

Module title and code: Software Development 2 - CMP020L004S

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1. Application Proposal:

Business Idea:

SmartBudget is a personal finance management application designed to help users track their income and expenses, manage budgets, and achieve their financial goals. The application provides a simple and intuitive way for users to monitor their spending habits, categorize transactions, and make data-driven financial decisions. SmartBudget will incorporate essential budgeting features such as expense tracking, budget allocation, financial goal setting, and automated savings suggestions. By leveraging a CRUD (Create, Read, Update, Delete) application structure, users will have the flexibility to manage their financial data seamlessly.

The application will also integrate Open Banking APIs to securely connect with users' bank accounts, ensuring real-time transaction tracking and categorization. With a user-friendly interface and insightful analytics, SmartBudget will empower individuals to take control of their finances, eliminate unnecessary expenses, and work towards financial stability.

Purpose:

Helping Users Manage Their Finances Efficiently

The primary purpose of SmartBudget is to assist users in tracking expenses, maintaining budgets, and achieving financial discipline.

Financial management is often a challenge, especially for young professionals and students who struggle with irregular income, unexpected expenses, and the need to save for future goals. Many individuals fail to track their spending effectively, leading to unnecessary financial stress and poor money management habits.

SmartBudget aims to simplify personal finance by providing a structured and automated system for managing income and expenses.

Target Users:

Young Professionals and Students

The main target audience for SmartBudget consists of young professionals and students who need a structured and easy-to-use financial management tool.

1. Young Professionals (Age 22-35)

- Often earn irregular income, especially freelancers and self-employed individuals.
- Need to track business vs. personal expenses.

- Require tax estimations and financial planning tools.
- Want a budgeting app that adapts to fluctuating income.

2. Students (Age 18-25)

- Manage limited funds, often relying on part-time jobs or student loans.
- Need to track daily expenses and prevent overspending.
- Want to save for tuition, books, and personal goals.
- Prefer a simple and mobile-friendly budgeting solution.

2. Key Business Questions:

- How can users effectively track and categorize their spending?
- How can we help users set and maintain realistic budgets?
- How can we provide meaningful insights into spending patterns?
- How can we encourage better saving habits?

3. Initial Tasks Link:

<https://eportfolios.roehampton.ac.uk/tanzeemm/2025/02/14/smart-budget-application/>

4. Code of Conduct:

Team Values:

- Respect: Treat all team members with respect and dignity
- Communication: Keep team updated through daily standups and Discord
- Reliability: Meet deadlines and communicate early if issues arise

Meeting Guidelines:

- Attend all scheduled team meetings (Mon/Wed/Fri)
- Inform team 24 hours before if unable to attend
- Be prepared and on time
- Actively participate in discussions

Work Standards:

- Follow agreed coding standards
- Comment code appropriately
- Review pulls requests within 24 hours
- Keep task board updated daily
- If a member is unable to attend, they should notify the group at least 12 hours in advance

Conflict Resolution:

- Address issues directly with team member
- If unresolved, discuss in team meeting
- If still unresolved, consult module leader
- Document all conflict resolution attempts

Consequences:


- First violation: Verbal warning
- Second violation: Written warning
- Third violation: Meeting with module leader
- Continued violations: May result in team dismissal

5. GitHub Repository Link:


<https://github.com/Mdtanzeem702/Smart-Budget-App>

6. Two Initial Personas:

Persona 1:

	<p>Description Name: Data Analyst Demographic:</p> <ul style="list-style-type: none">• Age: 22• Occupation: Data Analyst
<p>Goals</p> <ul style="list-style-type: none">• Manage irregular income• Track business vs personal expenses• Plan for tax payments <p>Frustrations</p> <ul style="list-style-type: none">• Irregular income makes budgeting difficult• Needs to separate personal and business expenses• Wants better income forecasting <p>Wishes</p> <ul style="list-style-type: none">• A budgeting tool that adapts to fluctuating income• A clear distinction between personal and business transactions• Automated tax estimations based on earnings	<p>Scenario</p> <p>Tanzeem receives payments from different clients at unpredictable intervals, making it challenging to maintain a steady budget. He often forgets to set aside money for taxes, which creates financial stress during tax season.</p> <p>Using Smart Budget, Tanzeem categorizes income sources and separates business-related expenses. The app provides a tax estimate based on his earnings, helping him allocate funds accordingly.</p> <p>By the end of the quarter, Tanzeem has a clear overview of his financial health, making tax filing much easier and stress-free.</p>

Persona 2:

	<p>Description Name: Emily Carter Demographic:</p> <ul style="list-style-type: none"> • Age: 21 • Undergraduate Student (Business Management)
<p>Goals</p> <ul style="list-style-type: none"> • Track daily expenses to avoid overspending • Budget monthly allowance efficiently • Save for a summer trip while managing student loans <p>Frustrations</p> <ul style="list-style-type: none"> • Impulse spending and difficulty tracking cash transactions • Manual expense tracking is time-consuming • Lack of clear insights into spending habits <p>Wishes</p> <ul style="list-style-type: none"> • A mobile-friendly budgeting tool for quick tracking • Automated categorization of transactions • Savings goal tracker to set aside money for future plans 	<p>Scenario: Emily receives her student loan payment at the beginning of the semester but struggles to make it last. She often loses track of small expenses like coffee, dining out, and transport, leading to financial stress towards the end of the month. Using SmartBudget, Emily syncs her bank account to categorize expenses automatically. The app notifies her when she's nearing her spending limit and helps her set realistic savings goals for her summer trip. By the end of the semester, Emily has successfully stayed within her budget, saved money, and developed better financial habits.</p>