

Java Backend – Intermediate

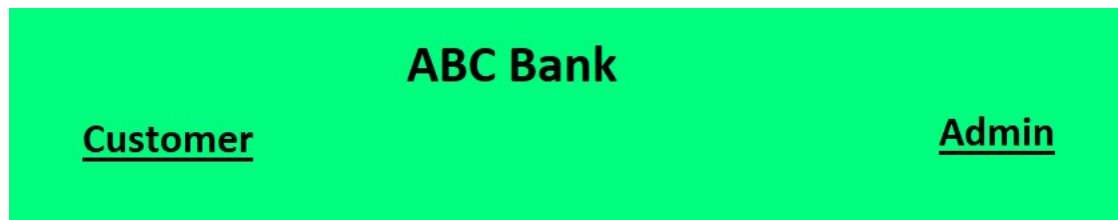
ABC Bank Credit Card – Case Study

The purpose of this application is to find if the customer is eligible for a Credit Card offered by the ABC Bank..

The application should support two types of users:

1. **Customer:** can check whether he/she is eligible for the credit card.
2. **Admin:** can manage the bank's database. To maintain valid details about the customer.

Main screen can be as below.



Admin User:

Admin user can click on the “Admin” link to perform admin activities.

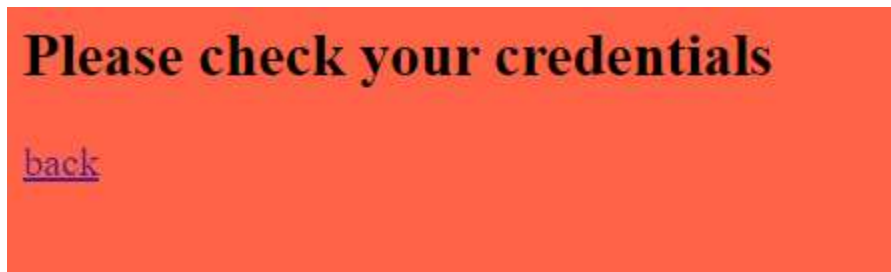
When the “Admin” link is clicked, a login page is shown as below:



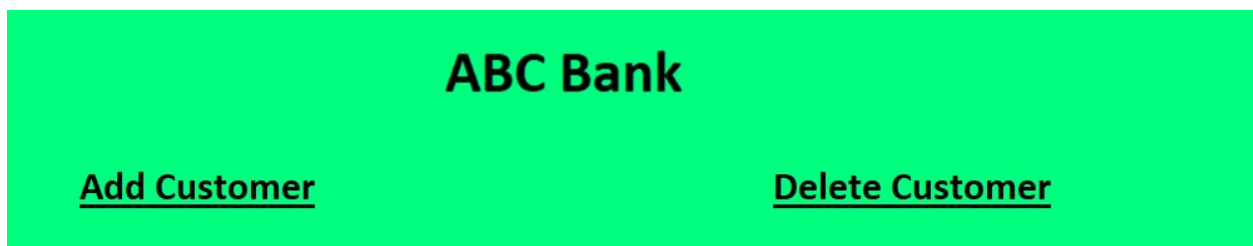
At present only 1 admin exists. Use below credentials for validating Admin.

User id	stella@gmail.com
Password	admin

If the credentials entered by the admin are incorrect, either the user id is invalid or the password is incorrect, you can show the below screen and allow the admin user to navigate back to the login screen.



If the credentials are entered correctly, the below Admin Page is shown.



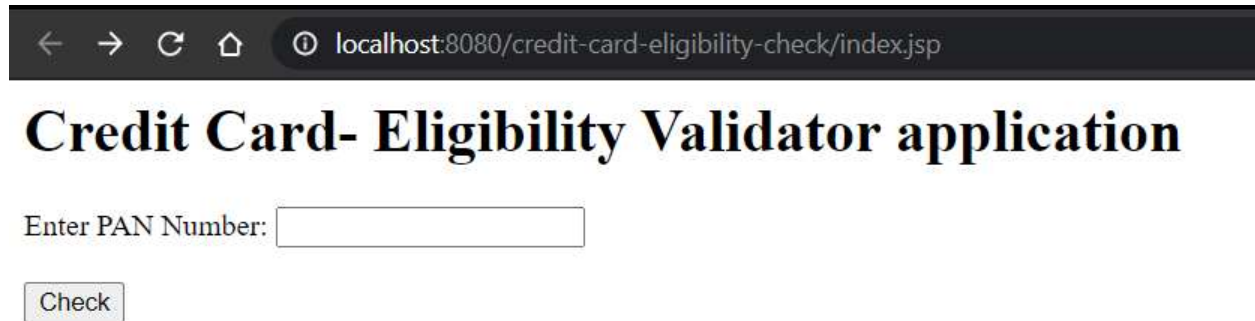
When the admin clicks on the “Add Customer” link, the admin should be shown a page to enter new customer details. And the Customer details are to be stored in the database. Clicking on “Delete Customer” should show a page where admin can enter the PAN card of the customer to be deleted. Upon successful completion of add or delete, the data must be added/deleted from the database and appropriate message should be displayed to confirm the operation.

Customer details can be as below:

Each customer should have id, credit score and the pan number.

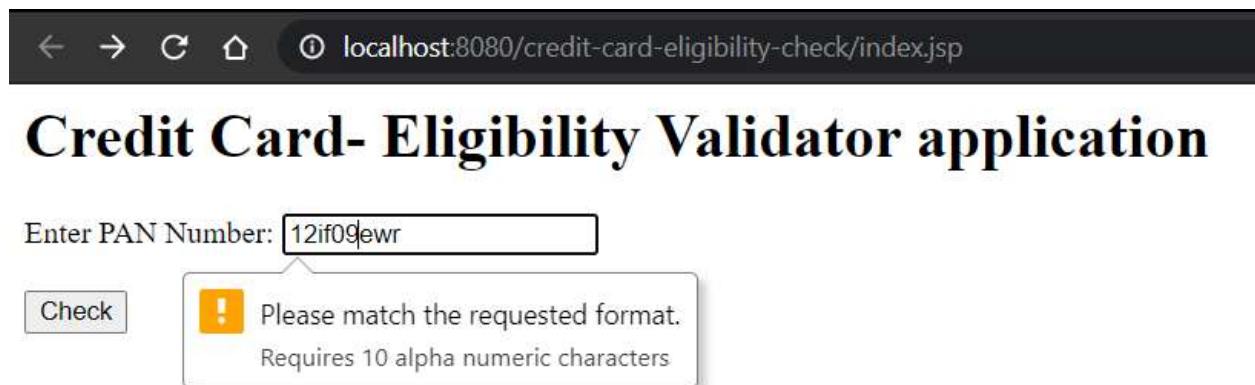
Customer :

When customer clicks on “Customer” link in the main screen, below page can be shown. The customer needs to enter the PAN Number to check whether eligible for credit card or not.



The screenshot shows a web browser window with the address bar displaying `localhost:8080/credit-card-eligibility-check/index.jsp`. The page title is "Credit Card- Eligibility Validator application". Below the title, there is a label "Enter PAN Number:" followed by a text input field. Below the input field is a "Check" button.

Implement the appropriate validation to check if the PAN card entered is correct.



The screenshot shows the same web browser window as before, but with the input field containing the text "12if09ewr". A validation error message is displayed below the input field, stating: "Please match the requested format. Requires 10 alpha numeric characters". The error message is enclosed in a box with a yellow warning icon.

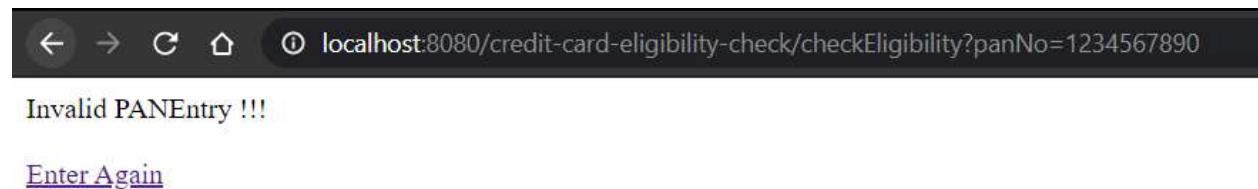
Check the PAN card against database to see if it exists. If it exists, then go ahead to the next step of finding the credit score of the user.

If user enters the PAN number which is not there in the database



The screenshot shows a web browser at localhost:8080/credit-card-eligibility-check/index.jsp. The page title is "Credit Card- Eligibility Validator application". Below the title, there is a label "Enter PAN Number:" followed by a text input field containing "1234567890". Below the input field is a "Check" button.

Show the error message as shown below.



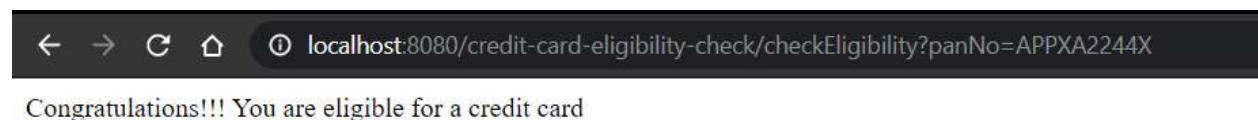
The screenshot shows a web browser at localhost:8080/credit-card-eligibility-check/checkEligibility?panNo=1234567890. The page displays the message "Invalid PANEntry !!!" in red. Below the message is a blue, underlined link labeled "Enter Again".

Clicking on [Enter Again](#), should take the user to enter the PAN again.

If the user entered a valid PAN number which is there in the database, then based on the credit score, user should be considered as eligible or not eligible for the credit card. PAN number entered by the customer can be in any case (case-insensitive).

Eligibility criteria for a user to get credit card is to have credit score ≥ 5

If eligible, show the below screen to the customer.



The screenshot shows a web browser at localhost:8080/credit-card-eligibility-check/checkEligibility?panNo=APPXA2244X. The page displays the message "Congratulations!!! You are eligible for a credit card" in green.

If not eligible, show the below screen to the customer.

← → ↻ 🏠 ⓘ localhost:8080/credit-card-eligibility-check/checkEligibility?panNo=AXVPS7766V

Sorry!!! You are not eligible for a credit card

General Requirements:

1. Apply suitable headings/titles as deemed appropriate.
2. Apply suitable validations to the forms wherever applicable (All the fields mandatory, credit score must be number etc.,)
3. The screen designs given above are for easy understanding of the flow and functionality. You can design the screens as per your choice.
4. Please use Thymeleaf view.
5. Styling and colors can be used as per your choice

Technologies mandatorily that needs to be used:

- **Languages and Frameworks:** Spring Boot & Spring Data
- **Databases :** Any In-Memory DB like H2/HSQL
- **Build Tool:** Create SpringBoot project with Maven build system