

First National Bank's Banking Software

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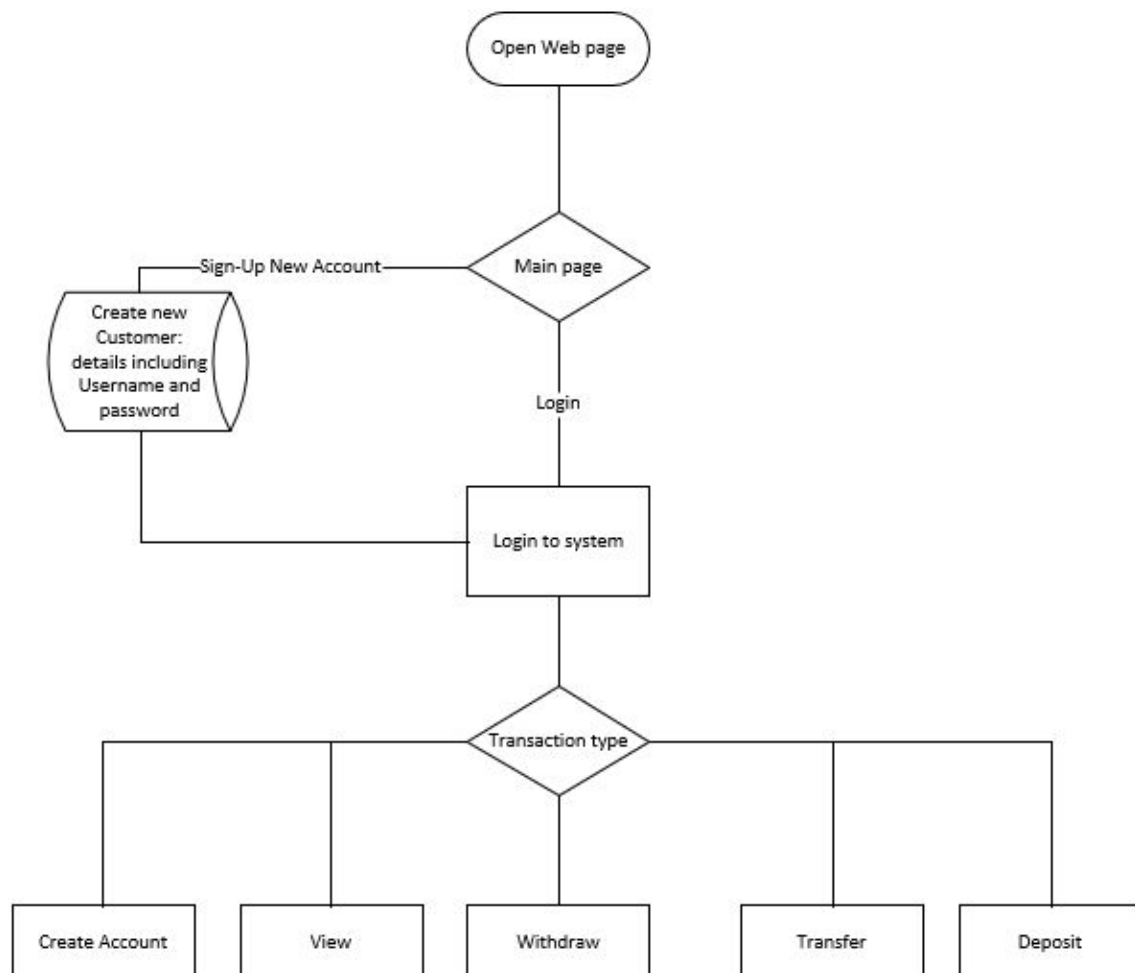
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Software Features

The software provides the following functionality:

- Secure login with password hashing.
- Ability to create and delete accounts.
- Deposit, withdrawal, transfer and check balances.
- Transaction “time out (5 mins) ” if inactive.
- Minimum password and username length (6 characters) to ensure security.
- Will not allow Username and Password to be the same.
- View all past transactions in account.
- Filtering on transaction types.
- Sorting by transaction time ascending or descending.

System flow Diagram:



Database

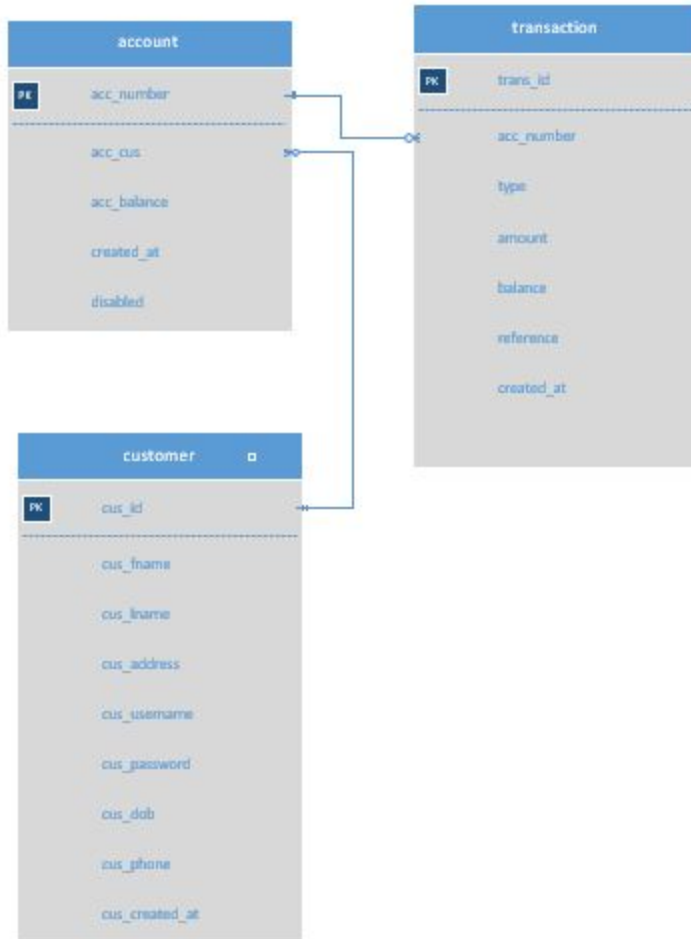
Business Rules

The following business rules were used:

- A customer must be registered before creating a login or account.
- A customer may only have one username and password.
- A customer may have multiple accounts.
- An account can not be overdrawn.

Entity Relationship Diagram

First National Bank ERD



Screen: 1

The new and existing customers are greeted with the following screen. Existing users can **login**, New customers must first **Sign-up**.




Step 1:

Before opening an account new customers must first sign up by pressing the **sign-up** from the top menu.




Step 2:

To start an account new customers must first Sign-up to provide their personal information including Username and Password and then press **Register** upon completion.


 FNB Bank

Q About UsSign-upLogin


Sign Up




First Name




Last name




Address



Username (log in ID)



Password



Confirm Password

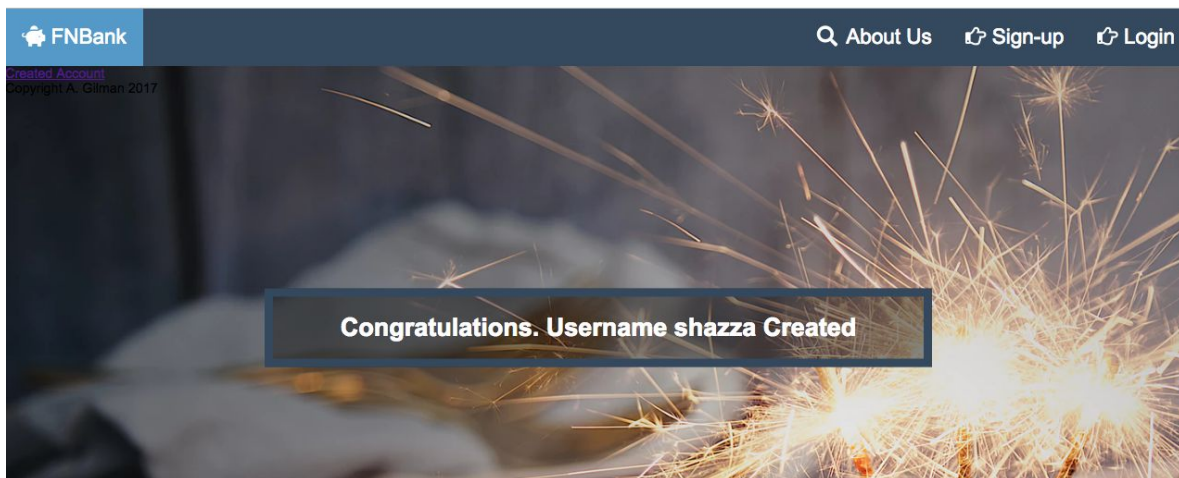
Register

Already have an account? [Sign In.](#)

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Step 3:

The customer upon successful registration with see the following screen.




Step 4:

The user may now choose **login** from the top menu, If an existing customer, they will now see **step 6.**


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[Q About Us](#) [Sign-up](#) [Login](#)

Login



robo



Login

Do not have an account? [Sign up.](#)

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Step 5a:

After successfully logging in a new customer has the option of creating a new account by simply clicking on the **Create new account** link shown.

 FNB Bank

[Q About Us](#) [Account](#) [Logout](#)

The accounts are:

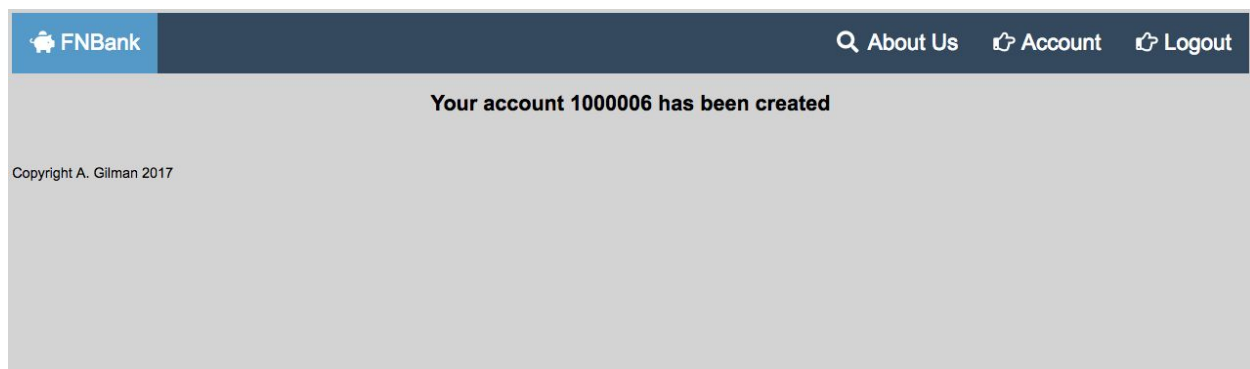
Account Number	Customer Id	Balance
Create new account.		

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Step 5B:

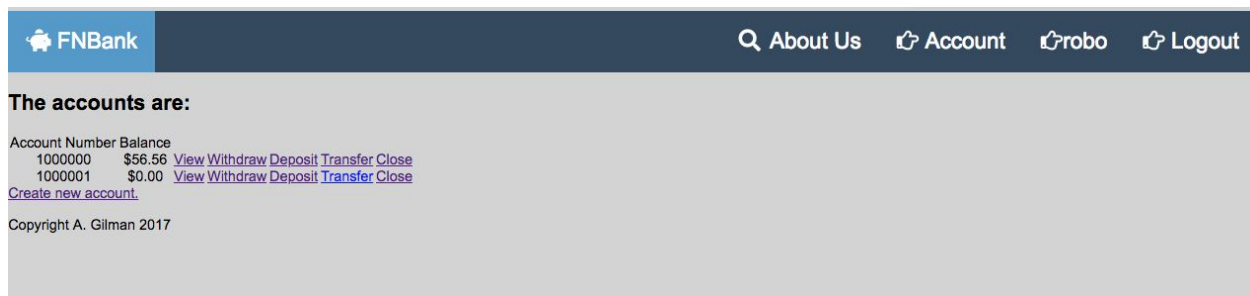
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The customer is asked to confirm the creation of the new account and if confirmed a new account is established and their new account number is displayed



Step 6:

The customer is now presented with a view of existing accounts and balances, They can now choose the option of View, Withdraw, Deposit, Transfer and Close and when completed logout



View: Displays past transactions

Withdraw: Withdraw from chosen account if there is sufficient funds available.

Deposit: Deposit some money to chosen account.

Transfer: Move funds from one account to another.

Close: Ability to close empty accounts not required.

Step 7:

Press **Logout** to close the transaction window and return to the main page.