

Task 3A : Sprints

Sprint 1: User Account Management and Authentication

Objective: This feature aims to establish core user management functionalities, including account registration, login, password recovery, and language settings.

Sprint Details: Develop core user management features such as account registration, login, password recovery, and support for language settings. This sprint focuses on creating a robust user authentication system, ensuring that all users can access their accounts securely, and allowing them to change the interface language.

- **Account Registration or Login:** Users can create or log into their accounts.
- **Password Recovery:** Users can recover their passwords securely.
- **Language Settings:** Users can change the interface language.

Duration: 2 weeks

Sprint 2: Core Expense Management Features

Objective: Implement core functionalities for tracking expenses, setting budgets, and managing daily expenditure limits.

Sprint Details: Develop input forms for recording expenses, allow users to set budgets, and notify them if daily limits are exceeded.

- **Expense Tracking:** Users can track their expenses.
- **Budget Setting:** Users can set their budgets.
- **Daily Expenditure Limits:** Users can manage and get notified about their daily expenditure limits.

Duration: 2 weeks

Sprint 3: Financial Insights and History

Objective: Develop features that provide users with insights into their financial activities.

Sprint Details: Includes viewing expense history, setting reminders for expenses, and generating financial reports.

- **Expense History:** Users can view their expense history.
- **Expense Reminders:** Users can set reminders for expenses.
- **Financial Reporting:** Users can generate financial reports.

Duration: 2 weeks

Sprint 4: Advanced Financial Management

Objective: Add advanced financial management features.

Sprint Details: Includes emergency fund setup, support for multiple currencies, and dynamic budget adjustments.

- **Emergency Funds Management:** Users can manage their emergency funds.
- **Currency Preference:** Users can set their currency preferences.
- **Dynamic Budget Adjustment:** Users can adjust budgets dynamically based on spending behavior.

Duration: 2 weeks

Sprint 5: Invoicing and Payment Features

Objective: Develop features related to invoice generation, tracking invoice payments, and basic project management tools.

Sprint Details: Includes invoice generation, tracking payments, and managing tasks and expenses related to specific projects.

- **Invoice Generation:** Users can generate invoices.
- **Invoice Payment Tracking:** Users can track invoice payments.
- **Project Management:** Users can manage tasks and expenses related to projects.

Duration: 2 weeks

Sprint 6: User and System Administration

Objective: Focus on administration and system management tasks.

Sprint Details: Includes user account management, handling system updates, resolving user issues, and managing user feedback.

- **User Account Management:** Admins can manage user accounts.
- **System Updates:** Admins can handle system updates.
- **User Issue Resolution:** Admins can resolve user issues.
- **System Feedback Management:** Admins can manage user feedback.

Duration: 2 weeks

Sprint 7: Data Security and Enforcement

Objective: Ensure data security enforcement, manage advertisement campaigns, and develop features for demographic targeting.

Sprint Details: Focuses on data security, managing ad campaigns, and demographic targeting.

- **Data Security Enforcement:** Ensure data security measures are enforced.
- **Ad Campaign Management:** Manage advertisement campaigns.
- **Demographic Targeting:** Develop features for demographic targeting.

Duration: 2 weeks

Sprint 8: Advertisement Management and Performance

Objective: Develop features that allow users to monitor the performance of ad campaigns.

Sprint Details: Includes generating reports and analytics for ad performance.

- **Ad Performance Monitoring:** Users can monitor and analyze the performance of ad campaigns.

Duration: 1 week

Task 3B : Functional Point estimation

Complexity Factor

Complexity Factor	Rating (0-5)
Backup and Recovery	3
Data Communication	3
Distributed Processing Functions	3
Is Performance Critical?	4
Existing Operating Environment	3
On-Line Data Entry	3
Input Transaction Bit Over Multiple Screens	2
Master Files Updated On-Line	4
Complexity of Inputs, Outputs, Files, Inquiries	4
Complexity of Processing	4
Code Design for Re-use	3
Are Conversions/Installation Included in Design?	1
Multiple Installations	2
Application Designed to Facilitate Change by the User	3
ΣFi	42

Adjusted FP : $0.65 + (\Sigma Fi / 100)$,

Where ΣFi = Sum of each characteristics mentioned above

Therefore, AFPC = UFPC * $(0.65 + \Sigma Fi/100)$

FP calculated for each of the sprints as mentioned

Sprint 1: User Account Management and Authentication

Functionality	Type	Complexity	FP
Account Registration	External Input (EI)	Low	3
Account Login	External Input (EI)	Low	3
Password Recovery	External Inquiry (EQ)	Average	4
Language Settings	External Input (EI)	Low	3
Unadjusted Functional Points (UFPC)			13
Adjusted Functional Points (AFPC)	$13 * \{0.65 + (42/100)\} = 18.91$		

Sprint 2: Core Expense Management Features

Functionality	Type	Complexity	FP
Expense Tracking	External Input (EI)	Average	4
Budget Setting	External Input (EI)	Average	4
Daily Expenditure Limits	External Inquiry (EQ)	Average	4
Unadjusted Functional Points (UFPC)			12
Adjusted Functional Points (AFPC)	$12 * \{0.65 + (42/100)\} = 17.16$		

Sprint 3: Financial Insights and History

Functionality	Type	Complexity	FP
Expense History	External Inquiry (EQ)	Low	3
Expense Reminders	External Output (EO)	Low	3
Financial Reporting	External Output (EO)	Average	4
Unadjusted Functional Points (UFPC)			10
Adjusted Functional Points (AFPC)	$10 * \{0.65 + (42/100)\} = 15.10$		

Sprint 4: Advanced Financial Management

Functionality	Type	Complexity	FP
Emergency Funds Management	External Input (EI)	Average	4
Currency Preference	External Input (EI)	Average	4
Dynamic Budget Adjustment	External Inquiry (EQ)	Average	4
Unadjusted Functional Points (UFPC)			12
Adjusted Functional Points (AFPC)	$12 * \{0.65 + (42/100)\} = 17.16$		

Sprint 5: Invoicing and Payment Features

Functionality	Type	Complexity	FP
Invoice Generation	External Input (EI)	Low	3
Invoice Payment Tracking	External Inquiry (EQ)	Low	3
Project Management	External Input (EI)	Low	3
Unadjusted Functional Points (UFPC)			9
Adjusted Functional Points (AFPC)	$9 * \{0.65 + (42/100)\} = 13.77$		

Sprint 6: User and System Administration

Functionality	Type	Complexity	FP
User Account Management	External Input (EI)	Low	3
System Updates	External Inquiry (EQ)	Low	3
User Issue Resolution	External Inquiry (EQ)	Average	4
System Feedback Management	External Output (EO)	Low	3
Unadjusted Functional Points (UFPC)			13
Adjusted Functional Points (AFPC)	$13 * \{0.65 + (42/100)\} = 18.91$		

Sprint 7: Data Security and Enforcement

Functionality	Type	Complexity	FP
Data Security Enforcement	External Input (EI)	Average	4
Ad Campaign Management	External Input (EI)	Average	4
Demographic Targeting	External Inquiry (EQ)	Average	4
Unadjusted Functional Points (UFPC)			12
Adjusted Functional Points (AFPC)	$12 * \{0.65 + (42/100)\} = 17.16$		

Sprint 8: Advertisement Management and Performance

Functionality	Type	Complexity	FP
Ad Performance Monitoring	External Inquiry (EQ)	Low	3
Unadjusted Functional Points (UFPC)			3
Adjusted Functional Points (AFPC)	$3 * \{0.65 + (42/100)\} = 4.29$		