Abdullah Khan, Tasnim Ferdous, Danish Syed, Abhishek Sharma

Software Engineering – 325

Dr. Aydin

02/15/2024

Project Initial Submission – Team 4

1. **JavaFX Bank Account Application**

The JavaFX Bank Account Application is a group project aimed at creating a simple desktop application that allows users to manage a personal bank account. The application will consist of a graphical user interface built using the JavaFX framework that enables users to create an account, log in securely, view their account balance and transaction history, deposit and withdraw hypothetical funds, and access features typical of a basic banking app. By developing the application using Java and JavaFX, we aim to gain experience building a functional desktop program utilizing common GUI controls, data persistence, and object-oriented concepts. The project will allow us to demonstrate core programming skills as well as deliver a working application that simulates basic personal banking features in a secure, easy-to-use interface. Though no real financial transactions will occur, the application will provide the foundation for future banking projects using JavaFX, SceneBuilder and other related technologies.

**WRSPM Analysis of the Chosen Problem:**

**World Assumptions:**

* Users have access to devices with JavaFX capabilities (desktops, laptops, etc.).
* Users are familiar with basic banking concepts like accounts, deposits, withdrawals, balances, etc.
* Users want a simple application to manage a personal bank account.
* Real monetary transactions will not take place - this is for demo purposes.

**User Requirements:**

* Ability to create a user account with login credentials.
* Secure authentication and authorization for account access.
* Interface to view account balance and transaction history.
* Features to deposit and withdraw hypothetical funds.
* Easy to use and intuitive interface design.

**Specifications and Interface Needs:**

* Login page for entering credentials.
* Dashboard page showing account overview.
* Forms for depositing and withdrawing funds.
* Table showing transaction history.
* Use JavaFX UI controls like buttons, text fields, labels, etc.
* Data persistence using files or database.

**Program and Hardware:**

* Java SDK and JavaFX framework.
* Scene Builder to design UI layout.
* Database like JDBC or NoSQL for data storage.
* Sufficient RAM and storage for JavaFX application.
* Hosting the application on Firebase with sufficient resources.

1. All group members have been added as collaborators on the attached repo:  
   <https://github.com/abdkhan-git/swe-325-proposal>
2. Our group has decided to meet virtually every Monday at 4:00 pm via Discord. Our back-up day will be Fridays at 4:00 pm also on Discord.