

# OBJECT ORIENTED ANALYSIS & DESIGN WITH JAVA

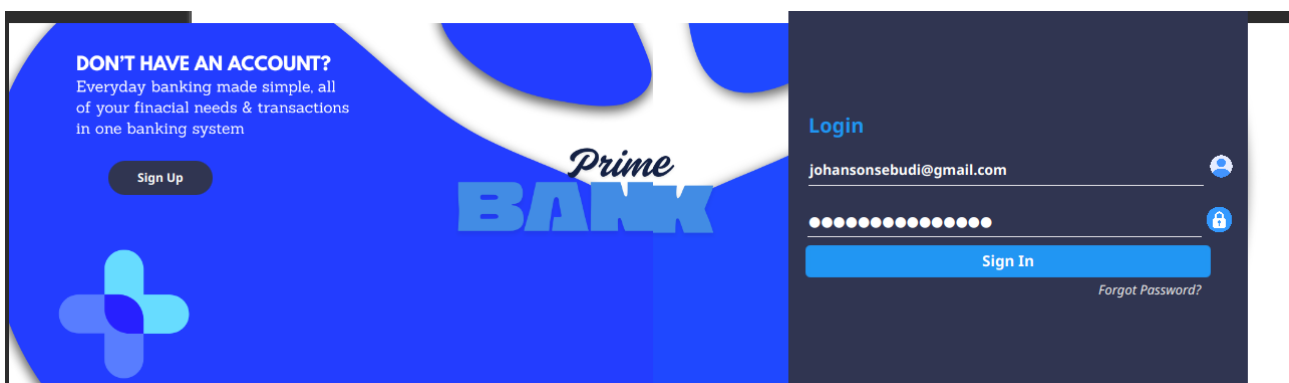
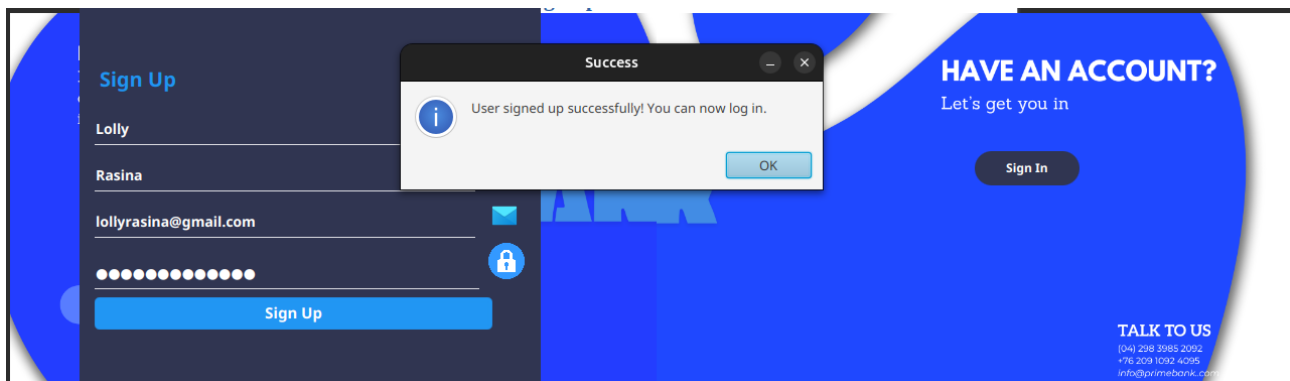
## Module Integration & Testing Report

### Boundary (GUI)

Main1.fxml

SignIn.fxml

SignUp.fxml



## Reset Password

Enter your email and new password below.

---

New Password

---

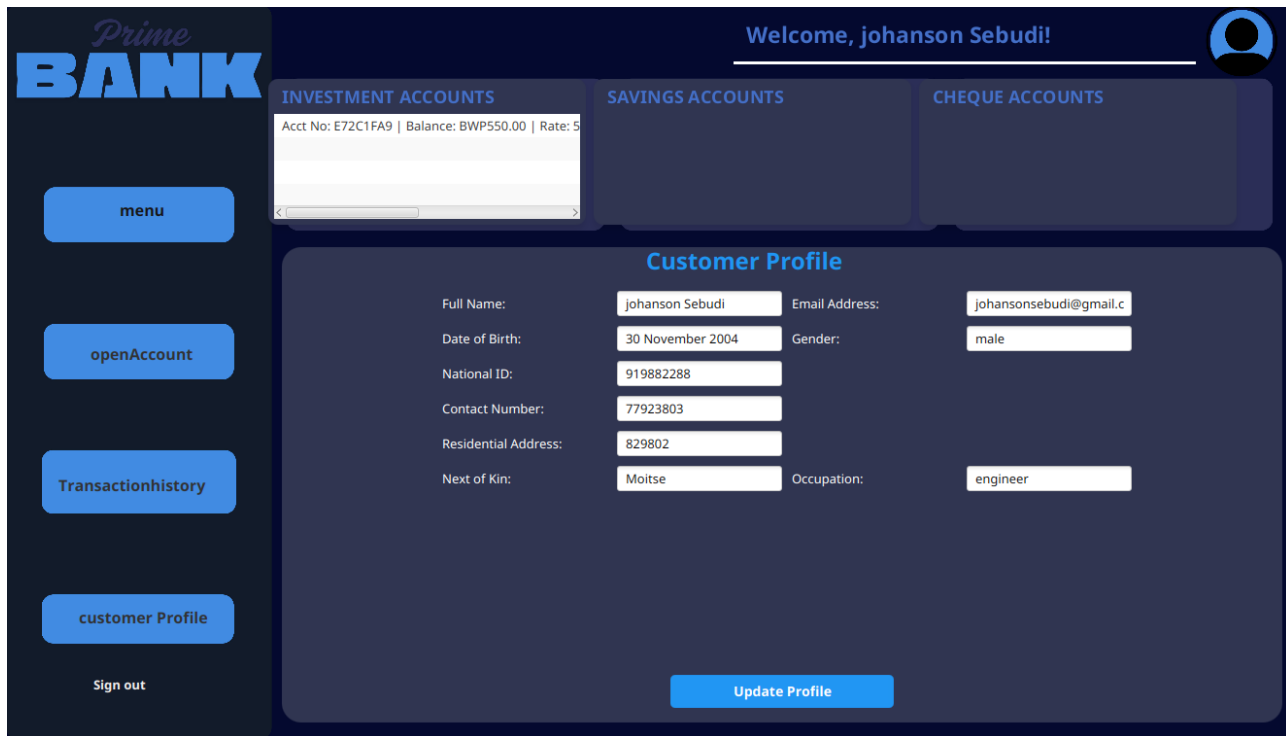
Confirm New Password

---

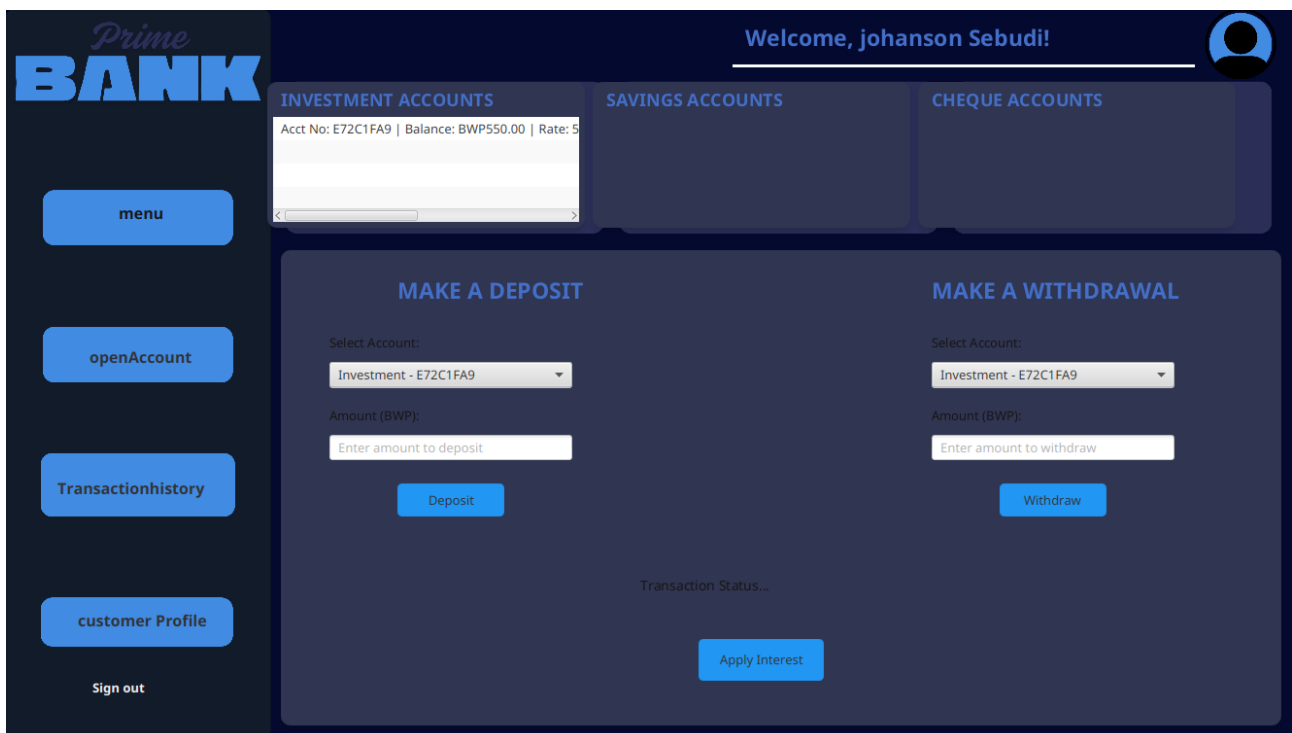
Reset Password

[← Back to Login](#)

Dashboard.fxml, DashboardDetails.fxml, OpenAccount.fxml,  
CustomerProfile.fxml, TransactionHistory.fxml, ForgotPassword.fxml



The image shows a web application interface for Prime BANK. The header features the bank's logo on the left and a welcome message "Welcome, johanson Sebudi!" on the right, accompanied by a user profile icon. A left sidebar contains navigation buttons: "menu", "openAccount", "Transactionhistory", "customer Profile", and "Sign out". The main content area is divided into three sections: "INVESTMENT ACCOUNTS" (displaying account details like "Acct No: E72C1FA9 | Balance: BWP550.00 | Rate: 5"), "SAVINGS ACCOUNTS", and "CHEQUE ACCOUNTS". Below these is a "Customer Profile" section with a form containing fields for Full Name, Date of Birth, National ID, Contact Number, Residential Address, Next of Kin, Email Address, Gender, and Occupation. An "Update Profile" button is located at the bottom of this section.



This image displays the transaction section of the Prime BANK web application. It maintains the same header and sidebar as the previous view. The main content area is split into two columns: "MAKE A DEPOSIT" and "MAKE A WITHDRAWAL". Each column contains a "Select Account:" dropdown menu (currently showing "Investment - E72C1FA9"), an "Amount (BWP):" input field with placeholder text, and a corresponding action button ("Deposit" or "Withdraw"). Below these columns is a "Transaction Status..." section with an "Apply Interest" button.

All loaded via FXMLLoader and animated with MainController

**ControllerLoginController, SignUpController, DashboardController,  
DashboardDetailsController, CustomerProfileController, OpenAccountController,  
TransactionController, ForgotPasswordControllerAll**

**@FXML injected, event handlers working, data passed correctlyCore**

**ModelUser, Customer (abstract), IndividualCustomer, CompanyCustomer, Account  
(abstract), SavingsAccount, ChequeAccount, InvestmentAccount, Transaction, Withdrawal  
interface, InterestCalculation interfaceFull inheritance, polymorphism, composition**

**Data Access (JDBC)DBConnection (users.db), CustomerDBConnection (customer.db),  
UserDAO + Impl, CustomerDAO + Impl, AccountDAO + ImplTables auto-created, CRUD  
operations functional, transactions recorded**

**Cross-database linkin is achieved: after login, CustomerDAO.findByUserId(user.getId())  
correctly loads the customer profile from customer.db.**

**wo separate SQLite databases (users.db and customer.db) are correctly linked via user\_id,  
secure password hashing is in place, and every OOP principle has been applied.**