

Industrial Internship Report on Banking Information System

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Executive Summary

This report details the internship conducted through Upskill Campus and The IoT Academy in partnership with UniConverge Technologies Pvt Ltd (UCT). The project titled *Banking Information System* involved developing a simple banking application in Java to simulate core banking operations such as deposit, withdrawal, and account information display. The internship spanned six weeks, providing me valuable industry exposure and hands-on programming experience. This practical work enhanced my understanding of Java programming, object-oriented concepts, and software development lifecycle.

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Preface

This report summarizes my 6-week internship at UniConverge Technologies Pvt Ltd, facilitated by Upskill Campus. The internship was an opportunity to apply academic knowledge in a real-world industrial project. The project was developing a Banking Information System in Java to understand basic banking operations and software development practices. The program was well-structured with mentoring support. I thank all those who helped me complete this internship successfully.

Introduction

UniConverge Technologies Pvt Ltd (UCT) is a digital transformation company founded in 2013 specializing in industrial solutions leveraging IoT, cloud computing, machine learning, and communication technologies. Upskill Campus is a career development platform that facilitates internships and skill development in collaboration with industry partners like UCT.

This internship aimed to provide practical industry experience, improve job readiness, and enhance technical and communication skills through real project work.

Problem Statement

Banking is a fundamental service requiring efficient and reliable systems to manage customer accounts and transactions. The challenge was to develop a basic banking system capable of simulating deposit, withdrawal, and displaying account details to provide a foundational understanding of banking software operations.

Existing and Proposed solution

Existing banking systems are complex and enterprise-level, requiring robust infrastructure. This project proposes a simplified Java-based solution focusing on core banking functions suitable for educational and small-scale use. The proposed system improves understanding by implementing object-oriented principles and encapsulating banking logic within classes.

Proposed Design/ Model

The design uses a class BankingInformationSystem encapsulating account holder details, account number, and balance. Methods for deposit, withdrawal, and displaying account info handle user transactions. The system ensures validation for deposit and withdrawal operations.

High Level Diagram:

[Insert high level class diagram here]

Performance Test

Performance testing focused on validating transaction correctness and error handling. Test cases included valid deposits, withdrawals within balance limits, and handling invalid transactions.

Test Plan/Test Cases:

- Deposit positive amount
- Withdraw valid amount
- Withdraw more than balance
- Deposit negative amount

Test Procedure:

Manual testing of operations by running main program and verifying console outputs.

Performance Outcome:

The system correctly handled valid transactions and appropriately rejected invalid operations

My learnings

This internship enhanced my Java programming skills, deepened understanding of object-oriented design, and gave exposure to practical software development workflows. I improved problem-solving abilities and learned the importance of validating user inputs and handling errors gracefully.

Future work scope

Future improvements can include adding a graphical user interface, integrating persistent database storage, supporting multiple accounts, and enhancing security features.

GitHub links

Code submission (GitHub link):

<https://github.com/Idrish-9912/upskillcampus/blob/main/BankingInformationSystem.java>

Report submission (GitHub link):

https://github.com/Idrish-9912/upskillcampus/blob/main/BankingInformationSystem_IdrishShaik_USC_UCT.pdf