

Credit card statement

[Problem Statement]

Develop a Full Stack application which would show the credit card statement for six months.

We have provided a CSV file which contains extensive information about credit card details for six months.

You are expected to develop a pseudo full stack web app in the tech stack mentioned below for (suppose) American Express back office, where they can query credit card statement of any user to get his last 6 months statement.

[Minimum Requirement] (Beginner)

- Use of CSV file provided.
- Implement a backend service in Enterprise Java, use any framework of your choice.
- Implement a frontend in ReactJS, Angular JS or any framework of your choice.
- Visually interactive design to list statement details on the front end.
- Submit **Source code, Screenshots & detailed deployment instructions**.

[Plus Point] (intermediate)

- Implement Elastic Search or Apache Solr in the backend.(Strictly)

- Specific page with statement details of a particular user on the frontend.
- Implement a Search feature get user details by name or unique id.
- Implement paging to display the results properly.

[Extra Work] (experienced / wizard)

- On the frontend show comprehensive information of credit card statement.
- Perform some analysis and plot beautiful graphs on the UI, if time permits.
- An option to filter and list 'defaulter' users.
- Custom design, font and icons to make webapp more user friendly.
- You may add portfolio activity comprising awesome work you have done.
- Use your imagination and add features which would make things easier for end users.
- Beautify; Comment; Documented code; handle Input Exceptions, Unicode and Null values.

[Data Params]

- ID: ID of each client
- NAME: Name of the card holder
- LIMIT_BAL: Amount of given credit in NT dollars (includes individual and family/supplementary credit
- SEX: Gender (1=male, 2=female)
- EDUCATION: (1=graduate school, 2=university, 3=high school, 4=others, 5=unknown, 6=unknown)
- MARRIAGE: Marital status (1=married, 2=single, 3=others)
- AGE: Age in years

- PAY_0: Repayment status in September, 2005 (-1=pay duly, 1=payment delay for one month, 2=payment delay for two months, ... 8=payment delay for eight months, 9=payment delay for nine months and above)
- PAY_2: Repayment status in August, 2005 (scale same as above)
- PAY_3: Repayment status in July, 2005 (scale same as above)
- PAY_4: Repayment status in June, 2005 (scale same as above)
- PAY_5: Repayment status in May, 2005 (scale same as above)
- PAY_6: Repayment status in April, 2005 (scale same as above)
- BILL_AMT1: Amount of bill statement in September, 2005 (NT dollar)
- BILL_AMT2: Amount of bill statement in August, 2005 (NT dollar)
- BILL_AMT3: Amount of bill statement in July, 2005 (NT dollar)
- BILL_AMT4: Amount of bill statement in June, 2005 (NT dollar)
- BILL_AMT5: Amount of bill statement in May, 2005 (NT dollar)
- BILL_AMT6: Amount of bill statement in April, 2005 (NT dollar)
- PAY_AMT1: Amount of previous payment in September, 2005 (NT dollar)
- PAY_AMT2: Amount of previous payment in August, 2005 (NT dollar)
- PAY_AMT3: Amount of previous payment in July, 2005 (NT dollar)
- PAY_AMT4: Amount of previous payment in June, 2005 (NT dollar)
- PAY_AMT5: Amount of previous payment in May, 2005 (NT dollar)
- PAY_AMT6: Amount of previous payment in April, 2005 (NT dollar)
- DEFAULT.PAYMENT.NEXT.MONTH: Default payment (1=yes, 0=no)

[Guide]

— **Credit Card Statement CSV:** <http://hck.re/4kb3nQ>

— **Tech Stack:**

UI Skills

1. Must have - HTML, CSS, JS, JEE, PHP.
2. Good to have - Angular, React, Vue, D3, PWA

- Interaction Channel Skills

1. Must have - Ability to develop Hybrid / Native Apps / Web Apps
2. Good to have – React Native, Angular Ionic, Portal products (Liferay / AEM), Commerce Solution (Magento / Hybris), Marketing Skills (Adobe Marketing platform)

- Integration Skills

1. Must have – REST and SOAP integration on JEE, Security – OPENID / SMTP-POP3, Search (Solr, ElasticSearch, Lucene)
2. Good to have – Springboot, Node.JS, AWS iPaaS services

- Backend Skills

1. Must have – MySQL / SQL Server understanding for Stored Procs and SQL journeys
2. Good to have – NoSQL systems – Cassandra, Mongo, Spark, Nifi, Kafka, AI Skills – Python / R

— **IMPORTANT: Archive source, screenshots and documentation in ZIP file and upload it.**