

Expense Tracker

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Abstract: *The web application “Expense Tracker” is developed to manage the daily expenses in a more efficient and manageable way. By using this application we can reduce the manual calculations of the daily expenses and keep track of the expenditure. In this application, user can provide his income to calculate his total expenses per day and these results will be stored for each user. The application has the provision to predict the income and expense for the manager using data mining. In this application, there are 3 logins such as admin, manager and staff. Admin has the privilege to add, edit, delete manager, add, edit, delete staff, and to get all custom reports. For Manager, the privileges are to add type of expense, verify expense, add type of income, verify income and generate reports. For staff, the privileges are to add and edit expense, income and calculations, and send for verifications.*

Keywords: Daily expense and income, Least Square Algorithm, Prediction

I. INTRODUCTION

Daily Expense Tracker System is designed to keep a track of Income-Expense of an organization on a day-to-day basis. This System divides the Income based on daily expenses. If exceed day's expense, system will calculate income and will provide new daily expense allowed amount. Daily expense tracking System will generate report at the end of month to show Income-Expense graph. And employees send reports to the manager for verification. Manager send final reports to administrator. Based on the final reports system predict the next month expense. It will help to manage over all expense and income. Businesses utilize expense management software to process, pay, and audit employee-initiated expenses. The software includes capabilities for employees to input expenses for approval through a form. Expense management software simplifies and automates a business' expense entry, eliminates paper trail, and reduces administrative effort. Expense management software allows administrators to have full visibility of and track employee use of business financial resources. Expense management software analyzes overall expenses, identifies cost-saving opportunities, and controls excessive spending. “Expense Tracker” is developed to manage the daily expenses in a more efficient and manageable way. By using this application. we can reduce the manual calculations of the daily expenses and keep track of the expenditure.

In this application, user can provide his income to calculate his total expenses per day and these results will be stored for each user. The application has the provision to predict the income and expense for the manager using data mining. Budgeting systematically and Expense Tracking takes a crucial role in managing the expenses of business organizations. Expense tracking (for managing the employee developed expenses) will bring in several advantages for an organization. That are helpful for the stake-holders in processes of expense. The expense tracker will help any organization to deal with all their expenses more efficiently. By using software for managing expense tracking will help to control unnecessary expenses. There are several benefits and advantages of using online expense trackers, expense tracking makes any organization run faster and smoother.

II.

BACKGROUND

Technologies used in this project:

- **NetBeans** is an integrated development environment (IDE) for Java. NetBeans allows applications to be developed from a set of modular software components called modules. NetBeans runs on Windows, macOS,

Linux and Solaris. In addition to Java development, it has extensions for other languages like PHP, C, C++, HTML5 and JavaScript. Applications based on NetBeans, including the NetBeans IDE, can be extended by third party developers.

- **Dreamweaver** is a software program for designing web pages, essentially a more fully featured HTML web and programming editor. The program provides a WYSIWYG (what you see is what you get) interface to create and edit
- web pages. Dreamweaver supports many markup languages, including HTML, XML, CSS, and JavaScript.
- **MySQL (XAMPP)** is an Oracle-backed open-source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. MySQL is an important component of an open-source enterprise stack called LAMP.

II. EXISTING SYSTEM

A) How it Actually Works

In existing, we need to maintain the Excel sheets, CSV etc. files for the user daily and monthly expenses. In existing, there is no as such complete solution to keep a track of its daily expenditure easily. To do so a persona to keep a log in a diary or in a computer, also all the calculations need to be done by the user which may sometimes results in errors leading to losses.

B) Drawbacks of the Existing System

There can be many disadvantages of using a manual accounting system. Accounting, for any business, can be a complex undertaking. A manual accounting system requires you to understand the accounting process in a way that may be unnecessary with a computerized accounting system. This can be an advantage or a disadvantage, depending on the person doing the bookkeeping; often, a specially trained professional is needed to ensure that accounting is done properly. Unraveling the complexity of your financial records by hand may be time consuming. Since it takes time to generate reports.

III. PROPOSED SYSTEM

To reduce manual calculations, we propose an application. This application allows users to maintain a digital automated diary. Each user will be required to register on the system at registration time, the user will be provided id, which will be used to maintain the record of each unique user. Expense Tracker application which will keep a track of Income-Expense of a user on a day-to-day basis. The best organizations have a way of tracking and handling these reimbursements. This ideal practice guarantees that the expenses tracked are accurately and in a timely manner. From a company perspective, timely settlements of these expenses when tracked well will certainly boost employees' morale. Additional feature of Expense and income prediction helps to better budget management

A) Advantages

- The best organizations have a way of tracking and handling these reimbursements. This ideal practice guarantees that the expenses tracked are accurately and in a timely manner. From a company perspective, timely settlements of these expenses when tracked well will certainly boost employees' morale
- Financially Aware and Improve Money Management tracking your expenditures ensures you achieve your project financial targets. How is that? By clearly understanding your project spending using project budget limits, you can aptly make the necessary changes to complete your project within time and budget.
- Effective expense tracking and reporting to avoid conflict. As a project manager or business owner, you can set clear policies for the expense types and reimbursement limits to avoid misunderstandings are about costs. Tracking the project expenses by asking team members to provide receipts is helpful to avoid conflict and maintain compliance also. An excellent reporting mechanism is extremely helpful to support the amount to be reimbursed to your team and also invoicing to your customer.

- Helps anticipate the costs of similar projects When you formally track and report expenses, you have a permanent documentation which helps you correctly anticipate expenses for similar projects in the future. This is even more significant when it comes to budget-making process.
- Tracking the amount of money spent on the projects is important to invoice customers and determine the cost & profitability analysis when your company is providing services to another company. On the other hand, expense tracking or internal project is important for cost and ROI calculation. Understanding how this money is being utilized across the project is such a significant issue. The consequence for not properly tracking and reporting project expenses may lead to a budgetary issue.

B) Algorithm Used

The least squares method is a statistical procedure to find the best fit for a set of data points by minimizing the sum of the offsets or residuals of points from the plotted curve. Least squares regression is used to predict the behavior of dependent variables. Least Squares Algorithm.

IV. RESULTS AND DISCUSSIONS

The screenshot shows the phpMyAdmin interface for a database named 'expense_tracker'. The 'tbl_expense' table is selected, and its structure is displayed. The table has the following columns:

Field	Type	Collation	Index	Primary	Nullable
ExpenseID	INT(11)	utf8_general_ci	PRIMARY	YES	NO
ExpenseType	VARCHAR(255)	utf8_general_ci		NO	YES
Amount	DECIMAL(10,2)	utf8_general_ci		NO	YES
Date	DATE	utf8_general_ci		NO	YES
Status	ENUM('pending', 'approved', 'rejected')	utf8_general_ci		NO	YES

Figure 1: DATABASE DESIGN



Fig2 :Admin Page



Figure 2: Admin Page



Figure 3: Prediction Page

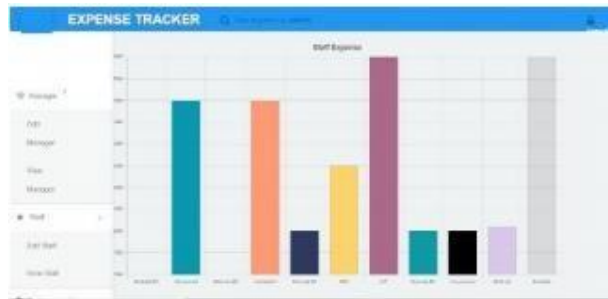


Fig4:Expense graph



Figure 4: Expense graph

Figure 5: Income graph

IV. CONCLUSION

The new system has overcome most of the limitations of the existing system and works according to the design specification given. The project what we have developed is work more efficient than the other income and expense tracker. The project successfully avoids the manual calculation for avoiding calculating the income and expense per month. The modules are developed with efficient and also in an attractive manner. The developed systems dispense the problem and meet the needs of by providing reliable and comprehensive information. All the requirements projected by the user have been met by the system. The newly developed system consumes less processing time and all the details are updated and processed immediately. Since the screen provides online help messages and is very userfriendly, any user will get familiarized with its usage. Module s are designed to be highly flexible so that any failure requirements can be easily added to the modules without facing many problems. The best organizations have a way of tracking and handling these reimbursements. This ideal practice guarantees that the expenses tracked are accurately and in a timely

manner. From a company perspective, timely settlements of these expenses when tracked well will certainly boost your employees' morale

- Quickly Determine How Profitable Business Is
- Effective expense tracking and reporting to avoid conflict

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