



Project Proposal

University Student Financial Management System

Group BG

COURSE

System Analysis and Design

SUBMISSION DATE

6/28/2024

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Introduction

1. Background

Managing budget is a vital thing of university existence for college students. Many students struggle with budgeting, tracking prices, and handling their economic useful resource. A financial management system tailored to university students can assist alleviate these challenges by way of supplying gear for budgeting, price monitoring, and monetary making plans.

2. Problem Statement

University students often lack effective tools to manage their finances, leading to overspending, under-investing, and financial stress. Comprehensive financial planning that addresses these issues and helps students develop good financial habits is needed.

3. Objectives

Develop a user-friendly financial management system for university students. Enable students to track their income, expenses, and savings.

Provide budgeting tools to help students plan their finances.

Ensure data security and privacy for all users.

4.Scope

The system will cover income and expense tracking, budgeting, and financial aid management. It will not include advanced financial planning tools or integration with external banking systems. The project will be completed within 40 days using C# Windows Forms in Visual Studio and MySQL database.



Literature Review

1.Relevant Research

Existing research suggests that financial management tools can significantly improve financial literacy and outcomes for university students. Studies have shown that budgeting apps and spending trackers can help students better track spending and make better financial decisions.

2.Gap Analysis

Most existing programs have not been tailored to the specific needs of university students in Sri Lanka. They often lack the resources to handle financial aid, which is critical for this population. Our project aims to fill this gap by providing solutions designed with university students in mind.



Requirements Gathering

1. Stakeholders

University students
Parents
Project Development Team

2. Data Collection Methods

Interviewing students to understand their budget needs
A survey to gather information on common financial challenges faced by students
Evaluating existing budgets among students
Specification of Requirements

3. Functional Requirements:

User registration and login
Income and expense tracking
Budget creation and monitoring
Financial aid management
Reports and analytics

4.Non-Functional Requirements:

Security: Ensure data privacy and protection

Usability: User-friendly interface

Performance: Efficient data processing

Feasibility Study

1.Possible technological advantages

Technologies: Visual Studio, C# Windows Forms, .NET Framework

Skills : The team has experience in C# and Windows Forms development

2.Operational efficiency

Aligns with university goals to promote student well-being Minimal disruption to existing university systems

3.Economic feasibility

Low development costs using existing software and tools Potential for cost savings through improved budgeting by students

Assumption

- 1500 students subscribing at LKR 500 per year.
- Monthly salary per developer : LKR 500 000.
- Project completion within 42 days (6 weeks) .

Total Costs

- Hardware : LKR 50 000
- Infrastructure : LKR 10 000
- Maintenance : LKR 20 000
- Training : LKR 5000
- Miscellaneous : LKR 15 000
- Monthly Salary Per Developer (7 developers) :
 $\text{LKR } 50\,000 \times 7 = \text{LKR } 350\,000$ (assuming for 6 weeks)
- Total Costs : $50\,000 + 10\,000 + 20\,000 + 5\,000 + 15\,000 + 350\,000 = \text{LKR } 450\,000$

Annual Benefits

- Subscription Fees : $\text{LKR } 750\,000$ ($\text{LKR } 500 / \text{Students} \times 1500$ students)

Total Annual Benefits

- Total Annual Benefits : LKR 750 000

ROI

- ROI :
$$\begin{aligned} & ((750\,000 - 450\,000) / 450\,000) * 100 \\ &= (300\,000 / 450\,000) * 100 \\ &= 66.67\% \end{aligned}$$

Playback Period

- Playback Period : $(450\,000 / 750\,000)$ -> 6 years -> 7.2 months

4.A feasible arrangement

The original project timeline calls for completion in 42 days



Proposed Solution

1. System Design

Architecture: Client-server architecture with a local database

Components: User interface, database, business logic layer

2. Tools and Technologies

- Visual Studio
- C# Windows Forms
- .NET Framework
- SQL Server for database

3. Implementation Plan

Phase 1: Requirements analysis and design

Phase 2: Development: Core Feature 1

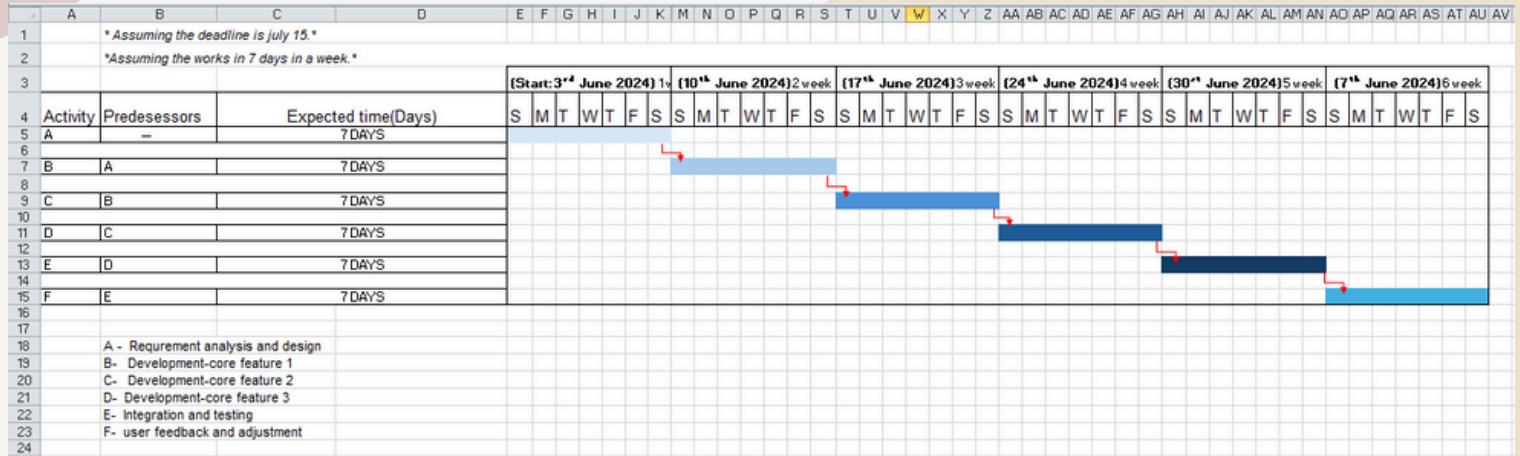
Phase 3: Development: Core Feature 2

Phase 4: Development: Core Feature 3 (and so on)

Phase 5: Integration & Testing Phase 6: User Feedback & Adjustments



Project Plan



1.Milestones

- Completion of requirements analysis
- Core feature development
- System testing
- Final deployment and maintenance

2.Resource Allocation

- Team members: 6 developers, 1 project manager
- Budget: Minimal, utilizing existing tools and resources
- Time: 42 days

Conclusion

Summary

This project proposal outlines how to develop a university student financial plan to help students better manage their finances. The system will include features related to revenue and expense tracking, budgeting, and sponsorship management, and will be created using C# Windows Forms in Visual Studio

Future Work

Integration with external banking systems, advanced financial planning tools, and mobile application development.



References

Palliyage, N. and Padmakanthi, D. (2022). An Analysis of Financial Knowledge of the Students in the Faculty of Social Sciences and the Faculty of Arts of the State Universities in Sri Lanka. Vavuniya Journal of Business Management Faculty of Business Studies, [online] 5. Available at: <https://fbs.vau.ac.lk/jbm/wp-content/uploads/2023/09/6.-An-Analysis-of-Financial-Knowledge-of-the-Students-thein-the-Faculty-of-Social-Sciences.pdf>.



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