

Functional Specification Documentation on Online Banking System

SUBMITTED BY

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1.Introduction

Online or Internet banking is a way for customers of a bank to conduct a range of financial transactions through their online banking channel. Online banking gives you the freedom to bank where and when you want and is a very convenient way to stay on top of your finances.

Online banking also names network banking, E-banking. It means banks provide their traditional services to customers through internet, such as inquiry, account checking, transferring within the same bank, etc. It can make the customer to manage his/her accounts at home safely and conveniently.

The project which we have implemented on the lines of online banking is titled as, Iron Bank of Braavos. Our bank is focussed on making banking simple. It is available anytime and anywhere. The primary goal is to increase customer satisfaction, by making the tedious process of banking, really simple, available at our fingertips.

Iron Bank of Braavos e-banking dedicate to provide comprehensive efficient and safe financial self-service to our customers and satisfy their characteristic financial requirement. It can save your time and reduce your inconvenience, make you manage financing easily, help you enjoy modern financial delight.

Features

Non-paper transactions:

electronic check, draft and receipt instead of traditional documents, electronic cash, wallet and credit card instead of former bank-note, data telecom network instead of paper-file mail.

Convenience faster efficiency safe:

One can enjoy convenient, fast, efficient and safe service through our e- banking. One can use our online service unlimited of time and place to accomplish 3A service (anywhere, anyhow, anytime)

2. Purpose

The purpose of Iron Bank of Braavos, is to make banking simple and enjoyable. So the application is on the same lines. Our online banking app, is customer friendly, with an interactive user interface, it's fast, it's reliable and secure and available 24 X 7.

Iron Bank of Braavos, being customer friendly, is designed to please our customers. Customers need not go to the bank to register for a profile. We have created a registration portal, where the bank employee verifies the credentials, and goes for the approval. Updating personal information is always time-consuming for customers, so we have a customer portal, which is enabled, to update their personal information easily.

Maintaining multiple bank accounts is hassle-free with IBB, customers can view their account details, and can also request for deactivation of their accounts, if they want to, without any questions being asked from our end.

Transferring funds, is not only fast but also reliable. IBB has a rigid security policy, where all the transactions are encrypted. One can also view all the transactions performed on their particular account.

IBB is not just solely focussed on customers, Our product is designed to make both customers and bankers joyful. Bankers can perform their duties, without worrying much about the security.

3. Process

The workflow for this project, is as follows. The Customer Account creation is sent to the bank employee, when the customer registers, the employee accepts the request, post verification of all details.

Customer can login using registered username and password, after logging in, customer can edit his profile, change password, and can transfer funds to any customer within the same bank. One could also generate multiple statements (within a date range/last 10 transactions) for all accounts.

4. Functional Requirements

We have classified functional requirements into four, common to all, requirements of customer, requirements of bank employee and requirements of bank admin.

4.1 Home Page

The home page of IBB is the most essential requirement. We have designed the home page in a way, so that it's easily understandable, easy for customers to interact. The Home page has a header and a side- navigation bar and also a carousel. The home page basically contains information about the bank.

4.2 Customer

4.2.1 Customer Registration

Customers who don't have an account with the bank are to be registered with the customer registration form, provided on the login page. The Customer fills out the form, with details like, first name, last name, phone number, email address, residential address, and with the following ID proofs, Aadhaar, pan card and passport. The customer has to enter his/her's valid details and the form is validated and also shows the required fields. The form is designed and implemented using Angular material.

Once the customer fills out the form, and submits the form, the bank employee receives a request. After verifying the details, the bank employee should approve the customer's request.

Post approval of the request, Customer receives a Mail from the bank with username and password, which he can change, once after logging into his profile.

4.2.2 Login

Customers who once received the email with their credentials from the bank, can log into their account, to view their profile and can perform the functions as per the customer's side-navigation bar.

4.2.3 Accounts

Once the customer logs into his profile, he can view his profile , and can explore what he can do , with the side-nav bar provided exclusively for customers. When he/she clicks on the accounts , one can view their accounts or add new accounts.

4.2.4 Customer Profile

The Customer can not only view his details, but also edit them. When the customer profile is displayed, one can view and update details of phone number or email, which have the probability of getting changed. This updation can be done by pushing the edit button and the fields which can be edited are displayed.

After filling out the form ,customer clicks on save and the details are updated immediately.

4.2.5 Transfer

The transfer component does the following task. Customers can transfer funds from one account to another account of the same bank, easily, with this functionality. For transfer of funds, Customer, must enter the account number of the payee, and also the amount he/she wants to transfer to the payee.

Any transaction, which includes, transfer of more than \$10,000 in a day, are flagged and reported to the bank.

4.2.6 Transaction Summary

Transaction Summary functionality shows the summary of all transactions, it lists out all transactions and one can select to view withdrawals and deposit transaction as well.

As the transaction records could be large in number, we have implemented pagination, to display only ten records at a time.

4.2.7 Change Password

Customer can change his password, after logging into the account. To change password, enter a password that is strong enough, in terms of security and re-enter it for confirmation. The password will be updated.

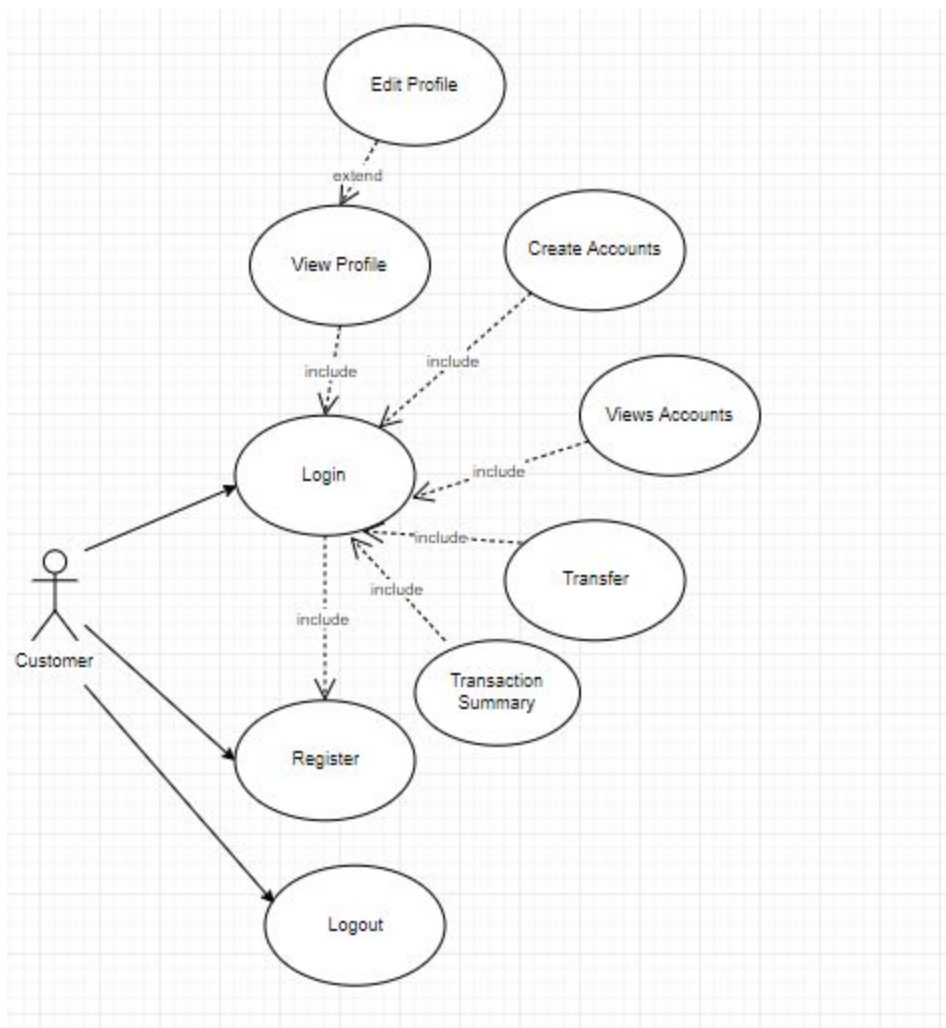
4.2.8 FAQ's

Customers do always have a handful of questions, so as to get some of their questions answered, We have an FAQ's section to view the most frequently asked questions.

4.2.9 Logout

One can log out by pushing the logout button on the header. If the customer's inactive for more than minutes, the application redirects to the login page, by logging out of the profile.

4.2.10 Customer Use Case Diagram



4.3 Bank User

4.3.1 Dashboard

This component is designed in the most interactive way. This is available exclusively for bank employees (users) and bank admin. This contains the statistics of the bank, which includes, number of customers to the bank, number of employees to the bank, bank's revenue, performance, and number of branches. We also have a pie chart that updates the types of accounts. We do have an interactive graph that illustrates, the number of transactions that occurred over this year.

4.3.2 Profile

The Bank User can not only view his details, but also edit them. When the bank user's profile is displayed, one can view and update details of phone number or email, which have the probability of getting changed. This updation can be done by pushing the edit button and the fields which can be edited are displayed.

After filling out the form, user clicks on save and the details are updated immediately.

4.3.3 Customer Accounts

The Bank User can view all the accounts of customers. The records are displayed as customer id and customer name. When the user clicks on the name, it displays number of accounts and their details. The bank employee, can deactivate, the customer's account at any point of time.

As there are many accounts, the accounts are displayed using pagination, where only ten records are displayed in a page.

4.3.4 Customer Requests

Iron Bank of Braavos, is focussed on making banking joyful. So as the customer, registers, the bank user gets a request, to either approve or decline the request. Bank User verifies the customer details and then does the approval.

The bank sends an automated email to the customer, regarding the login to his portal.

4.3.5 All Transactions

The Bank User can view all transactions of the customer, this can be accomplished by clicking on ,all transactions, on the side navigation bar. As there are many accounts and many transactions related to the accounts, the transactions are displayed using pagination, where only 10 records are displayed in a page.

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Bank User can change his password, after logging into the account. To change password, enter a password that is strong enough, in terms of security and re-enter it for confirmation. The password will be updated.

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4.4 Bank Admin

4.4.1 Dashboard

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4.4.2 Profile

The Bank Admin can not only view his details, but also edit them. When the bank admin's profile is displayed, one can view and update details of phone number or email, which have the probability of getting changed. This updation can be done by pushing the edit button and the fields which can be edited are displayed.

After filling out the form ,user clicks on save and the details are updated immediately.

4.4.3 Customer Accounts

The Bank Admin can view all the accounts of customers. The records are displayed as customer id and customer name. When the user clicks on the name, it displays number of accounts and their details. As there are many accounts, the accounts are displayed using pagination, where only ten records are displayed in a page.

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As there are many accounts and many transactions related to the accounts, the transactions are displayed using pagination, where only ten records are displayed in a page.

4.4.6 Change Password

Bank Admin can change his password, after logging into the account. To change password, enter a password that is strong enough, in terms of security and re-enter it for confirmation. The password will be updated.

4.4.7 Add Employee

The Bank Admin solely has the privileges to add bank employees. To implement this, the admin fills out a form with employee details and creates one immediately.

4.4.8 Logout

One can log out by pushing the logout button on the header. If the user's inactive for more than minutes, the application redirects to the login page, by logging out of the profile.

4.5 Sessions and Other Features

A Session is maintained in customer page when a customer is inactive for three minutes then he/she is redirected to the login page. If a customer were to transfer funds above \$10,000 in a day, the transaction is flagged and reported. In addition to that IBB, is checks that a customer maintains a minimum balance of \$5000 in all accounts, else he/she will be reported.

5. Conclusion

We have successfully implemented all the functional requirements for our online banking portal, Iron Bank of Braavos. IBB is always focussed on increasing customer satisfaction, which we have achieved by providing an advanced, user-friendly interface, which is reliable, fast and hence banking with IBB is always a better way to bank.