

## 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:

BOOK YOUR TICKET

From\*

Station is required

To\*

30-09-2019

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

### Proposed Design:

BOOK YOUR TICKET

From\*

To\*

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

This drop-down list displays the available stations:

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

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

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 40125

Need Help? Ask DISHA

- 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:

30-Sep-2019 [10:35:20] ALERTS A A A\* CONTACT US REGISTER LOGIN AGENT LOGIN ASK DISHA ॐ

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

BOOK YOUR TICKET

m

Station is required II

To\*

30-09-2019

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

WAP-7 31959

C.R.V. KYN



## Proposed Design:

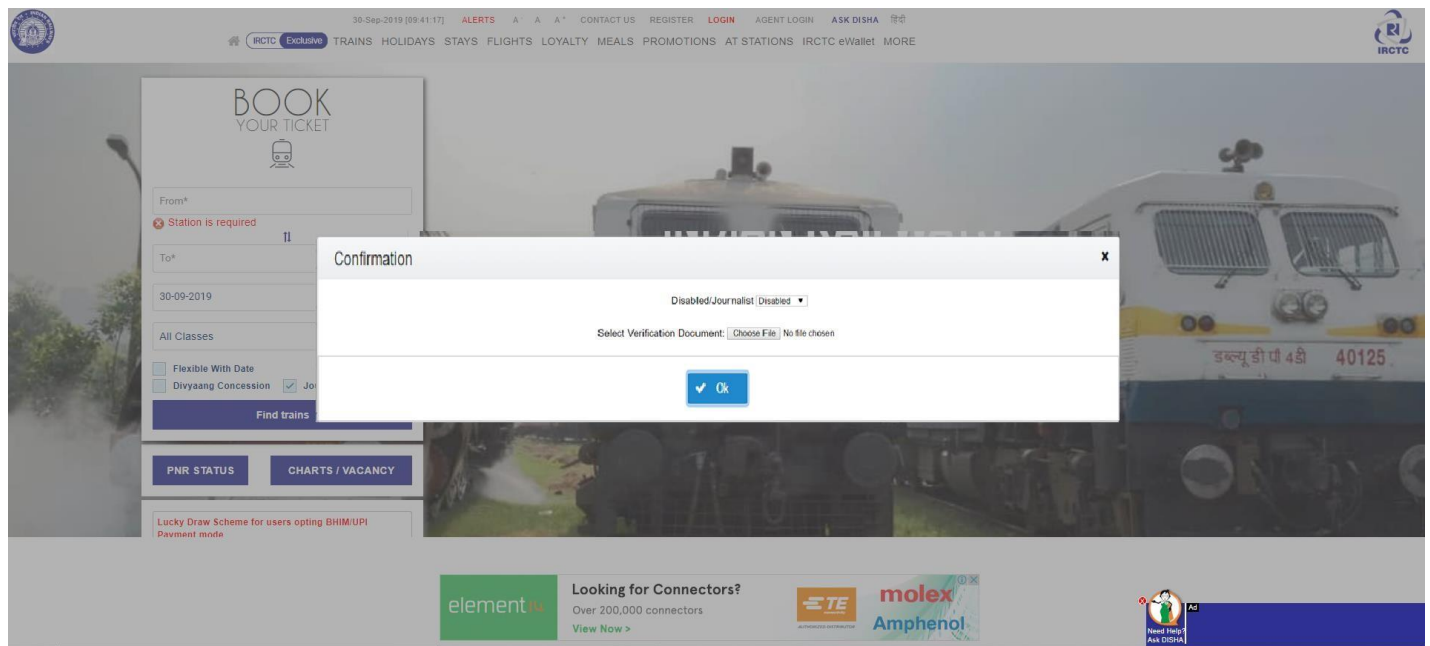
The proposed design shows a clean, modern booking interface. The header includes the IRCTC logo, a date/time stamp (30-Sep-2019 [09:17:04]), and navigation links for ALERTS, A\*, A, A\*, CONTACT US, REGISTER, LOGIN, AGENT LOGIN, ASK DISHA, and हिंदी. Below the header is a secondary navigation bar with links for IRCTC Exclusive, TRAINS, HOLIDAYS, STAYS, FLIGHTS, LOYALTY, MEALS, PROMOTIONS, AT STATIONS, IRCTC eWallet, and MORE. The main content area features a large background image of two Indian Railways locomotives. On the left, a white booking form titled "BOOK YOUR TICKET" is displayed. It includes fields for "From\*" (mumbai), "To\*" (mumbai), and "Date" (30-09-2019). Below these are checkboxes for "Flexible With Date", "Divyaang Concession", and "Journalist Concession". A "Find trains" button is prominently displayed. Below the form are buttons for "PNR STATUS" and "CHARTS / VACANCY". At the bottom of the form, a red banner mentions the "Lucky Draw Scheme for users opting BHIM/UPI Payment mode". The locomotives in the background are labeled "INDIAN RAILWAYS", "Safety | Security | Punctuality", "WAP-7", "GHAZIABAD", "30216", and "40125". A small "Ad" icon is visible in the bottom right corner of the locomotive image.

- 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:

The existing design shows the same booking interface as the proposed design, but with a confirmation dialog box overlaid. The dialog box is titled "Confirmation" and contains the following text: "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." Below the text is a blue "Ok" button. The background image of the locomotives is visible behind the dialog box. The booking form on the left is partially obscured by the dialog box. The "From\*" field is empty, and the "To\*" field is set to "mumbai". The "Date" field is set to "30-09-2019". The "Flexible With Date" checkbox is checked, and the "Divyaang Concession" checkbox is also checked. The "Journalist Concession" checkbox is unchecked. The "Find trains" button is visible below the form. The "PNR STATUS" and "CHARTS / VACANCY" buttons are also visible. The red banner at the bottom of the form is also visible. The locomotives in the background are labeled "INDIAN RAILWAYS", "Safety | Security | Punctuality", "WAP-7", "GHAZIABAD", "30216", and "40125". A small "Ad" icon is visible in the bottom right corner of the locomotive image.

## 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 clean, modern layout. On the left, a 'BOOK YOUR TICKET' form is overlaid on a background image of a train. The form includes fields for 'From\*', 'To\*' (with a dropdown menu), and '30-09-2019' (with a calendar icon). Below these are checkboxes for 'Flexible With Date', 'Divyaang Concession', and 'Journalist Concession'. A 'Find trains' button is prominently displayed. Below the form are links for 'PNR STATUS' and 'CHARTS / VACANCY'. At the bottom, a small text box mentions the 'Lucky Draw Scheme for users opting BHIM/UPI Payment mode'. The right side of the page features a large banner image of a train with the text 'INDIAN RAILWAYS' and 'Safety | Security | Punctuality'. To the right of the banner are several advertisements, including 'ADVERTISEMENTS', 'a TODAY'S DEALS', 'element', 'Looking for Connectors?', 'ETE', '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 is similar to the proposed one but has some differences. The 'BOOK YOUR TICKET' form is also on the left, but the 'To\*' field is a simple text input without a dropdown menu. The 'Find trains' button is present. Below the form are links for 'PNR STATUS' and 'CHARTS / VACANCY'. At the bottom, a small text box mentions the 'Lucky Draw Scheme for users opting BHIM/UPI Payment mode'. The right side of the page features a large banner image of a train with the text 'INDIAN RAILWAYS' and 'Safety | Security | Punctuality'. To the right of the banner are several advertisements, including 'ADVERTISEMENTS', 'a TODAY'S DEALS', 'element', 'Looking for Connectors?', 'ETE', 'molex', and 'Amphenol'.

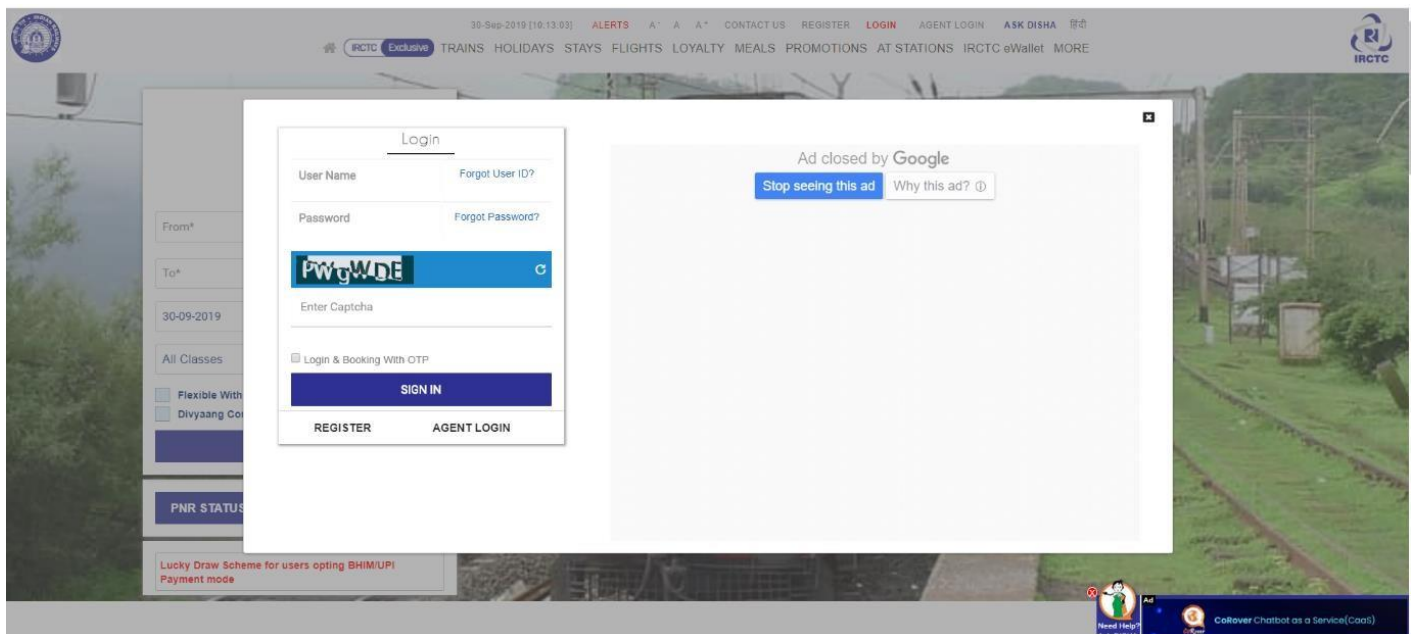


## Proposed Design:



- 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:

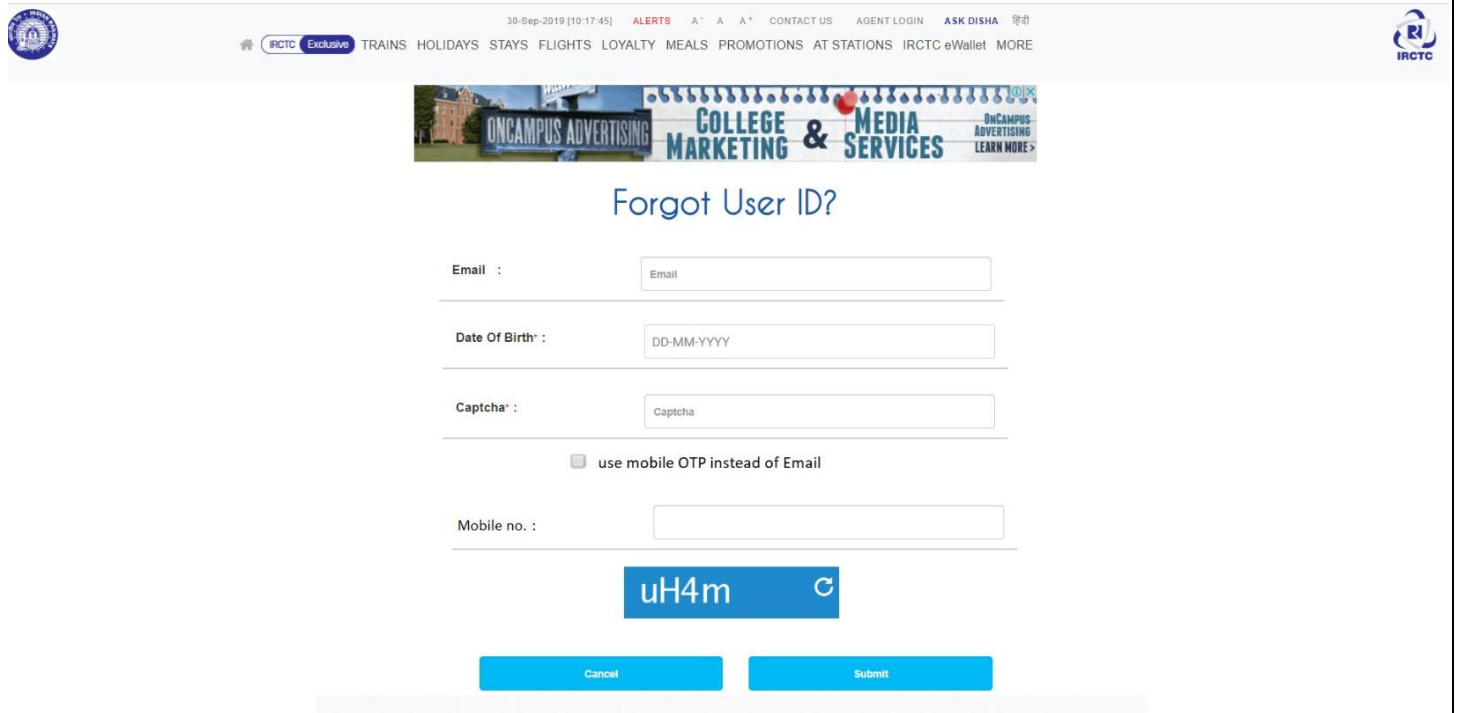
The screenshot shows the IRCTC website interface. A proposed design overlay is centered on the page, featuring a login form and an advertisement. The login form includes fields for User Name, Password, and Captcha, along with links for 'Forgot User ID?' and 'Forgot Password?'. It also has a 'SIGN IN' button and links for 'REGISTER' and 'AGENT LOGIN'. The advertisement is titled 'Ad closed by Google' and includes a 'Stop seeing this ad' button. 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 website interface for the 'Forgot User ID?' page. The page features a form with the following fields: 'Email \*', 'Date Of Birth \*', and 'Captcha \*'. Below the form is a blue button with the text 'uH4m' and a refresh icon. At the bottom of the form are two buttons: 'Cancel' and 'Submit'. The background of the website shows a train track and a station.

## Proposed Design:



30-Sep-2019 [10:17:45] ALERTS A+ A- CONTACT US AGENT LOGIN ASK DISHA ॐ

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

ONCAMPUS ADVERTISING COLLEGE MARKETING & MEDIA SERVICES ONCAMPUS ADVERTISING LEARN MORE >

### Forgot User ID?


Email :

Date Of Birth\* :

Captcha\* :

☐ use mobile OTP instead of Email

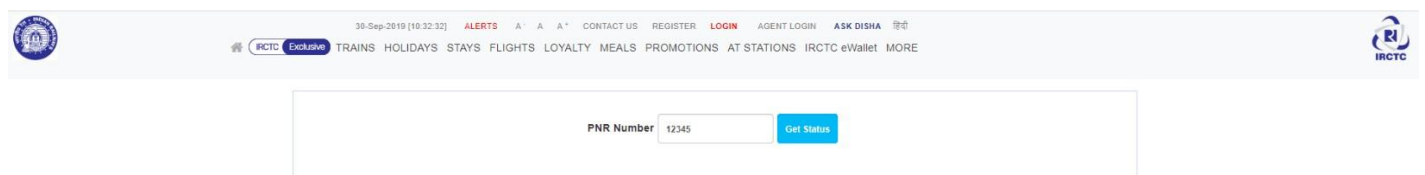
Mobile no. :

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:



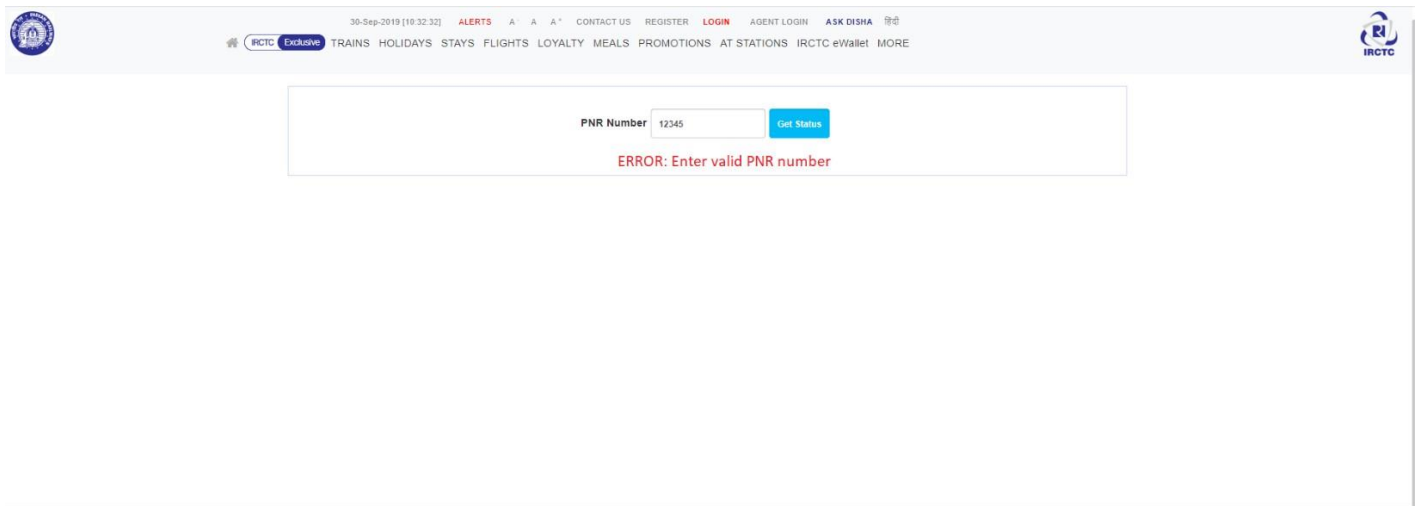
30-Sep-2019 [10:32:32] ALERTS A+ A- A+ CONTACT US REGISTER LOGIN AGENT LOGIN ASK DISHA ॐ

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

PNR Number



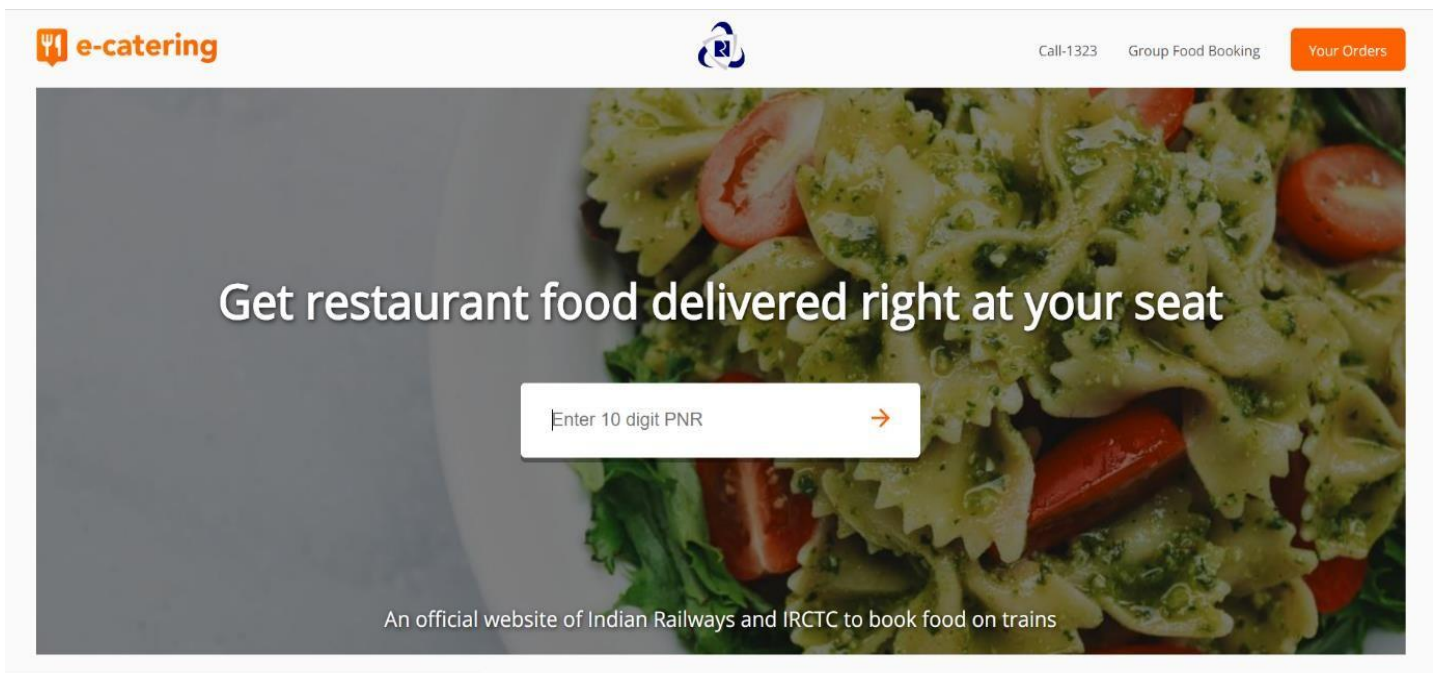
## Proposed Design:



The screenshot shows the IRCTC website header with navigation links like TRAINS, HOLIDAYS, STAYS, FLIGHTS, LOYALTY, MEALS, PROMOTIONS, AT STATIONS, IRCTC eWallet, and MORE. Below the header is a form for checking PNR status. The form has a label "PNR Number" and a text input field containing "12345". To the right of the input field is a blue button labeled "Get Status". Below the input field, a red error message reads "ERROR: Enter valid PNR number".

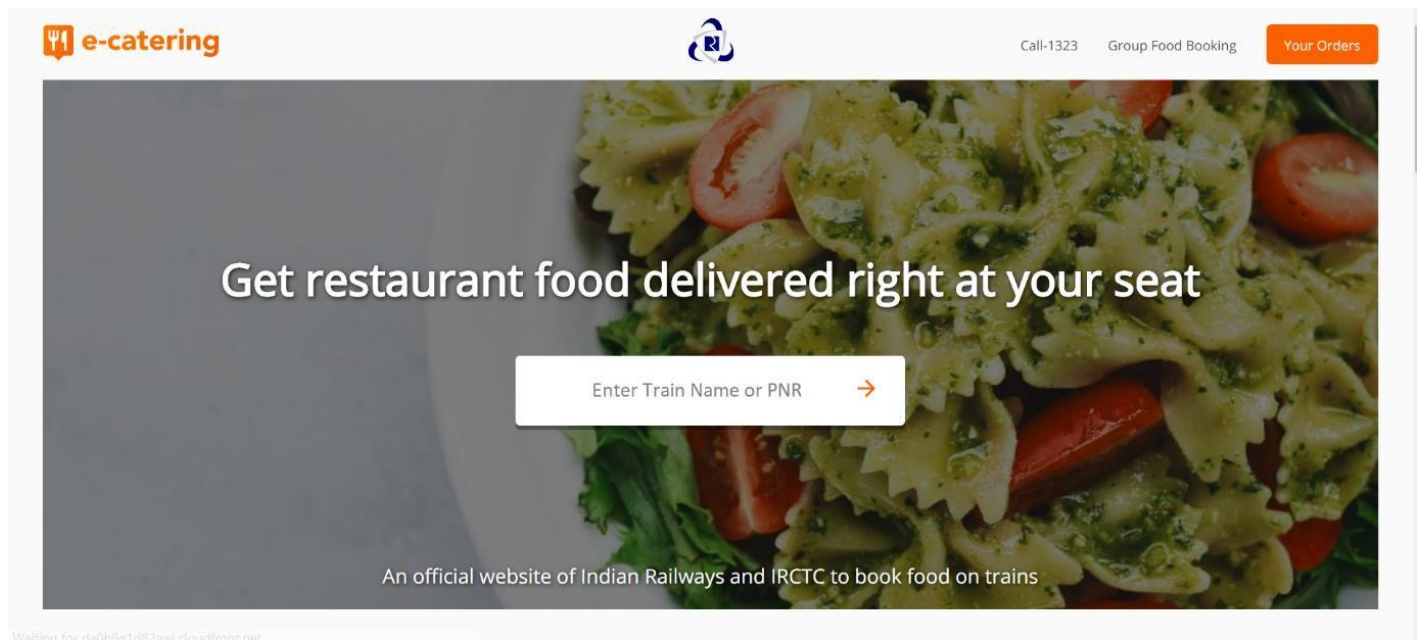
- In the e-catering tab of the IRCTC portal, where the user can schedule meals during his train travel, there is a compulsion to enter the train's PNR number. The PNR number is difficult to remember and increases the user's short-term memory-load. Hence, the option to enter either the train's name or 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:



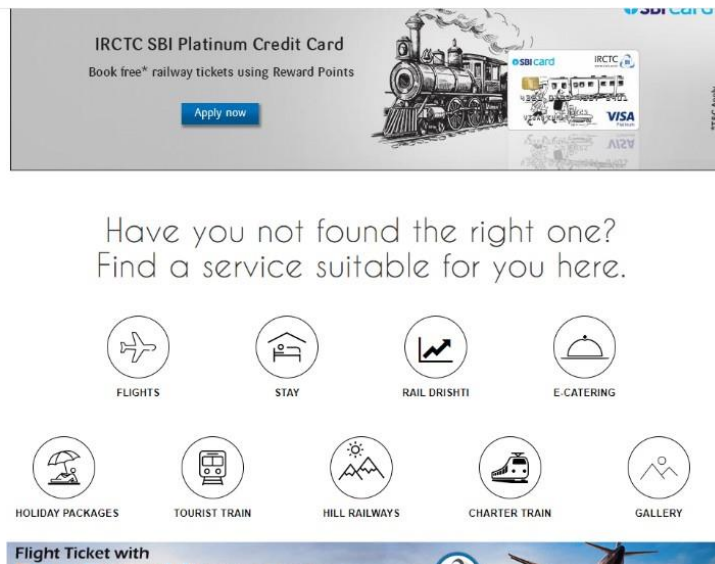
The screenshot shows the IRCTC e-catering website. The header includes the "e-catering" logo, the IRCTC logo, and links for "Call-1323", "Group Food Booking", and "Your Orders". The main content area features a large image of a salad with the text "Get restaurant food delivered right at your seat". Below this text is a white input field with the placeholder text "Enter 10 digit PNR" and an orange arrow button. At the bottom, a footer text reads "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:

