

# CashLens

An Artificial Intelligence Solution By Syntax-Sisters

## Background

- Managing personal finances is often a complex and time-consuming task. Many individuals, especially students and young professionals, struggle to consistently track their expenses, maintain budgets, and develop sustainable financial habits. Existing tools sometimes require intrusive access to sensitive financial information, like linking banking details, or place a heavy burden on users to manually update their data.
- The problem
  - Most budgeting applications lack convenience, accuracy, and ease of use. They often require:
    - Continuous manual updates that reduce engagement.
    - Direct bank integrations that raise security concerns.
    - Limited personalisation, making them less effective in creating meaningful financial insights.
  - As a result, users abandon these tools quickly, leaving their finances unmanaged and their savings potential unrealised.

## The selling point

 CashLens provides a secure, user-friendly budgeting platform that eliminates unnecessary complexity. Instead of linking directly to bank accounts, users simply upload their bank statements in .csv format. The AI then analyses spending patterns to generate realistic, personalised budgets without requiring extremely sensitive personal information. This approach combines simplicity, Security and Clarity.

#### The Idea

- CashLens leverages AI to transform raw transaction data into actionable financial insights:
  - Users create an account and upload their bank statements.
  - The AI engine analyses transaction history and spending habits.
  - A personalised budget is automatically generated, with categories users can further refine.
  - Daily transactions can be logged to maintain budget accuracy.
  - A gamified points system motivates consistent engagement by rewarding weekly streaks and disciplined saving behaviour.

## The Impact

 CashLens aims to make financial management accessible, sustainable, and relevant to modern users. By significantly reducing the amount of manual effort required, the platform encourages consistent budgeting and greater user engagement. Through Al-driven analysis, it provides actionable insights that empower individuals to spend smarter and save more effectively. In addition, the app promotes healthier financial habits by integrating gamification and positive reinforcement, making the process of money management both practical and rewarding. Designed with scalability in mind, CashLens caters to a broad spectrum of users—from students taking their first steps in financial responsibility to professionals seeking clarity and discipline in their personal finances.

### Implementation

- Built using Apache and PHP for the backend, with JavaScript for the frontend.
- Al integration was done through API calls to Google's Gemini for transaction analysis, categorisation, and predictions.
- Deployment through use of Docker. Designed as a lightweight web application for ease of access and scalability.
- Future roadmaps include expansion into mobile platforms, enhanced AI forecasting, and strategic reward partnerships with popular consumer brands.



Thank You:)