

BỘ THÔNG TIN VÀ TRUYỀN THÔNG
HỌC VIỆN CÔNG NGHỆ BƯU CHÍNH VIỄN THÔNG



Eighth Report
Foundation Internship
ChippyCash
Smart Chatbot for Easier Expense Management

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INTERNSHIP BASE REPORT - WEEK 8

As of this week, I have completed the following tasks:

1. Requirement Analysis and System Design

- Project analysis: Carefully reviewed the project requirements to identify the core functionalities of a personal finance management system, including login, registration, transaction management, financial analysis, and AI chatbot support.
- Development environment setup: Installed PHP and MySQL, configured the database, and included necessary libraries such as Chart.js and FontAwesome.
- Interface design: Designed the homepage, login/register pages, transaction management, and financial analysis pages using HTML, Tailwind CSS, and JavaScript. Integrated components like tables, modals, tabs, and filters for a responsive and modern UI.

2. Application Development

- Transaction management:
 - Implemented functionalities to add, edit, and delete income/expense transactions.
 - Developed filters by type, category, and date with interactive table views and UI effects (hover, rounded corners, shadows).
- Financial analysis:
 - Integrated Chart.js to display:
 - A pie chart for income vs. expense ratio.
 - A line chart for 6-month income/expense trends.
 - A bar chart for category-based expense breakdown.
 - Optimized layout for clarity and responsiveness.
- AI Chatbot Integration:

- • Built a chat interface supporting multiple personas (smart assistant, strict mama, homie).
- • Connected to AI APIs for responding to financial queries, analyzing transactions, and extracting data from receipt images.
- • Streamlined the image upload flow to trigger automatic AI processing and display detected transaction data.
- User experience improvements:
 - • Fixed bugs related to saving transactions, image uploads, and notifications.
 - • Improved performance and feedback during photo uploads.
 - • Implemented role persistence to auto-restore chatbot persona after reload.

3. Achievements

- Completed a fully functional UI and the essential features of the personal finance system.
- Successfully integrated intuitive financial analysis charts.
- Developed a working AI chatbot that helps users enter data using receipt images.
- Delivered a polished, responsive, and user-friendly interface.

4. Next Steps

- Develop advanced features like report export and spending reminders.
- Enhance security and perform full-system testing.
- Prepare user manual and finalize the complete project report.

