

Project Proposal: Bank Management System with GUI

Project Title:

Bank Management System with Graphical User Interface

Group Members:

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1. Introduction

The goal of this project is to develop a desktop-based **Bank Management System (BMS)** with an intuitive **Graphical User Interface** using **C++ and Qt Framework**. This system will allow basic banking operations like creating accounts, managing customer information, deposits, withdrawals, and balance inquiries.

2. Problem Statement

Manual bank record management is inefficient, error-prone, and insecure. There is a need for a desktop application that securely handles bank operations and provides a user-friendly experience to the bank staff.

3. Objectives

- Design and develop a desktop GUI using Qt.
- Implement object-oriented principles in managing accounts and transactions.

- Provide core functionalities:
 - Add/Edit/Delete Accounts
 - View Account Details
 - Deposit & Withdraw Funds
 - Search and Filter Accounts
 - Ensure data persistence using files or a lightweight database.
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4. Tools & Technologies

- **Programming Language:** C++
 - **Framework:** Qt (for GUI)
 - **IDE:** Qt Creator / Visual Studio
 - **Version Control:** Git (optional)
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5. Methodology

- **Phase 1: Requirement Gathering & Planning**
 - **Phase 2: GUI Design & Class Structure (OOP)**
 - **Phase 3: Backend Logic Implementation**
 - **Phase 4: Integration & Testing**
 - **Phase 5: Finalization & Documentation**
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6. Expected Outcomes

- A fully functional desktop application for bank account management.
 - A user-friendly GUI with all essential banking operations.
 - Source code demonstrating object-oriented programming concepts.
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7. Deliverables

- Source code (.cpp, .h, .ui files)
- Project Report
- User Manual
- Presentation Slides