Project Synopsis
on
Expense Tracker using MERN stack

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EXPENSE TRACKER

Introduction

In today's busy and expensive life we are in a great rush to make money. But at the end of the month we often come face budget failure or shortage of money because we unknowingly spend money on little and unwanted things and these small transactions can sometimes break our monthly budget plan. So, we have come over with the idea to track the daily expenditure of the person, so that a record could be maintained on the monthly expenditure. Expense Tracker aims to help everyone who are planning to know their expenses and save from it.

Expense Tracker System is designed to keep a track of Income-Expense of a person on a daily basis. This System divides the amount entered into two parts i.e. Income and Expenditure and generates a report on the Income-Expenditure data based on daily expenses.

Expense Tracker is an online website, which users can execute in their mobile phones, laptops or desktops and update their daily expenses so that they are well known to their expenses. The website has a simple User-Interface which makes the website very easy to use by people belonging to any age group. The users need to define their expense like food, clothing, rent, bills etc. as well as the amount spent to register in the website so that the record could be maintained on the expenses. Although the website is made to be used by everyone, it especially focuses on new job holders, interns and teenagers because they find it difficult to manage money.

Problem Statement

In the existing system, we need to maintain the physical notebooks or Excel sheets, CSV files etc. in the computer to maintain the record of the expenses. In the existing system, it is very difficult to maintain the records as there are chances of errors and mistakes while inputting the details of the records of expenses in the notebooks or in the Excel sheets. The process of maintaining the records in the notebooks or in the Excel sheet is very complex and not user friendly. Additionally, mathematical errors could be made while manually adding all the expenses, whereas in the case of Online Expense Tracker no mathematical error could be made as all the calculations are done by the computer. Also the user can lose his notebook resulting in the loss of the records of the expenses.

If the user is storing the records of the expenses in the excel sheet in his laptop then the file will not be accessible to him all the time and at all places. There is also a chance that the excel file could be damaged by the virus or could be accidentality deleted by the user.

Proposed System

To reduce the complexity of making record of the daily expenses, we propose an application website which is developed on MERN stack technology. This website allows users to maintain a digital automated diary keeping the track of Income-Expense of a user on a day to day basis. The data on the user's expenditure will be saved in the cloud so that there is hardly any chance of data loss. Also the user could use the application website anywhere and on any device to input the expenses. The mathematical calculations will be done by the computer program so there will be no mathematical error in the transactional calculations.

Objective

The objective of expense tracker is to help people save their money and provide details about their daily expenses.

Hardware and Software Specifications

- Technologies Implemented:- MERN stack
- Languages Used:- HTML, CSS, JavaScript, Node js, React, MongoDB.
- Development Environment :- Visual Code Studio, Git and GitHub
- Processor :- i3
- Operating System:- Windows 10 or above
- RAM :- 8 GB

Feasibility of Project

After doing the project on Expense Tracker, studying and analysing all the existing or required functionalities of the system, the next task is to do the feasibility study for the project. The project is feasible given unlimited resources and infinite time.
The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements.

1. Economical Feasibility :-
This is a very important aspect to be considered while developing aproject. We decided the technology based on minimum possible cost factors :-
1. All hardware and software cost has to be borne by the organization.
2. Overall we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for system.

2. Technical Feasibility :-
This included the study of function, performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionality to be provided
in the system, as described in the System Requirement Specification(SRS).

3. Operational Feasibility :-
Operational feasibility is the measure of how well a system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements.

Team contribution

- In this project we are working in a team of 2 people.
- Pawan
- Team Contribution:-
    - Team Lead :- Yash Nigam
    - Frontend :- Pawan Pandey
    - Backend :- Yash Nigam
    - Design and Development:- Pawan Pandey, Yash Nigam
    - Research and Content :- Pawan Pandey, Yash Nigam

Limitations of the system proposed

- Internet connection is required while accessing the website.

Online GIT repository

https://github.com/PawanPandey007/Expense-Tracker

FUTURE SCOPE

FUTURE SCOPE OF APPLICATION :
This application can be easily implemented under various situations. We can add new features as and when required. Reusability is possible as there is flexibility in all the modules.

SOFTWARE SCOPE:

- Extensibility
  This software is extendable. The following principles enhances extensibility like hide data structure, avoid traversing multiple links or methods, avoid case statements on object type and
  distinguish public and private operations.

- Reusability
  Reusability is possible as and when required in this application. We can update it next version. Reusable software reduces design, coding and testing cost by reducing effort over several designs.
  Reducing the amount of code also simplifies understanding, which increases the likelihood that the code is correct. We follow up both types of reusability.
  Sharing of newly written code within a project
  and reuse of previously written code on new projects

Conclusion

After making this application we assure that this application will help its users to manage the cost of their daily expenditure. It will guide them and aware them about there daily expenses. It will prove to be helpful for the people who are frustrated with their daily budget management, irritated because of amount of expenses and wishes to manage money and to preserve the record of their daily cost which may be useful to change their way of spending money. In short, this application will help its users to overcome the wastage of money.

References

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