



# JAVAC BANKING SYSTEM

The javac Banking system, developed in Java, serves to provide a secure and efficient platform for managing financial transactions and account operations. Its main purposes include:

- 1.Account Management: Facilitating the creation, modification, and deletion of user accounts securely.
2. Transaction Handling: Enabling users to perform essential banking operations such as deposits, withdrawals, and money transfers between accounts.
3. Security: Implementing robust authentication mechanisms to ensure user privacy and prevent unauthorized access.
4. Administration: Supporting administrative functionalities like monitoring transactions, managing user accounts, and ensuring the overall system integrity.
5. User-Friendly Interface: Providing a user-friendly interface that allows customers to easily navigate through banking services.

6. Reliability and Scalability: Designing the system to be reliable under heavy loads and scalable to accommodate future growth and additional features.

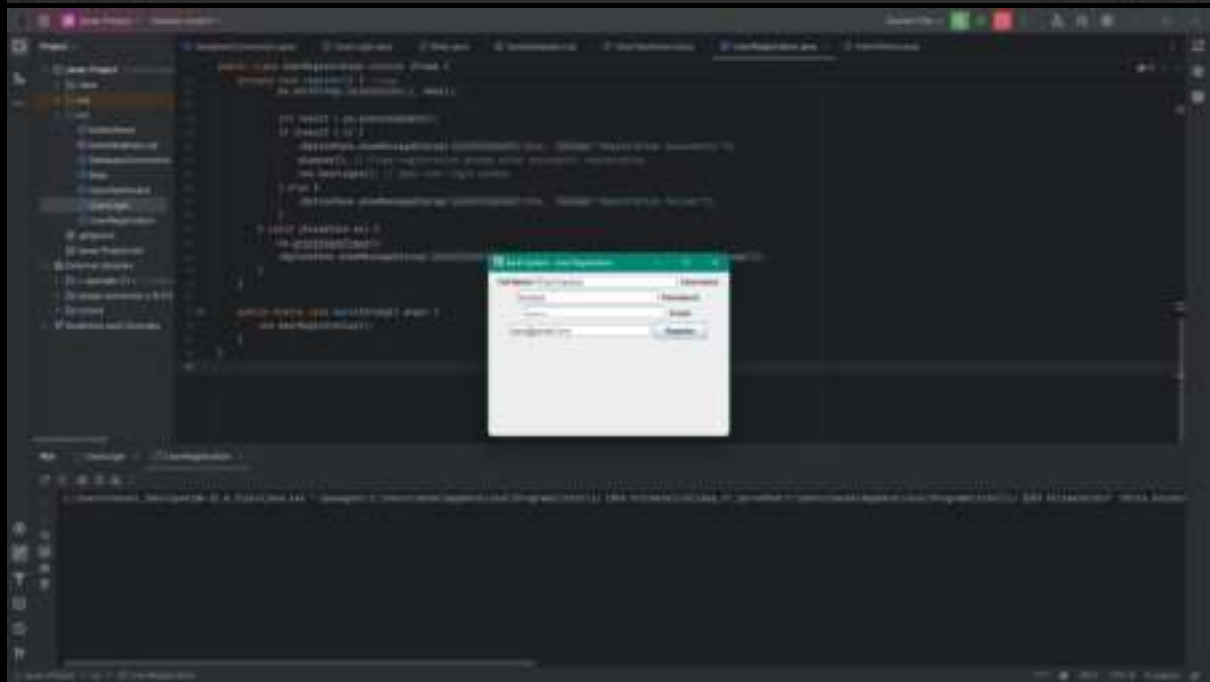
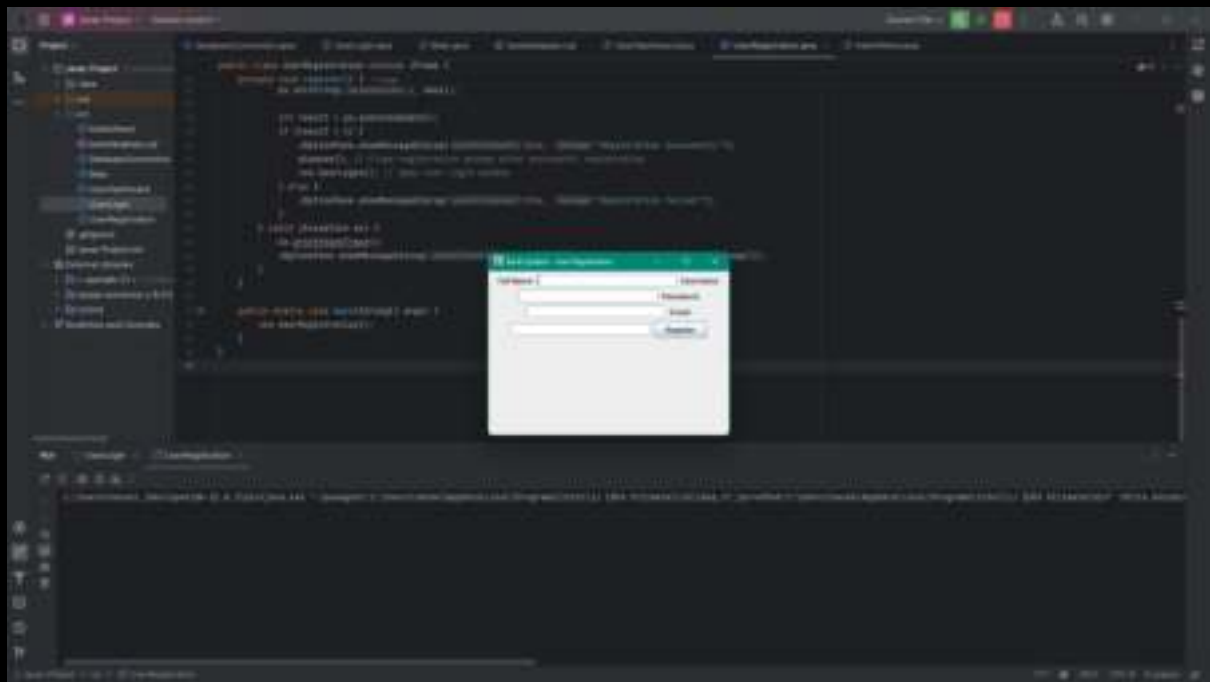
Overall, the javac Banking system aims to enhance the banking experience by leveraging Java's capabilities to deliver a secure, efficient, and user-friendly platform for both customers and administrators.

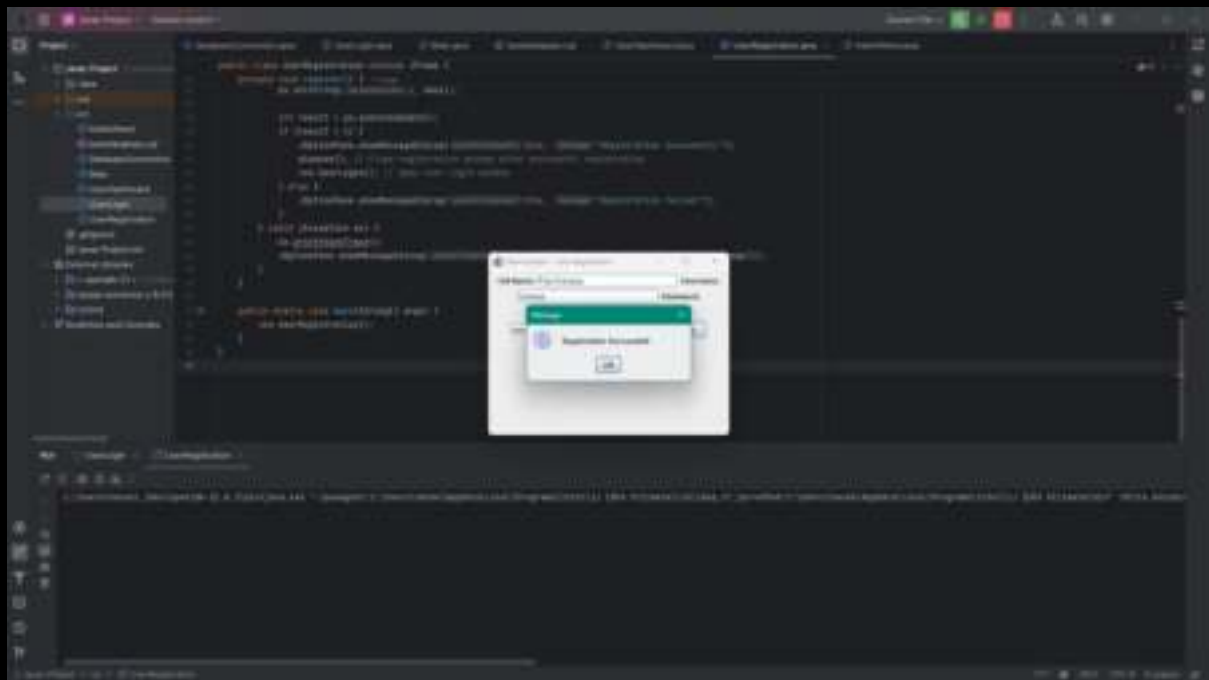
## Project Overview

### 1.The User Registration Interface

User registration involves capturing user details such as full name, username, password, and possibly additional information like email and contact details. These details are typically validated and stored securely in a database to ensure data integrity and confidentiality.

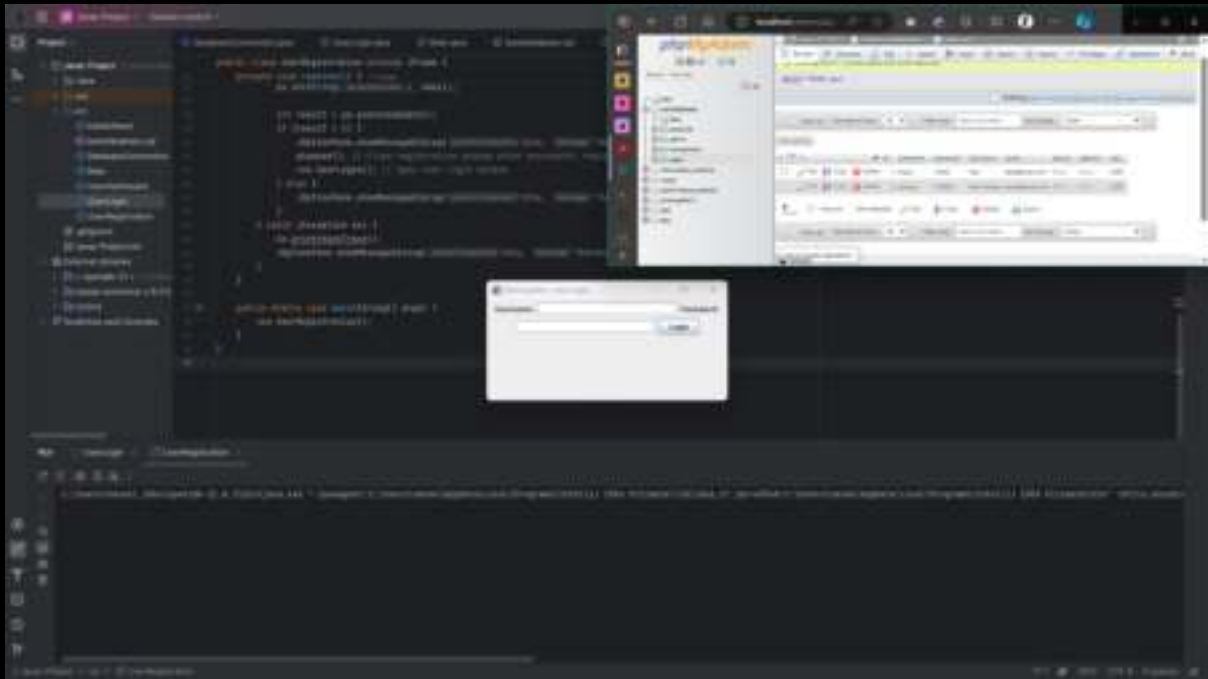
The user registration functionality efficiently connects to the database while maintaining high standards of data security, validation, and error handling. By adhering to best practices in database management and security, the application ensures a reliable and secure user registration process.





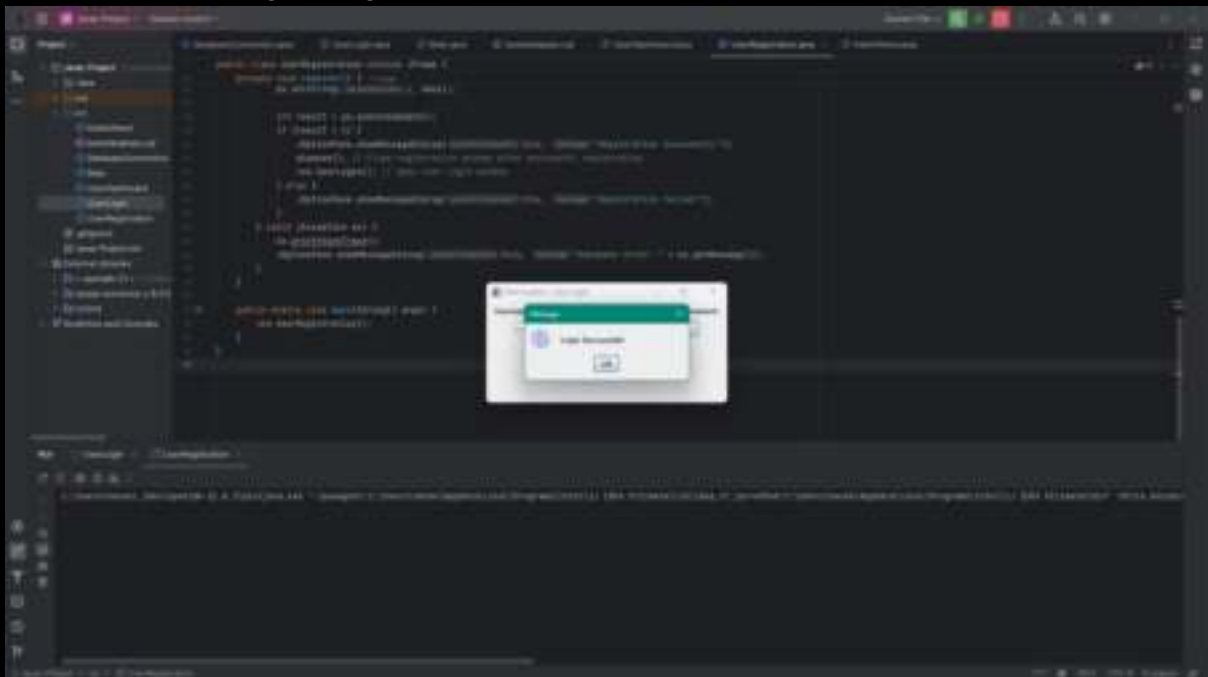
Automatically updates the Database

The application manages database connections efficiently



## 2. Log In User Interface

The login authentication process ensures that only authorized users can access the application while maintaining high standards of security and user privacy.



## 3.User Dashboard

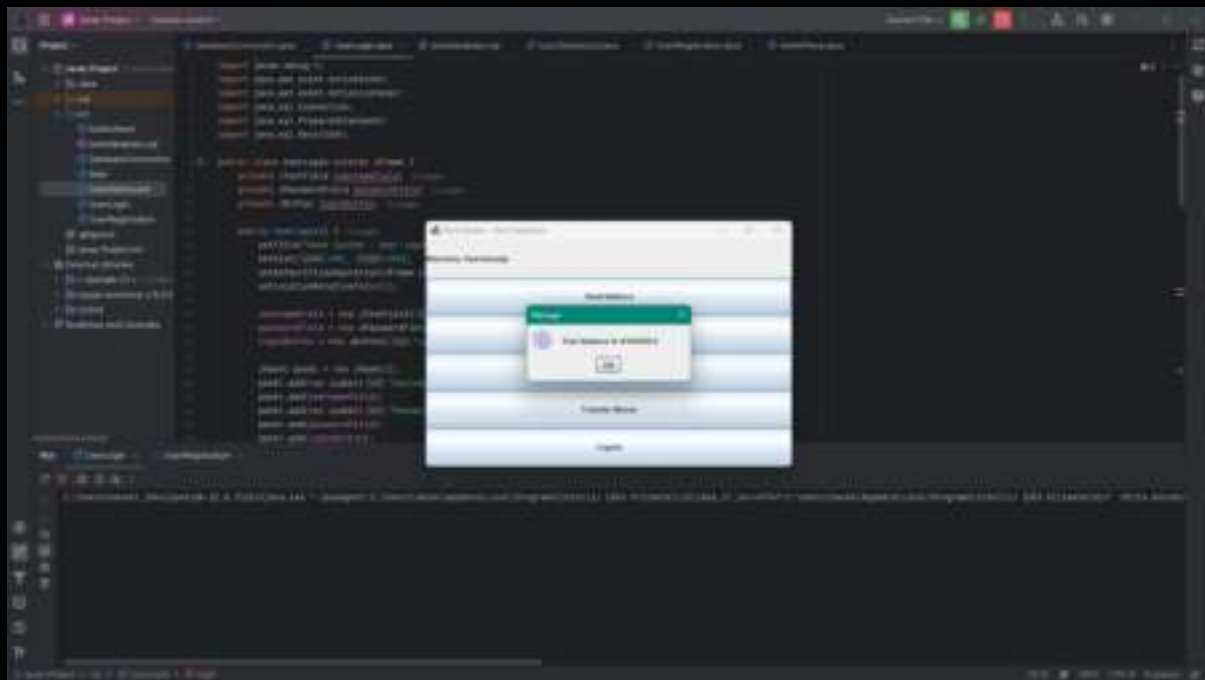
The user dashboard offers a comprehensive suite of banking functionalities, empowering users to manage their finances efficiently and securely. With intuitive design and real-time transaction processing, the dashboard enhances user satisfaction by providing seamless access to essential banking services.

Upon login, the dashboard displays a personalized welcome message with the user's full name, creating a welcoming user experience.



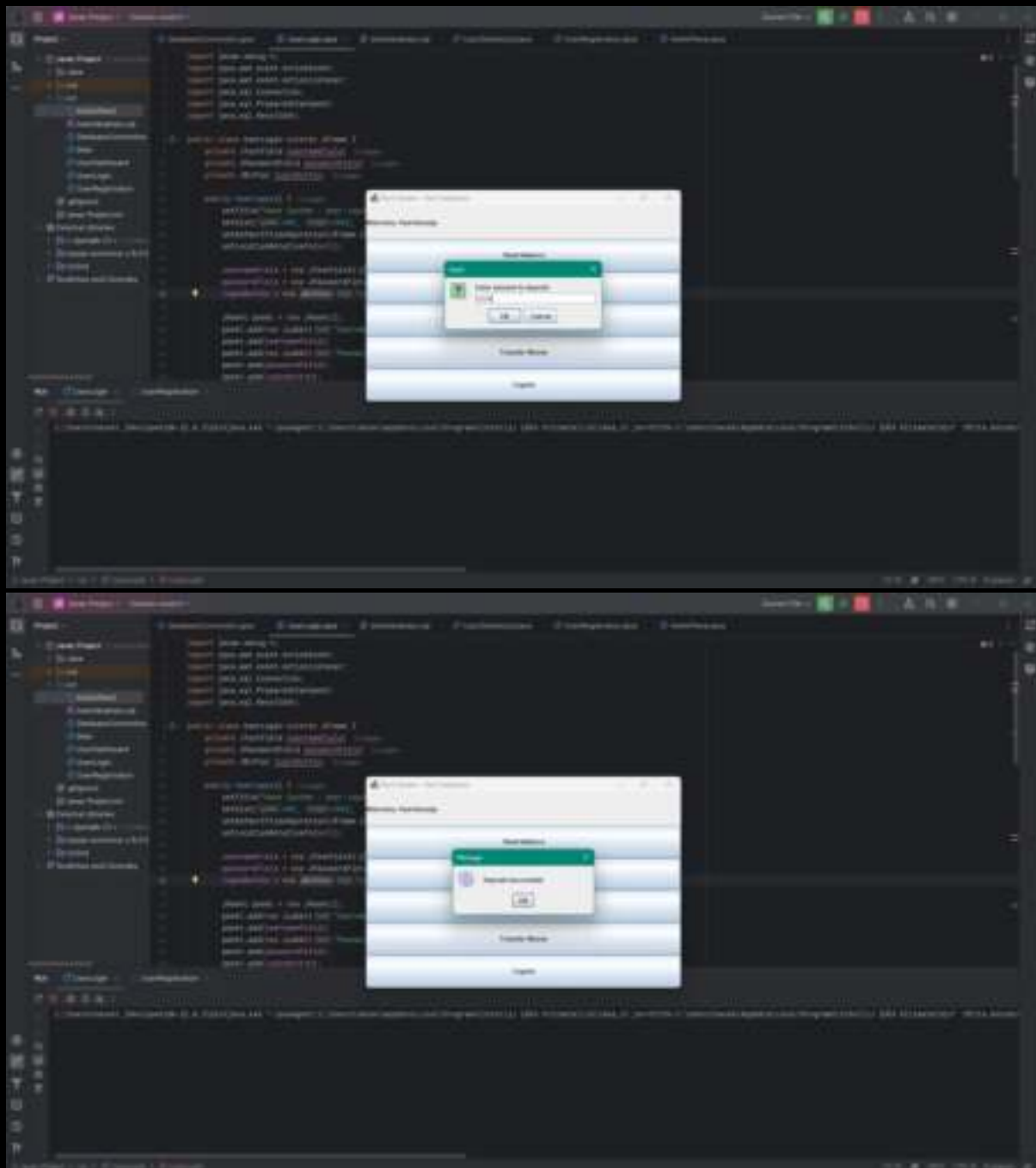
## View Balance

Users can easily view their current account balance directly from the dashboard. This feature provides immediate access to financial information without navigating to a separate screen.



## Deposit of Money

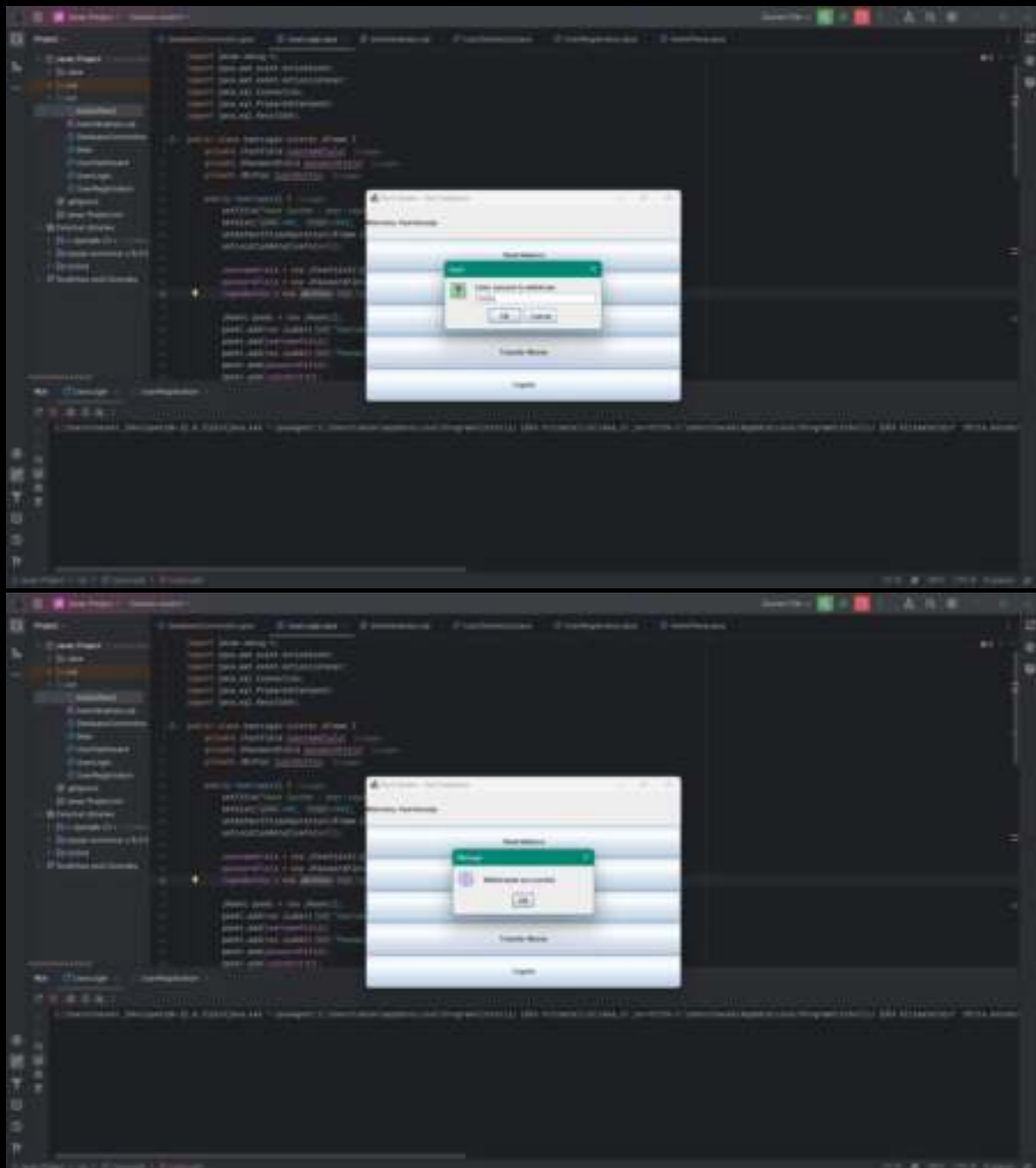
Users have the option to deposit funds into their account directly from the dashboard. Upon entering the deposit amount, the system updates the balance in real-time and provides feedback on the success or failure of the transaction.



## Withdraw of money

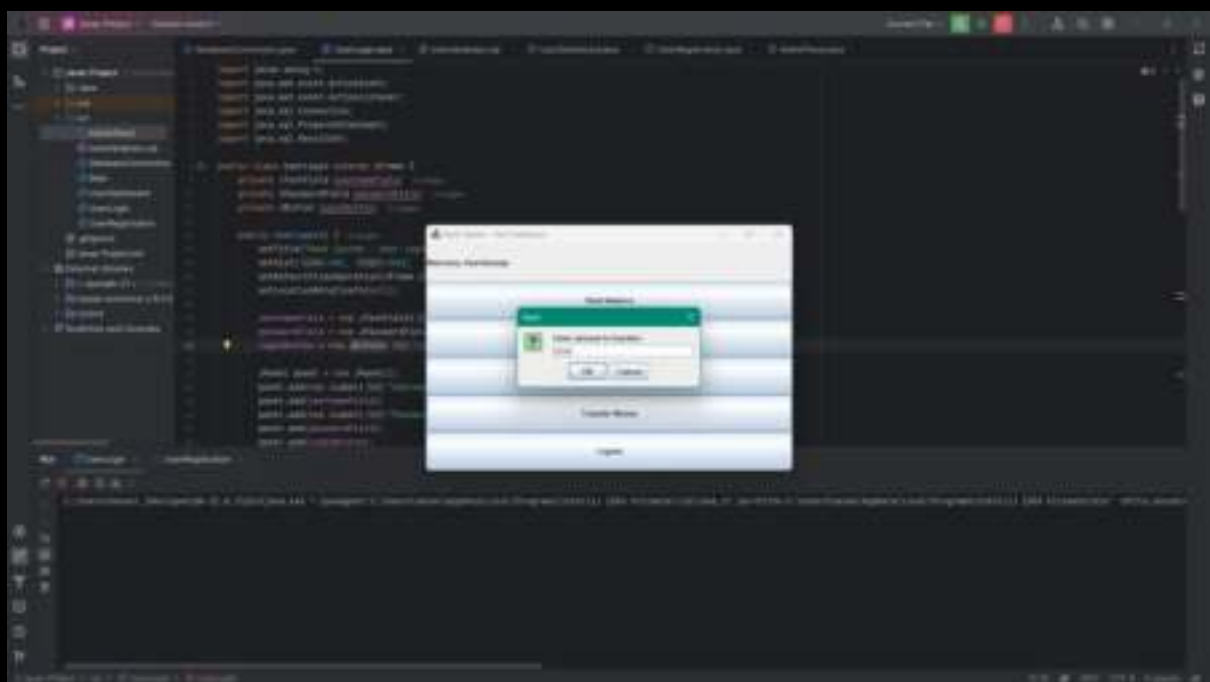
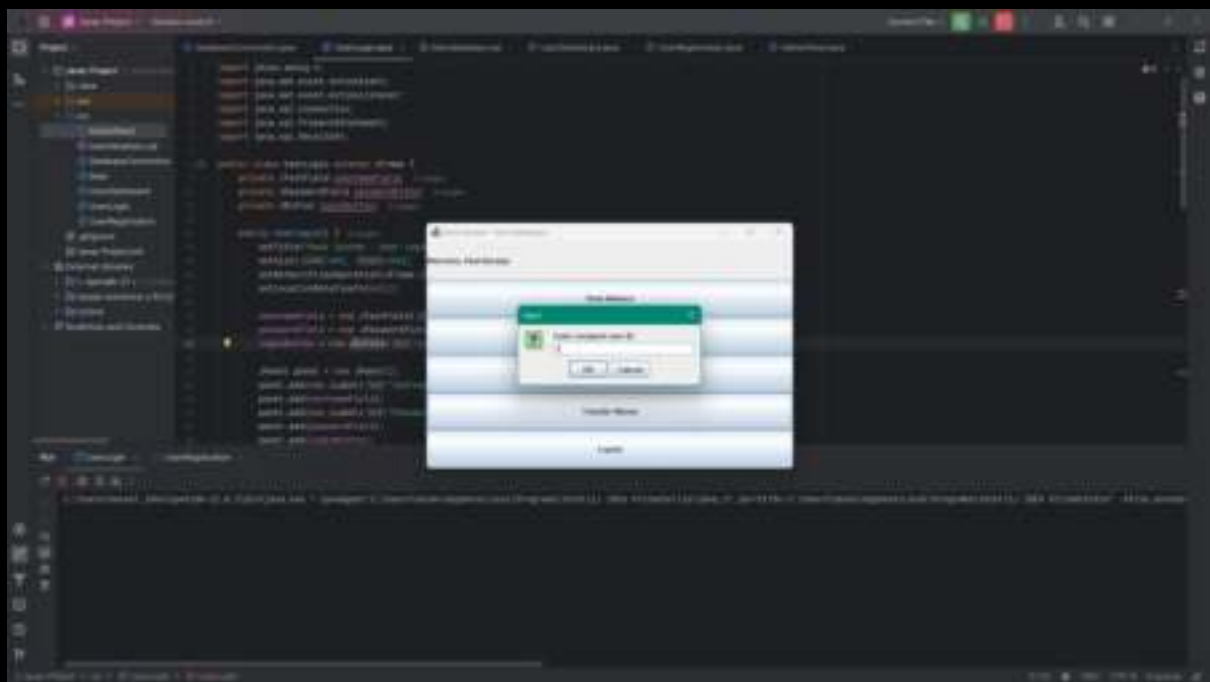
Users can withdraw money from their account via the dashboard. The system verifies the availability of funds and processes the withdrawal, updating the balance accordingly and providing transaction status feedback.

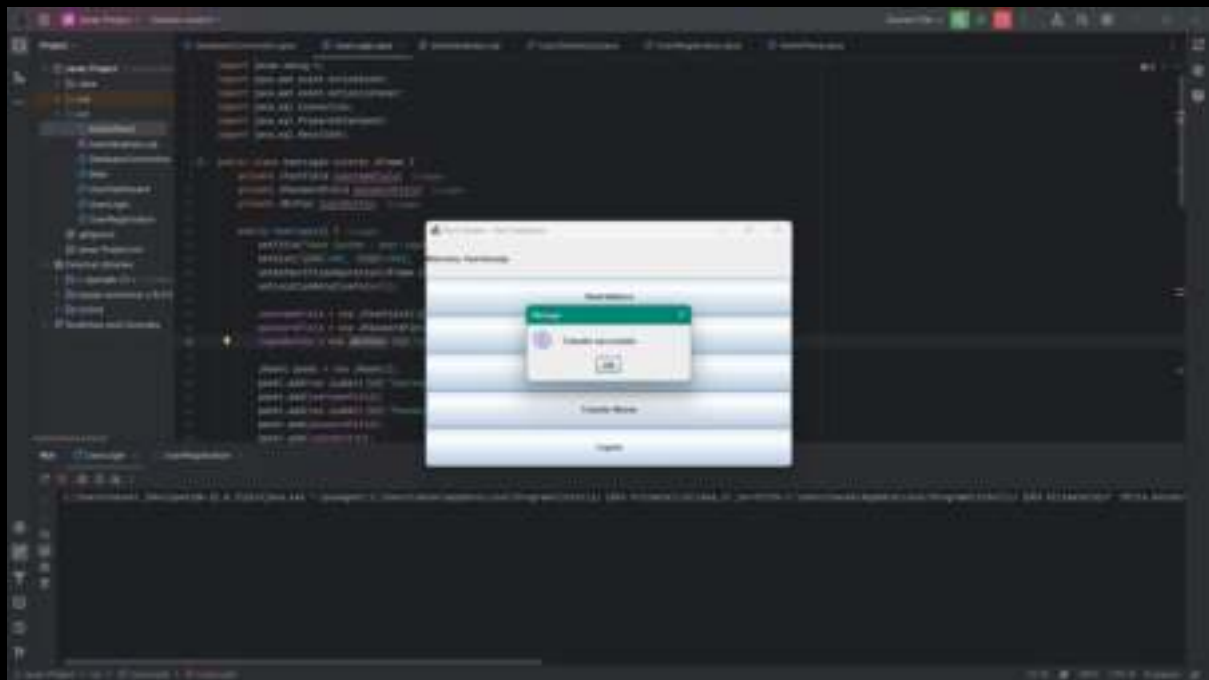




## Transfer Of Money between accounts

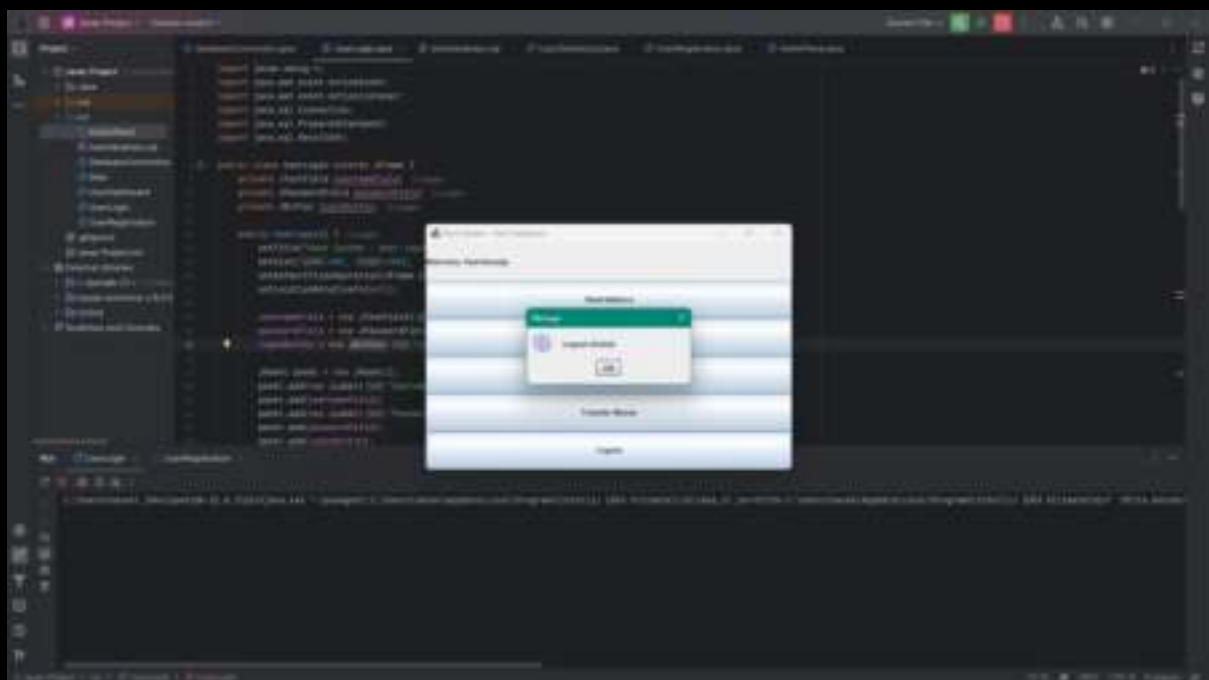
Users can transfer funds to another account by entering the recipient's user ID and the amount to transfer. The system checks the sender's balance, deducts the transfer amount, updates both accounts' balances, and confirms the success of the transfer.

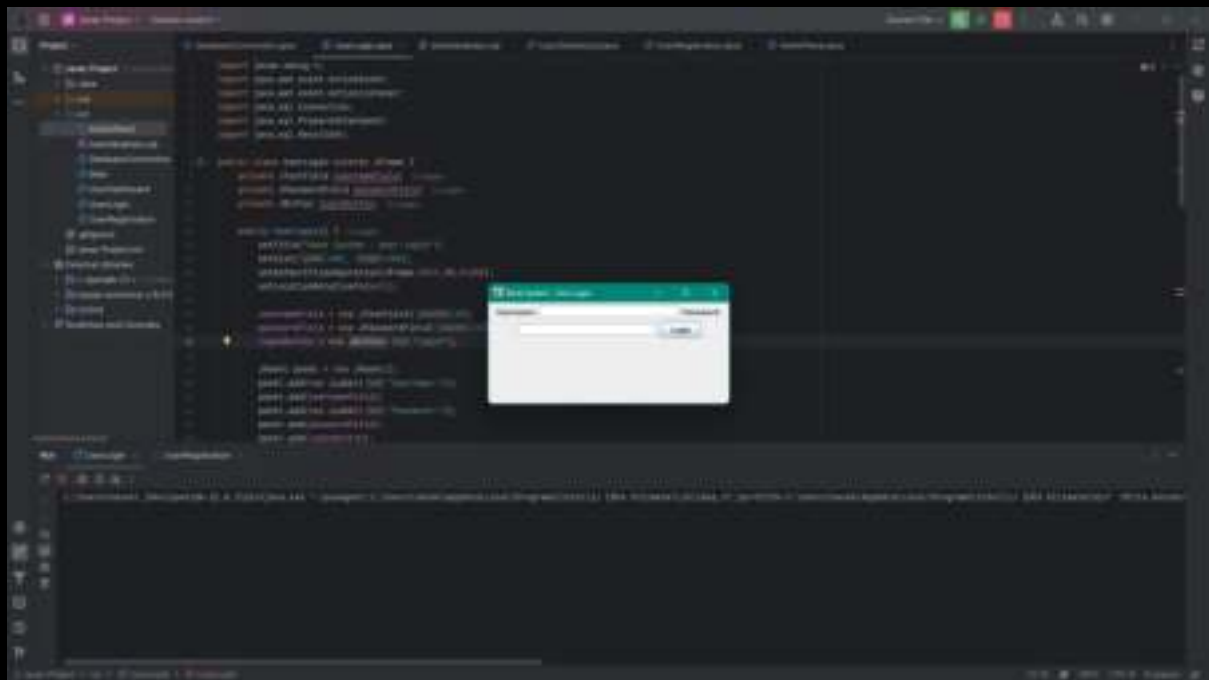




## Log Out Functionality

A logout button allows users to securely end their session. Upon logout, the user is redirected to the login screen, ensuring the security of their account and data.



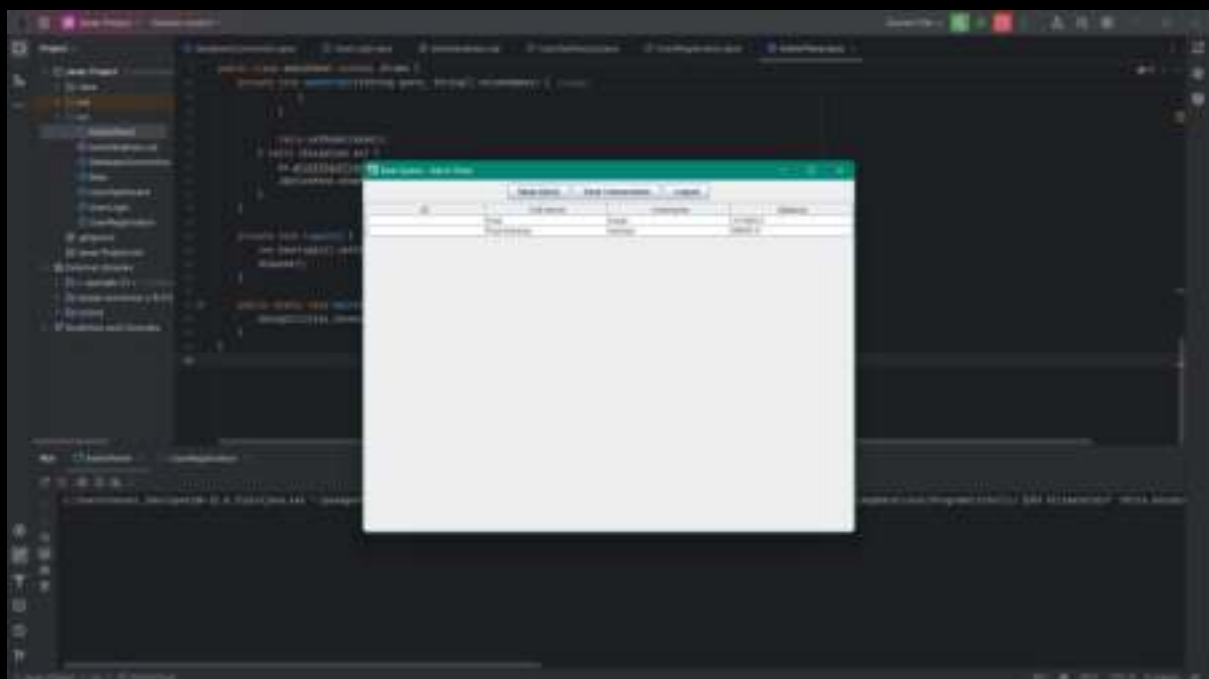


## 4. Admin Dashboard

The dashboard's intuitive design and direct access to user and transaction data streamline administrative tasks, enhancing operational efficiency.

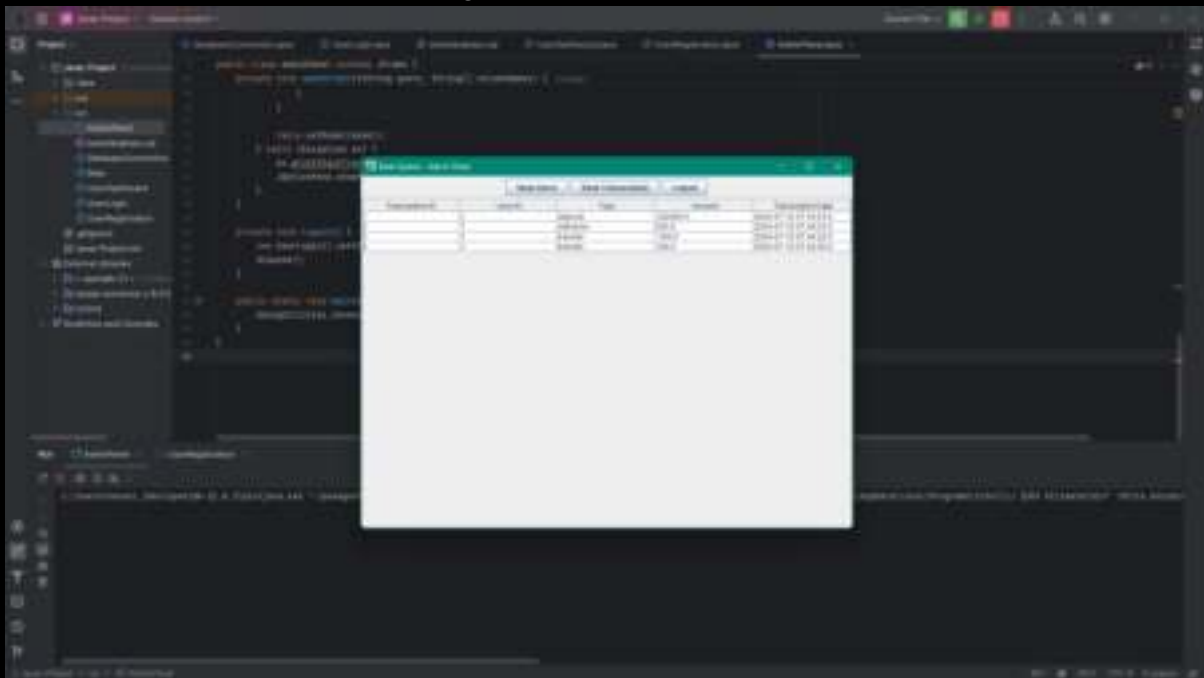
### View Users

Administrators can view a list of all users registered in the system. The dashboard displays essential user details such as ID, full name, username, and current balance. This feature facilitates easy management and oversight of user accounts.



## View Transactions

Administrators have access to a comprehensive view of all transactions performed within the system. The dashboard lists transaction details including transaction ID, user ID, transaction type (deposit, withdrawal, transfer), transaction amount, and timestamp (date). This functionality provides administrators with insights into financial activities and transaction histories

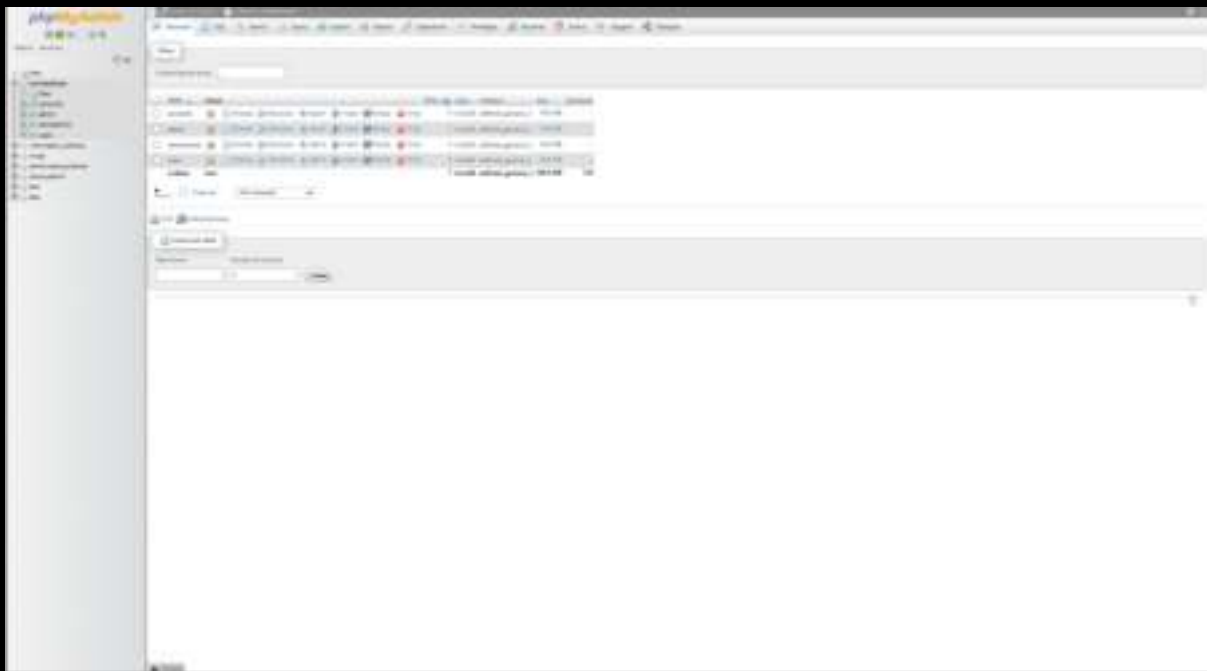


## 5.The Database

### Main Database Dashboard (PHP MyAdmin XAMP)

#### Database Management Tools used

- **XAMPP:** Provides Apache, MySQL, PHP, and Perl for local web development and testing.
- **PHPMyAdmin:** Web-based application for managing MySQL databases.



## Admin Account

### Admins Table

- **Table Name:** admins
- **Columns:**
  - id (INT, Primary Key, Auto Increment)
  - username (VARCHAR)
  - password (VARCHAR)



# Transactions

## Transactions Table

- **Table Name:** transactions
- **Columns:**
  - transaction\_id (INT, Primary Key, Auto Increment)
  - user\_id (INT, Foreign Key referencing users.id)
  - type (VARCHAR) - Type of transaction (e.g., "Deposit", "Withdrawal", "Transfer")
  - amount (DOUBLE)
  - date (TIMESTAMP) - Date and time of the transaction



# Users

## Users Table

- **Table Name:** users
- **Columns:**
  - id (INT, Primary Key, Auto Increment)
  - full\_name (VARCHAR)
  - username (VARCHAR)
  - password (VARCHAR)
  - balance (DOUBLE)



## Functionality

- **Users Table:** Stores user information including their full name, username, hashed password, and current balance.
- **Admins Table:** Stores admin credentials for accessing administrative functions.
- **Transactions Table:** Records all financial transactions, including deposits, withdrawals, and transfers between accounts.