CAPTCHA letters can be heard by the user. (This can be done by calling a JavaScript function containing the CAPTCHA audio file when the user clicks the audio-CAPTCHA icon.)

## Existing design:



## Proposed Design:

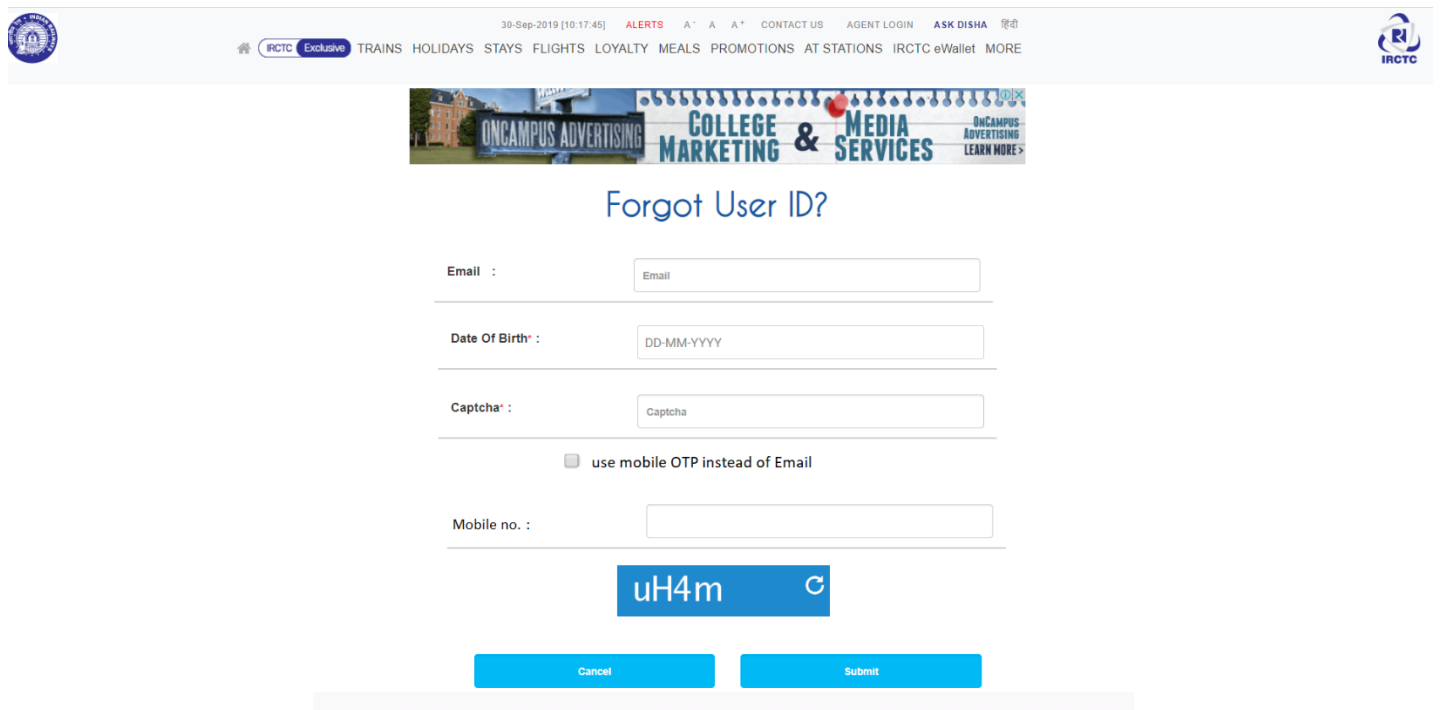
The screenshot shows the IRCTC website interface. A proposed design overlay is centered on the page, featuring a 'Login' form. The form includes fields for 'User Name' (with a 'Forgot User ID?' link), 'Password' (with a 'Forgot Password?' link), and a 'Enter Captcha' field. Below these fields is a checkbox for 'Login & Booking With OTP'. A prominent blue 'SIGN IN' button is present, along with 'REGISTER' and 'AGENT LOGIN' links. To the right of the form, an advertisement is displayed with the text 'Ad closed by Google' and buttons for 'Stop seeing this ad' and 'Why this ad?'. The background of the website shows a train track and a station.

- If the end user forgets his login ID, he is only given the option to retrieve it through his email. However, for better convenience, providing the user with his ID/password information should be done using mobile phone OTP (One-time Password). (This can also be done by calling a JavaScript function which is able to send the message to the entered cellphone number.)

## Existing design:

The screenshot shows the IRCTC 'Forgot User ID?' page. At the top, there is a banner for 'ONCAMPUS ADVERTISING COLLEGE MARKETING & MEDIA SERVICES'. Below the banner, the title 'Forgot User ID?' is displayed. The form consists of three input fields: 'Email \*', 'Date Of Birth \*', and 'Captcha \*'. Each field has a corresponding label and a validation message (e.g., 'Email', 'DD-MM-YYYY', 'Captcha'). Below the form is a blue captcha image showing the text 'uH4m'. At the bottom, there are two buttons: 'Cancel' and 'Submit'.

## Proposed Design:



30-Sep-2019 [10:17:45] **ALERTS** A<sup>+</sup> A<sup>-</sup> A<sup>\*</sup> CONTACT US AGENT LOGIN **ASK DISHA** ॐ

IRCTC **Exclusive** TRAINS HOLIDAYS STAYS FLIGHTS LOYALTY MEALS PROMOTIONS AT STATIONS IRCTC eWallet MORE

**COLLEGE MARKETING & MEDIA SERVICES**

### Forgot User ID?

Email :

Date Of Birth\* :

Captcha\* :

☐ use mobile OTP instead of Email

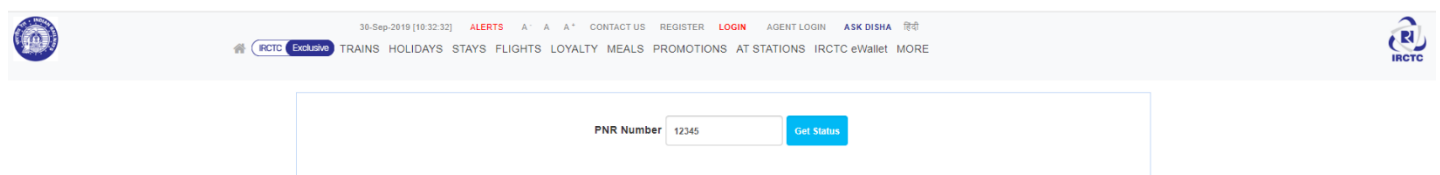
Mobile no. :

**uH4m** ↺

**Cancel** **Submit**

- For the train-enquiry, if the user enters an invalid PNR number, nothing happens and the page becomes idle/unresponsive. Instead, an appropriate error message must be displayed. (This can be done using JavaScript regular expression – checking if the entered PNR code is valid).

## Existing design:



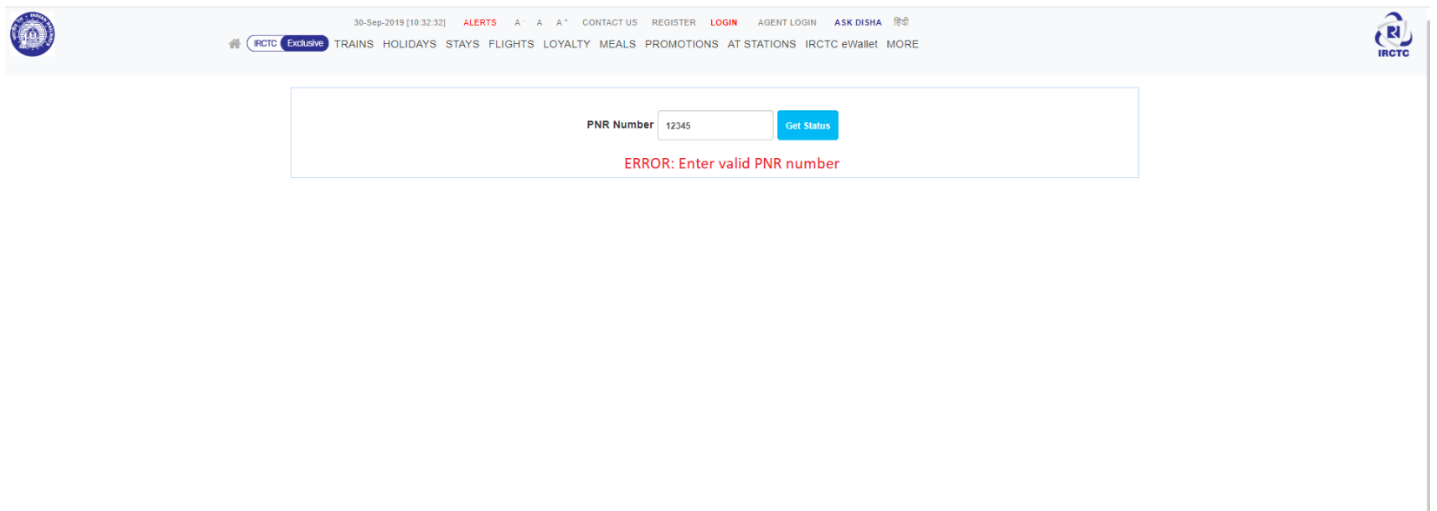
30-Sep-2019 [10:32:32] **ALERTS** A<sup>+</sup> A<sup>-</sup> A<sup>\*</sup> CONTACT US REGISTER **LOGIN** AGENT LOGIN **ASK DISHA** ॐ

IRCTC **Exclusive** TRAINS HOLIDAYS STAYS FLIGHTS LOYALTY MEALS PROMOTIONS AT STATIONS IRCTC eWallet MORE

PNR Number  **Get Status**



## Proposed Design:



30-Sep-2019 [19:32:32] ALERTS A A\* CONTACT US REGISTER LOGIN AGENT LOGIN ASK DISHA

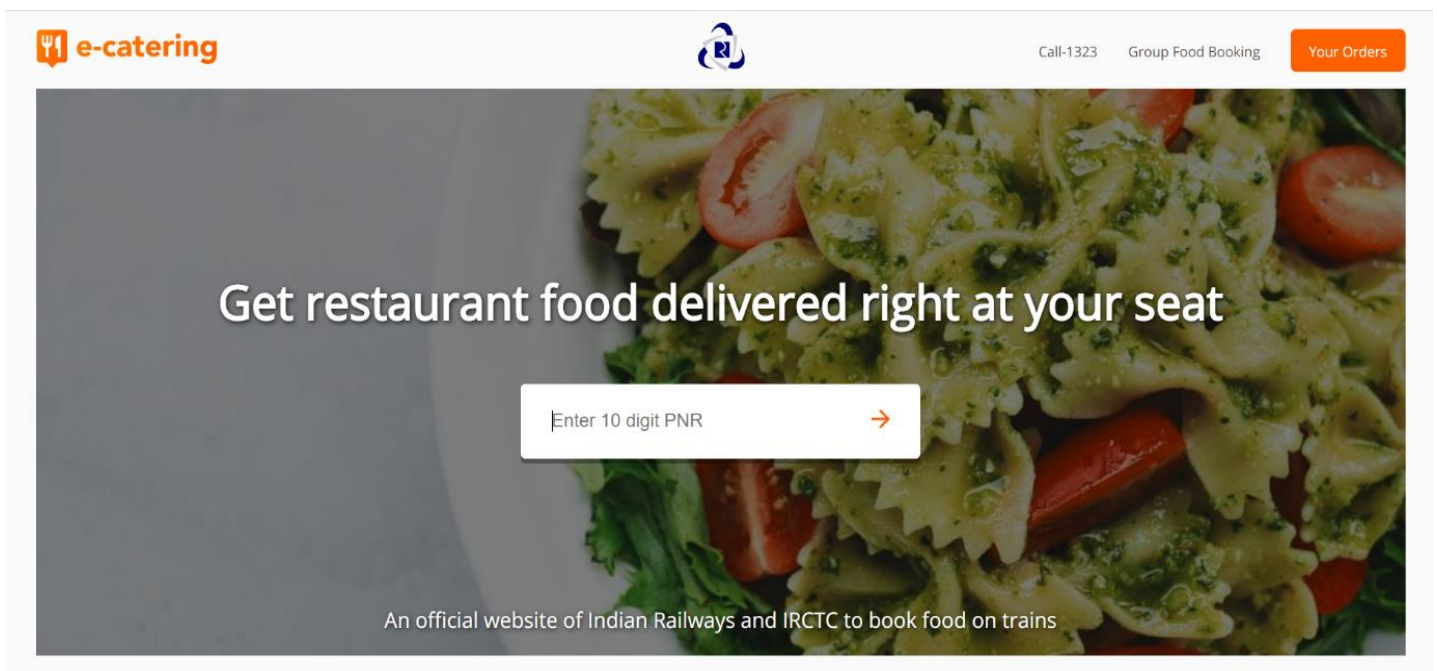
IRCTC EXCLUSIVE TRAINS HOLIDAYS STAYS FLIGHTS LOYALTY MEALS PROMOTIONS AT STATIONS IRCTC eWallet MORE

PNR Number 12345 Get Status

ERROR: Enter valid PNR number

- In the e-catering tab of the IRCTC portal, where the user can schedule meals during his train travel, there is a compulsion to enter the train's PNR number. The PNR number is difficult to remember and increases the user's short-term memory-load. Hence, the option to enter either the train's name or its PNR number must be provided. (Then, the train name can be associated to the corresponding PNR number using JavaScript function for the same purpose.)

## Existing design:



e-catering

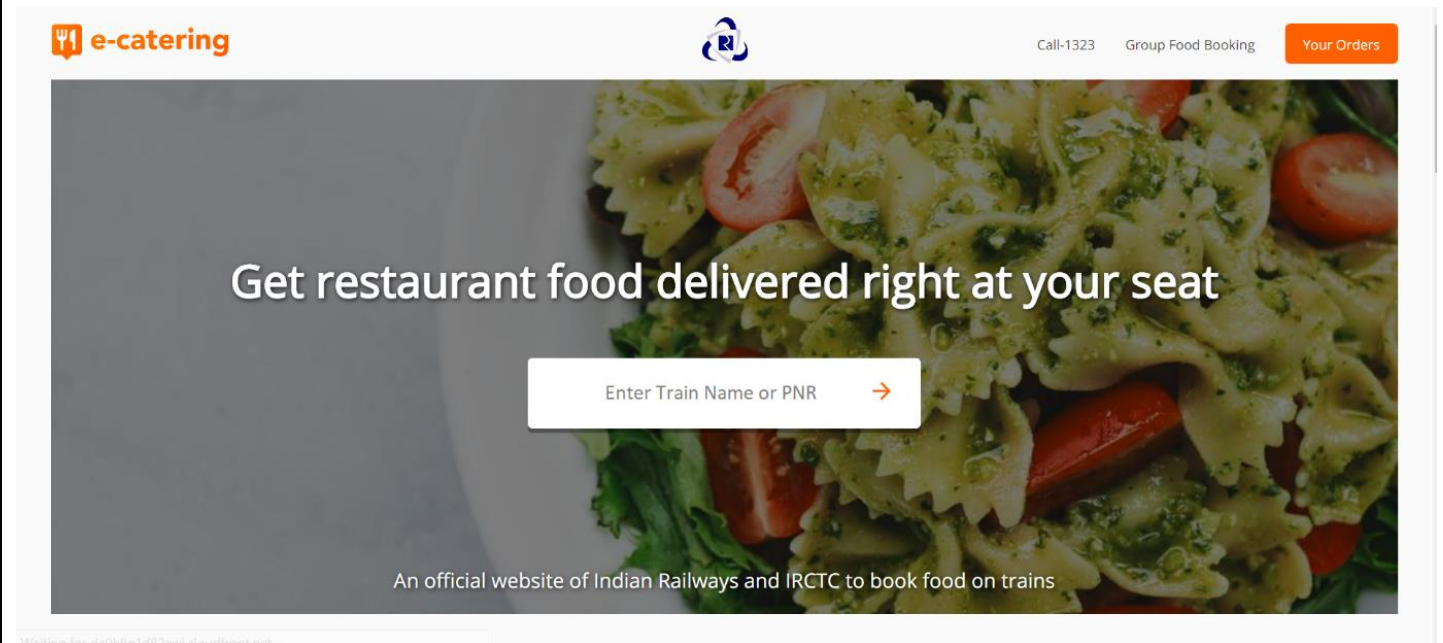
Call-1323 Group Food Booking Your Orders

Get restaurant food delivered right at your seat

Enter 10 digit PNR →

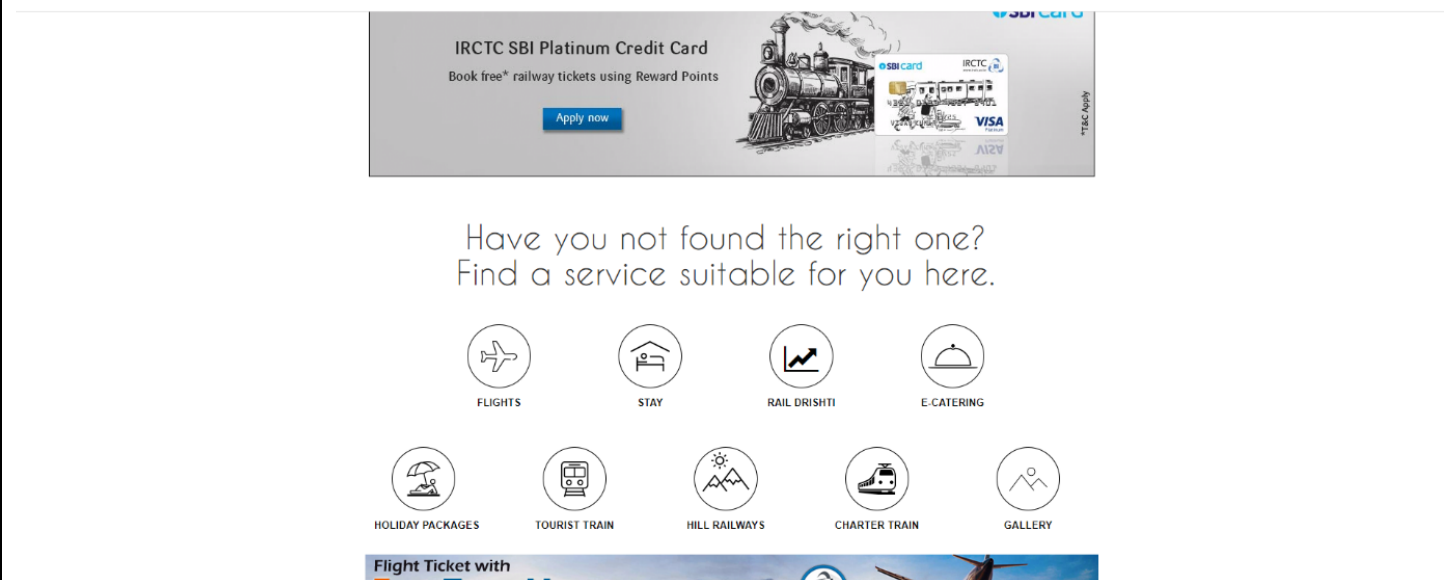
An official website of Indian Railways and IRCTC to book food on trains

## Proposed Design:



- The GUI design is plain and unattractive, which might create a bad impression on foreign users. Thus, it should be made more attractive and colour-coordinated. (This can be done using CSS stylesheets).

## Existing design:



## Proposed Design:

