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Daily Expense Management System

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Abstract: **This project aims to create a web-based application for tracking daily expenditures that use DBMS, PHP, HTML, CSS, and jQuery with the additional function of alerting mail messages. Users of the system may effortlessly control their everyday spending thanks to its user-friendly design. In addition to viewing their spending history, users can add, edit, and delete expenses. The system stores and retrieves data using a relational database management system, which guarantees the consistency and integrity of the data. A responsive and interactive user interface is made using HTML, CSS, and jQuery, with server-side processing handled by the PHP programming language. Integrating a mail server with the application makes the extra capability of sending alarm messages via mail possible. Based on specified rules like a daily or weekly expense restriction, the system will email users alerts when a user exceeds the set limit or when a specific expense category is depleted. With the help of this tool, consumers may make the required adjustments to their expenditures while staying constantly aware of their spending patterns. The application can accommodate several users with various roles and permissions because it is made to be scalable. Users can monitor their costs while on the road thanks to the adaptable user interface, which is accessible from any device. With the use of timely alerts, this initiative hopes to make managing everyday expenses easier for consumers while also assisting them in keeping tabs on their spending.**

Keywords — Web-based application, DBMS, PHP, HTML, CSS, jQuery, user-friendly design, spending history, interactive user interface, mail server, daily expense limit, timely alerts, managing expenses.

I. INTRODUCTION

For many people, especially those not accustomed to budgeting or spending control, managing everyday expenses can be difficult. This is where a web-based tool for monitoring everyday spending can be useful. This project intends to create such an application with the addition of alerting mail messages utilizing DBMS, PHP, HTML, CSS, and jQuery. Users will have access to a user-friendly interface through the program that makes it simple for them to monitor their daily expenses, check their spending history, and add, edit, and delete charges. The system will store and retrieve data using a relational database management system to guarantee data consistency and integrity. HTML, CSS, and jQuery will be used to develop the system's responsive and interactive user interface, and PHP will be used for server-side processing. Users will receive email warnings based on established rules, such as daily or weekly expense restrictions, when they exceed the set limit, or when a certain expense category is exhausted by integrating a mail server with the program. The flexible user interface allows users to track their spending from any device. The goal of this project is to make managing everyday expenses easier, let users monitor their spending habits, and use timely alerts to make the necessary adjustments to their spending. It expects that doing this will make it simpler for consumers to manage their daily spending.

II. IMPLEMENTATION

A. ER-Diagram

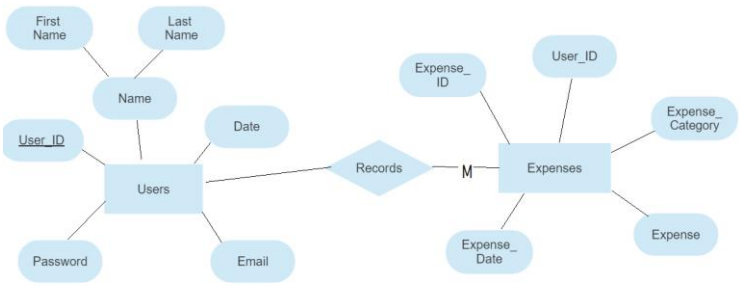

fig.1.1

The ER Diagram (fig.1.1) consists of entities such as Users and expenses. The entity Users has attributes Name, Email, Password, Date, and User_ID as primary key in the entity users. The entity Expenses has attributes Expense, Expense_Id, Expense_Category, and Expense_Date. The

relationship is created between users and the Expenses entity with the help of User_ID. The expenses table has a foreign key referencing the user ID field in the user's table to establish a one-to-many relationship between users and their expenses. For implementation, a web application server needs to be set up, either locally or remotely, that can run PHP. The server has a DBMS, installed and configured for efficient data storage and retrieval. Additionally, a responsive and interactive user interface that works on various devices have been developed using HTML, CSS, and jQuery.The application's backend comprises a set of PHP scripts responsible for handling user authentication, data validation, and database queries. For instance, the script will authenticate user credentials, and users will be redirected to the dashboard page, where they can view their expenses and add new ones. The script will also display error messages for invalid inputs or insufficient funds.The database schema includes tables for users(fig.2.4) and expenses(fig2.5). Each user will have a unique ID, username, password, and email, such for users. Expenses will have attributes such as ID, user ID, amount, category, date, and notes. Categories will have a name and a description.The program has been set up to use an email server (SMTP), to deliver email alerts. Whenever a user registers(fig.2.2) and login(fig.2.1) themselves they will get an email notification(fig.2.6). When a user crosses a threshold or a category runs out of cash, PHP scripts will use a function to send an email. In order to send the email, the function will make use of the user's email address.

III. RESULTS AND DISCUSSION

The project was successful in creating a web-based application for monitoring daily spending that makes use of a relational database management system, PHP, HTML, CSS, and jQuery, as well as the extra function of emailing users when something goes wrong. Users may check their spending history and add, change, and delete costs using the application's user-friendly interface. By employing a DBMS to store and retrieve data, the system assures the data's consistency and integrity. Multiple users with different roles and permissions can be accommodated by the application's scalability. With the application's customizable user interface, users can access it from any device and keep track of their spending wherever they go. The goal of the project was to create a useful and practical tool for keeping track of daily costs. A fantastic feature that keeps users updated on their spending patterns is the integration of a mail server for alerts. It's also important to highlight the application's scalability, which enables it to manage numerous users with various roles and permissions. Because it guarantees data consistency and integrity, using a relational database management system is a great choice. A responsive and interactive user interface, which is essential for a user-friendly experience, has been successfully created using the PHP programming language, HTML, CSS, and jQuery.

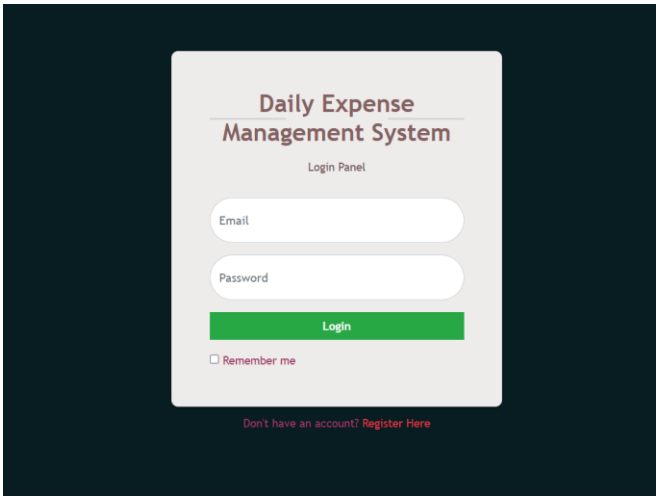

fig.2.1

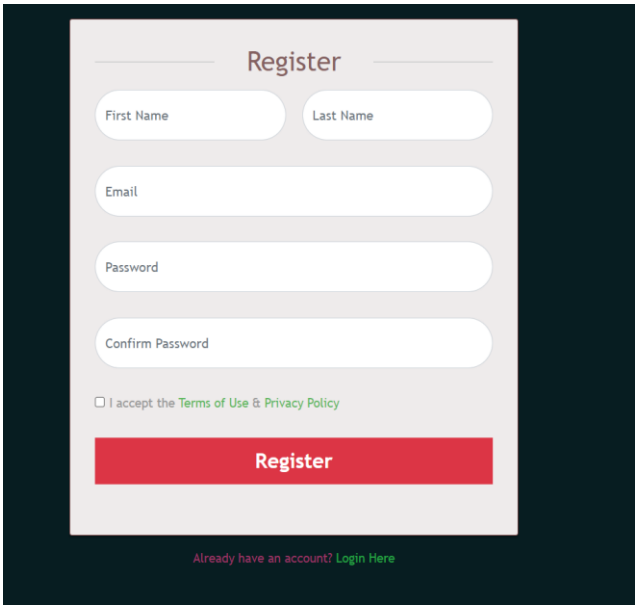

fig.2.2

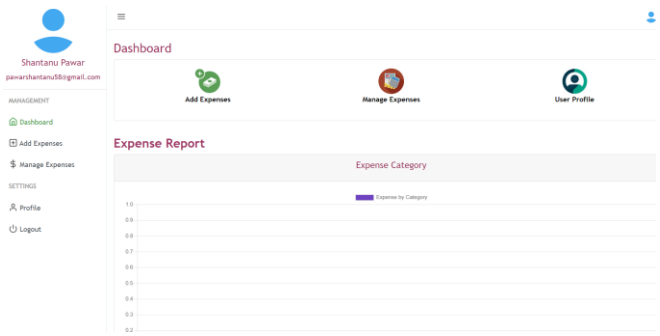

fig. 2.3

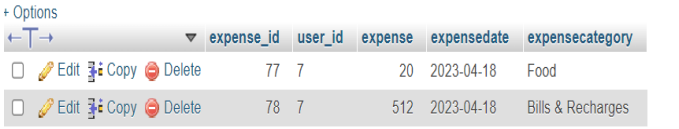

fig 2.4

fig 2.5

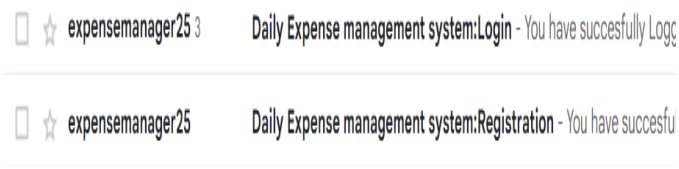

fig 2.6

IV. CONCLUSION:

The project's objective of creating a web-based application for tracking daily spending has been accomplished effectively using a variety of technologies, including DBMS, PHP, HTML, CSS, and jQuery. Users may add, amend, and delete expenses using the application's user-friendly interface, which also lets them track their spending patterns. Including a mail server for alerts is a great feature that keeps people updated on their spending patterns. The program can manage numerous users with various roles and permissions because it is scalable. The consistency and integrity of the data are guaranteed by using a DBMS to store and retrieve it.Users may access the project from any device, and it has an interactive and dynamic user interface that makes it possible to keep track of costs anywhere. Overall, the project was successful in creating a useful and practical tool for controlling everyday spending, and with some new functions and enhancements, it might be even more effective for users.

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FUTURE SCOPE

The web-based tool for keeping track of everyday costs has a lot of room for future growth and expansion. Future research may focus on a number of areas, including

1. The program might be created as a mobile application, which would increase its use and accessibility for users who are constantly on the go.

2. Social media integration: Users of the program could be given the option to share their spending objectives and accomplishments with their friends and family via social media platforms.

3. Budget forecasting: To assist users in better planning their spending and handling their money, the program could provide budget forecasting tools.

4. Integration with financial institutions: To give real-time updates on account balances and transaction history, the application may be integrated with banks and other financial organizations.

The web-based program for tracking daily spending has a lot of room for development and improvement in the future, which might make it an even more effective tool for users to manage their finances.

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