

EMI CALCULATOR

Due Date :18/05/2020

Completion Date :18/05/2020

Project Summary:

EMI calculator will help user to generate the rate of interest, monthly payment, total amount to be given and total interest to be paid for any load. User is required to input the details of principal amount and the months of the loan. Previous values searched will be saved and user can get the results for those values by clicking on them.

Developer:

Name : Hitesh Batra

Role : Frontend(React.js) Developer

Problem Statement :

There are many platforms that can calculate EMI but user needs to enter the details and then click on the button to get the results and their previously searched values are also not saved. This problem is solved by our product.

Solution by our Product:

User is required to only enter principal amount and duration of months for the loan and within fraction of seconds the result is displayed previous value are also stored.

Some glance of our product :

The image shows a screenshot of an "EMI CALCULATOR" interface. The interface has a light orange header with the title "EMI CALCULATOR" in white. Below the header, there are two main input sections: "Principal Amount in \$:" and "Duration in Months:". Each section has a text input field, a slider, and a range of values. The "Principal Amount" section shows a value of 800, with a slider ranging from \$500 to \$5000. The "Duration in Months" section shows a value of 8, with a slider ranging from 6 months to 24 months. Below these input sections, there are four rows of calculated values: Interest Rate (0.26%), Monthly Payment (\$117), Total Payment (\$936), and Total Interest (\$136). To the left of the calculator, there is a white box labeled "Previous Values". Above the calculator, there are three text boxes with arrows pointing to specific parts of the interface: "Previous values are displayed here" points to the "Previous Values" box; "Adjust the slider or type the principal amount" points to the "Principal Amount" input field; and "Adjust the slider or type the number of months" points to the "Duration in Months" input field.

Previous values are displayed here

Adjust the slider or type the principal amount

Adjust the slider or type the number of months

EMI CALCULATOR

Previous Values

Principal Amount in \$:

800

\$500 \$5000

Duration in Months :

8

6 months 24 months

Interest Rate : 0.26%

Monthly Payment : \$117

Total Payment : \$936

Total Interest : \$136

Once you adjust the slider and set the amount and month:

Previous values you searched are displayed

All the results are shown instantly by only typing the values .

EMI CALCULATOR

Previous Values

\$800	8 months
\$2284	8 months
\$2284	8 months
\$3236	8 months
\$3236	8 months
\$800	8 months
\$2533	12 months

Principal Amount in \$:

2533

\$500

\$5000

Duration in Months :

13

6 months

24 months

Interest Rate :

0.34%

Monthly Payment :

\$266

Total Payment :

\$3458

Total Interest :

\$925

Once you close your webpage and the open it all your searched values will be saved in your local storage. They will remain there until you go and delete them.

Concepts And Technologies Used:

- 1) Debouncing from (lodash library) - When user stop sliding the slider then after some time results are shown.
- 2) Material UI – It is a react UI framework, it is used to import the slider and input items.
- 3) Axios : It is used to call the API and store it locally.
- 4) React.JS: It is a library when reusability of code is enhanced and is based on javascript language.
- 5) Local Storage : Previous values are stores in the cache of the user by using the concept of local storage.

Difficulties :

- One of the major difficulty was to show the result when user stop sliding the slider or when they have entered the value in input tags without any further interaction. This was solved using debouncing.
- Another difficulty was caching the previously searched values and it was solved with the help of local storage concept in React.js

Improvements:

- Some values searched are stored twice in the local storage which can be improved.
- When user closes the webpage and reopen it then default values can be the last searched values instead of \$800 and 8 months.