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Expense Tracker using AI

Piska Lakshmi Lasyavi, Gadda praneetha, Budati Satyanarayana Reddy, Prof. Sanjeev Shukla Sandip University, Nashik, India

Abstract: Managing personal finances is a critical aspect of modern life, yet many individuals struggle with tracking their daily expenses effectively. This research introduces a Daily Expense Tracker AI, a system designed to provide seamless and automated financial management. Built using Python, the AI leverages natural language processing (NLP) and machine learning (ML) algorithms to categorize expenses, predict future expenditures, and provide insights into spending habits.

Key features include automated data entry through voice or text input, real-time categorization of transactions, and intuitive visualizations to highlight trends. The system integrates with APIs for bank statements and digital payment platforms to offer a holistic view of financial activity. Emphasis is placed on user privacy, ensuring data security through encryption and local processing.

A case study with 50 participants demonstrated the tool's ability to increase financial awareness and promote better budgeting decisions, with 85% of users reporting improved financial management. This research highlights the potential of AI-driven tools in personal finance and outlines future improvements, including enhanced prediction models and integration with wearable devices. This project aims to simplify financial tracking, making it accessible, efficient, and adaptable to diverse user needs..

Keywords: Daily Expense Tracker, Personal Finance Management, Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP), Automated Data Entry, Expense Categorization, Spending Habits Analysis

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