

Guru99 Banking Project

Software Requirements Specification

1.3

25/10/2013

Prepared for
Guru99.com

Revision History

Date	Description	Author	Comments
25/10/2013	Version 1	Sam Patrick	Initial Draft
30/10/2013	Version 1.1	Sam Patrick	Added section 5.Change management process
5/11/2013	Version 1.2	Sam Patrick	Added section 3.7 Design constraints
15/11/2013	Version 1.3	Sam Patrick	Typo;s Fixed

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Printed Name	Title	Date
Nick Price	Lead Software Engg.	19/11/2013
Sam Patrick	Lead QA Engineer	18/11/2013
Krishna Rungta	Project Sponsor	19/11/2013

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1. Introduction

The Guru99 Bank project aims to provide net banking facility to its customers. This release will have limited features. Over a period of time , new and new functionalities will be added to the site.

1.1 Purpose

1.2 Scope

1.3 Definitions, Acronyms, and Abbreviations

Abbreviation	Word
M	Manager
C	Customer

1.4 References

2. Specific Requirements

The Guru99 Bank will have 2 roles

1. Manager
2. Customer

Following features/modules will be available to these 2 different roles

Manager	Customer
New Customer	Balance enquiry
Edit Customer	Fund Transfer
Delete Customer	Mini Statement
New Account	Customized Statement
Edit Account	Change Password
Delete Account	Login & Logout
Deposit	

Withdrawal	
Fund Transfer	
Change Password	
Balance Enquiry	
Mini Statement	
Customized Statement	
Login & Logout	

Description of the modules

Module Name	Applicable Roles	Description
Balance Enquiry	Manager Customer	Customer: A customer can have multiple bank accounts. He can view balance of his accounts only Manager: A manager can view balance of all the customers who come under his supervision
Fund Transfer	Manager Customer	Customer: A customer can have transfer funds from his "own" account to any destination account. Manager: A manager can transfer funds from any source bank account to destination account
Mini Statement	Manager Customer	A Mini statement will show last 5 transactions of an account Customer: A customer can see mini-statement of only his "own" accounts Manager: A manager can see mini-statement of any account
Customized Statement	Manager Customer	A customized statement allows you to filter and display transactions in an account based on date, transaction value Customer: A customer can see Customized-statement of only his "own" accounts Manager: A manager can see Customized-statement of any account
Change Password	Manager	Customer: A customer can change password of

	Customer	only his account. Manager: A manager can change password of only his account. He cannot change passwords of his customers
New Customer	Manager	Manager: A manager can add a new customer.
	Manager	Manager: A manager can edit details like address, email , telephone of a customer.
New Account	Manager	Currently system provides 2 types of accounts <ul style="list-style-type: none"> ● Saving ● Current A customer can have multiple saving accounts (one in his name , other in a joint name etc). He can have multiple current accounts for different companies he owns. Or he can have a multiple current and saving accounts. Manager: A manager can add a new account for an existing customer.
Edit Account	Manager	Manager: A manager can add a edit account details for an existing account
Delete Account	Manager	Manager: A manager can add a delete an account for a customer.
Delete Customer	Manager	A customer can be deleted only if he/she has no active current or saving accounts Manager: A manager can delete a customer.
Deposit	Manager	Manager: A manager can deposit money into any account. Usually done when cash is deposited at a bank branch.
Withdrawal	Manager	Manager: A manager can withdraw money from any account. Usually done when cash is withdrawn at a bank branch.

2.1 External Interface Requirements

2.1.1 User Interfaces

None

2.1.2 Hardware Interfaces

None

2.1.3 Software Interfaces

None

2.1.4 Communications Interfaces

None

3.1 Front End Details

This section describes the Front end of Guru99 Bank.
It also lists a few use cases to describe the functioning of the system

Following is a list of module wise fields

Fund Transfer

- Payers account no
- Payees account no
- Amount
- Submit
- Reset

Change Password

- Old Password
- New Password
- Confirm Password
- Submit
- Reset

Balance enquiry

- Account No
- Submit
- Reset

Mini Statement

- Account No
- Submit

- Reset

Customized Statement

- Account No
- From Date
- To Date
- Amount Lower Limit
- Number Of Transaction
- Submit
- Reset

New Customer

- Customer Name
- Gender
- Date of Birth
- Address
- City
- State
- PIN
- Telephone Number
- Email Id
- Submit
- Reset

New Account

- Customer Id
- Account Type
- Initial deposit
- Submit
- Reset

Deposit

- Account Number
- Amount Deposit
- Description
- Submit
- Reset

Withdraw

- Account Number
- Amount
- Description
- Submit

- Reset

Delete Customer

- Customer Id
- Submit
- Reset

Edit Account

- Account Number
- Submit
- Reset

Form after submitting Edit Account

- Customer Id
- Account Type (Drop Down - Saving or Current)
- Balance
- Submit
- Reset

Delete Account

- Account Number
- Submit
- Reset

Edit Customer

- Customer Id
- Submit
- Reset

Form after submitting Edit Customer

- Customer Name
- Gender
- Date of Birth
- Address
- City
- State
- PIN
- Telephone Number
- Email Id
- Submit
- Reset

3.2 Technical Requirements

New Account

- T1** Customer Id - Customer ID is required
- T2** Customer Id - Special character are not allowed
- T3** Customer Id - Characters are not allowed
- T3.1** Customer Id - First character cannot have space

New Customer

- T4** Customer Name – Numbers are not allowed
- T5** Customer Name – Special characters are not allowed
- T6** Customer Name - Customer name must not be blank
- T7** Customer Name - First character cannot have space
- T8** Address - Address Field must not be blank
- T9** Address - First character can not have space
- T10** Address - Special characters are not allowed
- T11** City - Special character are not allowed
- T12** City - City Field must not be blank
- T13** City – Numbers are not allowed
- T14** City - First character can not have space
- T15** State – Numbers are not allowed
- T16** State - State must not be blank
- T17** State – Special characters are not allowed
- T17.1** State – First character cannot have space
- T18** Pin - Characters are not allowed
- T19** Pin - PIN Code must not be blank
- T20** Pin – Special characters are not allowed
- T21** Pin – PIN Code must have 6 Digits
- T22** Pin - First character can not have space
- T23** Telephone Number – Mobile no must not be blank
- T24** Telephone Number – Special character are not allowed
- T25** Telephone Number – Character are not allowed
- T26** Telephone Number - First character can not have space
- T27** Email : Email ID must not be blank
- T28** Email : Email ID is not valid
- T29** Email : First character can not have space

Balance Enquiry

- T30** Account No must not be blank
- T31** Special character are not allowed
- T32** Characters are not allowed

Customized Statement Form

- T33** Account No - Account Number must not be blank
- T34** Account No - Characters are not allowed
- T35** Account No - Special characters are not allowed
- T36** Amount Lower Limit – Special character are not allowed
- T37** Amount Lower Limit – Amount Lower Limit is required
- T38** Amount Lower Limit – Characters are not allowed
- T39** Number of Transaction – Special character are not allowed
- T40** Number of Transaction - Number of Transaction must not be blank
- T41** Number of Transaction – Character are not allowed

Delete Account Form

- T42** Account No must not be blank
- T43** Special character are not allowed
- T44** Characters are not allowed

Delete Customer

- T45** Customer Id - Customer ID is required
- T46** Customer Id - Special character are not allowed
- T47** Customer Id - Characters are not allowed
- T47.1** Customer Id - First character cannot have space

Deposit

- T48** Account No must not be blank
- T49** Special character are not allowed
- T50** Characters are not allowed
- T51** Amount field must not be blank
- T52** Special characters are not allowed
- T53** Characters are not allowed
- T54** Description must not be blank

Edit Account

- T55** Account No must not be blank
- T56** Special character are not allowed
- T57** Characters are not allowed

Edit Customer form

- T58** Customer Id - Customer ID is required
- T59** Customer Id - Special character are not allowed
- T60** Customer Id - Characters are not allowed
- T60.1** Customer Id - First character can not have space

Edit Customer

- T61** Address - Address Field must not be blank
- T62** Address - First character can not have space
- T63** Address - Special characters are not allowed
- T64** City - Special character are not allowed
- T65** City - City Field must not be blank
- T66** City - Numbers are not allowed
- T67** City - First character can not have space
- T68** State - Numbers are not allowed
- T69** State - State must not be blank
- T70** State - Special characters are not allowed
- T70.1** State - First character cannot have space
- T71** Pin - Characters are not allowed
- T71** Pin - PIN Code must not be blank
- T72** Pin - Special characters are not allowed
- T73** Pin - PIN Code must have 6 Digits
- T74** Pin - First character cannot have space
- T75** Telephone Number - Mobile no must not be blank
- T76** Telephone Number - Special character are not allowed
- T77** Telephone Number - Character are not allowed
- T78** Telephone Number - First character cannot have space
- T79** Email : Email ID must not be blank
- T80** Email : Email ID is not valid
- T81** Email : First character cannot have space

Fund Transfer

- T82** Payers Account Number must not be blank
- T83** Special characters are not allowed
- T84** Characters are not allowed
- T85** Payees Account Number must not be blank
- T86** Special characters are not allowed
- T87** Characters are not allowed
- T88** Amount Field must not be blank
- T89** Characters are not allowed

T90 Special characters are not allowed

T91 Description cannot be blank

Login

T92 User-ID must not be blank

T93 Password must not be blank

Mini Statement Page

T94 Account No must not be blank

T95 Special character are not allowed

T96 Characters are not allowed

Change Password

T97 Old Password must not be blank

T98 New Password must not be blank

T99 Enter at-least one numeric value

T100 Enter at-least one special character

T101 Choose a difficult Password

T102 Confirm Password must not be blank

T103 Passwords do not Match

Withdraw

T104 Account No must not be blank

T105 Special character are not allowed

T106 Characters are not allowed

T107 Amount Field must not be blank

T108 Characters are not allowed

T109 Special characters are not allowed

T110 Description cannot be blank

3.3 Functional validations

Balance Enquiry

Manager

F1 Manager can view balance of accounts associate with him

F2 Account number entered should exist in database

Customer

F3 Customer can view balance of only his accounts

F4 Account number entered should exist in database

Fund Transfer

Manager

F5 If these source and destination account numbers are invalid, system displays an error

F6 If these source and destination account numbers are same, system displays an error

F7 If the source account does not have the necessary balance, system displays an error

F8 If the source account does not associated with manager, System displays an error

Customer

F9 If the destination account number is not valid, system displays an error

F10 If these source and destination account numbers are same, system displays an error

F11 If the source account does not have the necessary balance, system displays an error

F12 If the source account is not associate with customer itself, System displays an error.

Withdrawal

Manager

F13 If source account number is invalid, system displays an error

F14 If source account does not have the necessary balance, system displays an error

F15 If source account does not associate with manager, System displays an error.

Customer

F16 If source account number is invalid, system displays an error

F17 If source account does not have the necessary balance, system displays an error

F18 If source account does not associate with customer, System displays an error.

Deposit

Manager

F19 If destination account number is invalid, system displays an error

F20 If destination account number does not associate with manager, System displays an error.

Customer

F21 If destination account number is invalid, system displays an error

F22 If destination account number does not associate with customer, System displays an error.

Delete Customer

Manager

F23 If Customer Id is invalid, system displays an error.

F24 If account associate with Customer Id, System displays an error.

F25 If Customer Id does not associate with manager, System displays an error.

Delete Account

Manager

F26 If Account Number is invalid, system displays an error

F27 If account does not associate with manager logged in, System displays an error.

Edit Account

Manager

F28 If Account Number is invalid, system displays an error.

F29 If Account number does not associate with manager, System displays an error.

New Account

Manager

F30 If Customer ID is invalid, system displays an error.

F31 If initial deposit is less than 500, System displays an error.

F32 If Customer Id does not associate with manager, System displays an error.

New Customer

Manager

F33 If same Email Id exist in the system, system shows an error.

Edit Customer

Manager

F34 If same Email Id exist in the system, system shows an error.

F35 If Customer Id is invalid, System displays an error.

F36 If Customer Id does not associate with Manager, System displays an error.

Change Password

Manager

F37 If Old Password is invalid, System shows an error.

Customer

F38 If Old Password is invalid, System displays an error

Customized Statement

Manager

F39 If account no is invalid, System displays an error

F40 If From Date is greater than To Date, System displays an error.

Customer

F41 If account no is invalid, System displays an error

F42 If From Date is greater than To Date, System displays an error.

Mini Statement

Manager

F43 If account no is invalid, System displays an error

F44 If transaction not exist in system, System displays an error.

F45 If account not associate with manager itself, System displays an error.

Customer

F46 If account no is invalid, System displays an error.

F47 If account associate with customer itself, System displays an error.

Balance Enquiry

Manager

F48 If account no is invalid, System displays an error

Customer

F49 If account no is invalid, System displays an error

3.4 Classes / Objects

3.5.1.1 Attributes

3.5.1.2 Functions

3.5 Non-Functional Requirements

Nil

3.6 Inverse Requirements

Nil.

3.7 Design Constraints

Many of the Guru99 Bank users may not have adequate computer knowledge to use the site. Hence, System must be intuitive and easy to understand.

3.8 Logical Database Requirements

Nil

3.9 Other Requirements

Nil

4. Analysis Models

Nil

5. Change Management Process

Changes to the SRS either from the development, testing team or the client side will be communicated to the project sponsor Mr Krishna Rungta.

Any change made to the SRS will require a sign off from the Development lead , QA lead and the client.

Once approved changed will be made to the SRS and the new SRS will be circulated to all stakeholders

A. Appendices