**­MERN Expense Tracker project**

1. Technology to use:
   1. **Frontend** 
      1. *React library*
         1. **React for UI**
      2. *React router* 
         1. **Client routing**
      3. *React transition components* 
         1. **Client routing animation**
      4. *React Icon*
   2. **Backend** 
      1. *Express.js* 
         1. **Server webframework**
         2. **Backend routes**:
            1. ***api/budget***

**/income** – **GET** all incomes

Get all income and return it with status 200

**/expenses** – **GET** all expense

Get all expense and return it with status 200

**/income** – **POST** create new income

Receive user input.

Validate if user input is empty string.

Create new income

Save it to database

Return a JSON data to user with status 200

**/expense** – **POST** create new expense

Receive user input

Validate if user input is empty string.

Create new expense

Save it to database

Return a JSON data to user with status 200

**/income/: id** – **DELETE** income.

Receive income id

Find the income document in the database and delete it.

Validate if income document exist

Return an id of deleted documents to user with status 200

**/expense/: id** – **DELETE** expense.

Receive expense id

Find the expense document in the database and delete it.

Validate if expense document exist

Return an id of deleted documents to user with status 200

**/income/:id** – **UPDATE** income

Receive income id

Find the income document in the database ad update it.

Validate if income document exist

Return updated JSON payload to user with status 200

**/income/:id** – **UPDATE** expense

Receive expense id

Find the expense document in the database and update it.

Validate if expense document in the database.

Return updated JSON payload to user with status 200.

* + 1. *Mongoose* 
       1. ODM for mongoDB
          1. Income schema

Name of Income

String

Required is true

Amount of Income

Number

Required is true

Timestamp of Income

* + - * 1. Expense schema

Name of expense

String

Required is true

Amount of Expense

Timestamp of Expense

* + 1. *NodeJS* 
       1. Server runtime
    2. *cors middleware* 
       1. Cors error solution
    3. *Express-async-handler* 
       1. Handling asynchronous controller

1. **User stories:** 
   1. As a worker, I would like to keep track my monthly income and expense.
   2. As a worker, I would like to add my monthly income in an application where I see my total income balance on the screen.
   3. As a worker, I would like to see a list of income generators in my screen and the total amount of money my generator bring to me every month.
   4. As a worker, I would like to see a list of expense and liabilities in my screen and the total amount of expense I incur.
   5. As a worker, I would like to add those incomes and expenses in the database.
   6. As a worker, I would like to add the following data for my income.
      1. Name of income.
      2. Amount of income.
      3. Timestamp when I add the income.
   7. As a worker, I would like to add the following data for my expense.
      1. Name of expense.
      2. Amount of expense.
      3. Due data if the expense has.
      4. Timestamp when I add the expense.
   8. As a worker, I would like to delete expense or income on screen and database.
   9. As a worker, I would like to edit expense or income on screen and database.
   10. As a worker, I would like to see an updated total amount of money I have when I try to add income or expense and remove income or expense.
   11. As a worker, I would like to see all important data cleanly arrange on the screen.
       1. Left for income.
       2. Right for income.