M S RAMAIAH INSTITUTE OF TECHNOLOGY

(Autonomous Institute Affiliated to VTU)

Department of Information Science and Engineering

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Topic:

"Banking Application"

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Java & J2EE

IS63

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ABSTRACT

The Bank Account Management System is an application for maintaining a person's account in a bank. In this project, we have tried to show the working of a banking system and cover the basic functionalities of them. We aim to develop a project for solving financial applications of a customer in the banking environment in order to support the needs of an end banking user by providing various ways to perform banking tasks. This project has been developed to carry out the processes easily and quickly, which is usually difficult with the manuals systems. Creating and managing requirements is a challenge, organizations need to effectively define and manage requirements to ensure they are meeting the needs of the customer while proving compliance and staying on the schedule and within budget. Requirements definition and management is an activity that can deliver a high, fast return on investment. The project analyzes the system requirements and then comes up with the requirements specifications. It studies other related systems and then comes up with system specifications. The system is then designed in accordance with specifications to satisfy the requirements. The system is designed as an interactive and content management system. Features of this project will save transaction time and therefore increase the efficiency of the system.

The idea is to give the customer a user-friendly GUI, which can be used to login to his account. Transactions like deposit, withdraw, inter-account deposit, checking the bank balance, can then be performed. This will enable the customer to remotely handle his account state and cut off the need to manually visit a branch for such works.

The project is scalable with MySQL database and performs as per the higher standards. Error handling has been done wherever required.

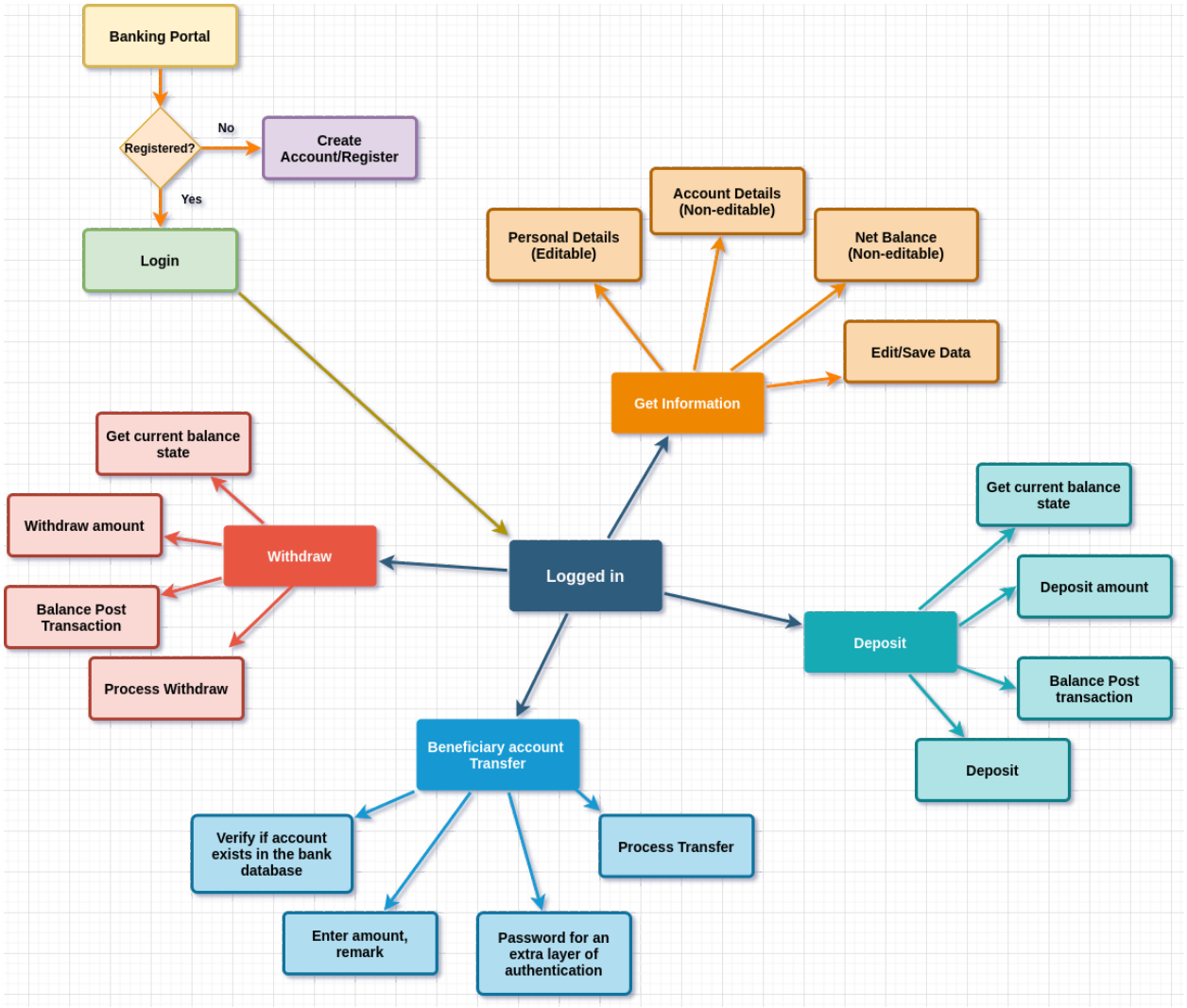
INTRODUCTION

Online banking is also called electronic banking, internet banking, electronic transfer fund and home banking. This banking management system project is a model of an internet banking site. This application enables the customer to perform the basic banking transactions by sitting in their office or at home through their personal devices. The customer can access the bank database for getting information about their account details and perform the transactions on account as per their requirements. With this application system, the element and structure of traditional banking gets converted into a **Click and Portal** model, thereby giving a concept of virtual banking a real shape. Today's banking is no longer confined to branches. E-Banking facilitates banking transactions by customers round-the-clock globally. The primary aim of the project is to provide an improved design methodology, which contemplates the future expansion and modification which is necessary for core sectors like banking.

The project is meant to overcome the drawback of the manual system. The project has been developed using the most powerful and secure backend - **MySQL** and the most widely accepted web-oriented as well as an application-oriented programming language - **Java**. It is a system based on a flexible, client-server technology which is scalable enough to meet the current needs. It has a centralised, customer-centric design and offers a complete set of integral retail banking modules sharing a user-friendly interface.

The application is built using a famous Java GUI widget toolkit called **Swing** which serves as a backbone to various softwares existing round the globe like Eclipse, various code editors and IDE's. The toolkit enables the user to use various UI components like fields, panels, buttons, boxes etc. Also, we have used **Apache Tomcat Server** for server operations and **Xampp** which binds the software to run on a localhost server port and provides an interface in the form of **phpMyAdmin** which makes the database visualisation really user-friendly and easy to use. Finally, we have used **NetBeans IDE 8.2** for building, executing and testing our project.

Workflow Diagram



Explanation:

The user will first get redirected to the home page which has login/register options. If the user doesn't have an account, then a new registration can be done after clicking the registration button and filling the form asking for relevant details. Once registration is done, the user can login.

Login provides the following options:

- Check balance and account details
- Withdraw/Deposit money to the same account
- Deposit money from current account to a beneficiary account
- Basic functionalities like changing username/password

CONCLUSION

We managed to develop a swing application on a banking system which has MySQL database connectivity. The user can create an account, and then log in after which the application serves as a net banking online portal. Users can check their details, deposit money, withdraw money and even transfer money to beneficiary accounts.

Note: All accounts registered in the database are considered as beneficiary. In future, we also aim to enable an option to add a beneficiary if not present already.

Basic functionalities like changing username and password are added which would ensure that the login details can always be revised from time to time and thus help maintain security.

Also, operations like adding to a beneficiary account are sensitive operations as a person can steal data to his/her bank account with a click. Thus, an extra layer of authentication in the form of re-submitting the password is added.

Thus, we finally achieved to pull out this project in a short span of time as a team, and in turn, gained a lot of exposure and experience as to how the Java Swing framework functions and got an insight to how such popular applications like Eclipse, GUI Packages, Code editors, etc are built at a large scale by the developers.

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