

# Intelligent Expense Logging System Organize Analyze and Optimize Your Expenses using AI and ML

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**Abstract:** *Many peoples report that they have a hard time tracking their day to day expenses which in turn they attribute to the use of old school methods like pen and paper or spreadsheets. Those tools are very time out of date and do not provide in depth analysis or feedback. To that end we put together an expense tracking system which we did to make the log in and analysis of spend out patterns easier and more intuitive. The system is an online platform which has features for users to either input their expenses by hand or upload receipts which the application will turn into data via image to text conversion. Also we have expense tracking categories which include food, travel, and bills which in turn makes it easy for the user to see what they are spending on a monthly basis. Also we find out over time what the user's spending habits are which in turn we use that info to give out tips like which times of the year you spend the most or to alert you when you are close to your budget. We also present the info via simple graphs which in turn make it easy for non finance background users to digest their info. We have incorporated secure logins and cloud storage to ensure user information is kept secure. The application utilizes widely available technologies such as HTML, JavaScript, and Node.js, making it accessible on multiple devices. From the initial feedback gathered, users found the system to actively assist them in managing their schedules and budgeting, which was received positively. Generally, this project aims to integrate intelligent functionalities with ease of use to make personal finance effortlessly manageable..*

**Keywords:** Expense Tracking, Personal Finance, Budget Management, Optical Character Recognition (OCR), Image-to-Text Conversion, Financial Visualization, Cloud Storage, Secure Login, Web Application, Spending Analysis, User-Centric Design

