Home Insurance Application

Software Requirements Document



Table of Contents

[1.0 Introduction 3](#_Toc361998421)

[1.1 About this document 3](#_Toc361998422)

[1.1.1 Purpose & Scope of the document 3](#_Toc361998423)

[1.1.2 Intended Audience 3](#_Toc361998424)

[1.2 About the Software System 3](#_Toc361998425)

[1.2.1 Purpose 3](#_Toc361998426)

[1.2.2 Scope of the system 3](#_Toc361998427)

[1.2.3 System Perspective 3](#_Toc361998428)

[1.2.4 System Environment 4](#_Toc361998429)

[1.2.5 User Characteristics 4](#_Toc361998430)

[1.2.6 Impact of the System 4](#_Toc361998431)

[1.2.7 Assumptions, Dependencies, Risks / Constraints 4](#_Toc361998432)

[1.2.8 Software proposed 4](#_Toc361998433)

[2.0 System Requirements 5](#_Toc361998434)

[2.1 Functional Requirements 5](#_Toc361998435)

[2.1.1 Login Module 5](#_Toc361998436)

[2.1.2 New User Register 5](#_Toc361998437)

[2.1.3 Get Quote Module 6](#_Toc361998438)

[2.1.4 Retrieve Quote Module 9](#_Toc361998439)

[2.1.5 Buy Policy Module 10](#_Toc361998440)

[2.1.6 View Policy Module 11](#_Toc361998441)

[2.1.7 Renew/Cancel Policy Module 11](#_Toc361998442)

[2.1.8 Logout Module 13](#_Toc361998443)

[3.0 Change Log 14](#_Toc361998444)

# Introduction

## About this document

### Purpose & Scope of the document

The purpose of the software requirements document is to systematically capture requirements for the project and the system to be developed. Both functional and non-functional requirements are captured in this document. It also serves as the input for the project scoping.

The scope of this document is limited to addressing the requirements from a user, quality, and non-functional perspective. It is recommended that design aspects are not added in this document.

### Intended Audience

* *Project Team*
* *Customer(to sign off this document)*

## About the Software System

### Purpose

* + The Main purpose of **Home Insurance Quote** is to provide the ability toget a new home insurance quote, retrieve an already existing quote and print the quote summary. Only registered users can get, retrieve and print quotes.

### Scope of the system

The Home Insurance application is expected to be used by home owners interested in buying home insurance on an e-commerce site having below functions:

* Login
  + Authenticates the logged in user and logs out when needed.
* Register a new user
  + Registers a new user.
* Get Quote
  + User provides the homeowner location, homeowner details, and property details and gets the home insurance quote details from the system.
* Retrieve an existing Quote
  + User logs in to view the already existing quotes that the user has created through the Get Quote module. Quote summary will be displayed for each of the quotes the user creates.
* Buy a policy
  + The user can buy the policy after retrieving the quote that the user has already created.
* View policy
  + The user the view the home insurance policies that he has.

**Admin functions:**

* Renew a policy
  + Admin can renew the policy for the user.
* Cancel a policy
  + Admin can cancel the policy for the user.

### System Perspective

This is an independent system and should be implemented using J2EE technologies.

### System Environment

When a user connects to theWeb Server, theWeb Server will interact with the Database after processing the business logic to transfer data to and from a database.

* Apache Tomcat 7.0 Web Server.
* MySQL database for data storage

### User Characteristics

The product should be user friendly; hence the user should not need any software and hardware knowledge.The user may be new to Mortage Loan Software products in general.

### Impact of the System

This is a new product which is developed for the customers. Expected impact of the product is to automate existing manual processes in order to make them more efficient and cost effective.

### Assumptions, Dependencies, Risks / Constraints

### Software proposed

* Tomcat 8.0
* JDK 1.8
* MySQL 5.5
* Spring4
* SpringBoot 3
* Junit4 , Maven3.0

# System Requirements

## Functional Requirements

### Login Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.1 | Welcome Page |
| **Functional Requirements**  When the user clicks start, welcome page appears this will have a short welcome message, a brief introduction of the purpose of this site and also Input fields for User ID and Password. The input fields for User ID and Password are Text fields. The entered characters in the Password field must be masked with an \* symbol. There should be a Login Button. User Id and password are mandatory for logging in to the site. | |
| **User Interface Requirements**   1. The User ID and Password fields should be the text boxes.   2. The entered characters in the Password field must be masked with an \* symbol.  3. There should be a Login button.  4. The page header should be “Homeowners Insurance”.  5. After login, the Get Started Page should be displayed. | |

### New User Register

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.2 | New User Page |
| **Functional Requirements**  The user has to enter the following information in this page –  Personal Information   * User Name * Password * Re-enter password | |
| **User Interface Requirements**   1. All the fields are mandatory 2. The page header should be “User Details”. 3. After login, the Get Started Page should be displayed. | |

|  |  |
| --- | --- |
| Home Insurance \_Req-2.1.3 | Get Started Page |
| **Functional Requirements**  The user has to view the following information in this page –   * Get Quote * Retrieve Quote | |
| **User Interface Requirements**  These links should take to the get quote and retrieve quote modules respectively. | |

### Get Quote Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.3.1 | Location Page |
| **Functional Requirements**  Following are the fields of this page; The user has to enter the following information.   * Residence Type * Address Line 1 * Address Line 2 * City * State * Zip * Residence Use | |
| **User Interface Requirements**   1. All the fields are Mandatory except ‘Address Line 2’. 2. Residence Type - Should be one of the following values in drop down: Single-Family Home, Condo, Townhouse, Rowhouse, Duplex, Apartment 3. Residence Use– Should be a drop down with values: Primary, Secondary, Rental Property 4. The page header should be “Get Quote”. 5. Except Residence Type and Residence Use, the rest should be text boxes. 6. Clicking on Continue, should go to the Homeowner Information Page | |

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.3.2 | Homeowner Information |
| **Functional Requirements**  Following are the fields of this page; The user has to enter the following information.   * First Name * Last Name * Date of Birth * Are you retired? * Social Security Number * Email Address | |
| **User Interface Requirements**   1. First Name and Last Name should be String values. 2. Date of Birth should be a valid date. 3. ‘Are you retired?’ should be radio button with ‘Yes’ or ‘No’ values. 4. Social Security Number should be a valid 9 digit numeric value. 5. Check for valid email address. 6. Logout option should be available. 7. Clicking on Continue, should go to the Property Page | |

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.3.3 | Property |
| **Functional Requirements**  The user has to enter the following property information.   * What is the market value of your home? * What year was your home originally built? * Square footage * Dwelling style * Roof material * Type of Garage * Number of full baths * Number half baths * Does your home have a swimming pool? | |
| **User Interface Requirements**   1. All the fields are Mandatory and are need to be entered as specified. 2. Market value text box should have a symbol ‘$’ before the text. 3. Square footage text box should have a text ‘square feet’ following the text. 4. Dwelling style should have one of the following values in the drop down: 1 story, 1.5 story, 2 story, 2.5 story, 3 story 5. Roof material drop down values – Concrete, Clay, Rubber, Steel, Tin, Wood 6. Type of Garage –Attached, Detached, Basement, Built-in, None 7. Number of full baths and half baths should be drop downs with values 1, 2, 3 or more. 8. Does your home have a swimming pool? – This should be ‘Yes’ or ‘No’ radio button. 9. Logout option should be available. 10. Clicking on continue should go to the quote screen. | |

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.3.4 | Quote |
| **Functional Requirements**  The following information should be calculated and displayed to the user   * QuoteId * Monthly Premium   Premium = Rate x Total number of Exposure Units  Rate is $5 per year per $1000 of coverage  Add 0.5 % of premium for Single-Family Home, .06 for Condo, Duplex, Apartment and .07 % for Townhouse and Rowhouse. Calulate the monthly premium from the yearly premium by dividing it by 12.   * Dwelling Coverage   Construction cost per Sq.foot is $120.  Home value is the cost for the given square footage.  If home is less than 5 years old, reduce 10% from the home value.  If home is less than 10 years old, reduce 20% from the home value.  If home is less than 20 years old, reduce 30% from the home value.  If home is greater than 20 years old, reduce 50% from the home value.  Dwelling coverage is 50% of the market value added to the calculated home value.   * Detached Structures   This is 10% of the dwelling coverage.   * Personal Property   This is 60% of the dwelling coverage.   * Additional living expense   This is 20% of the dwelling coverage.   * Medical expense   Default value of $5000 is offered as medical expense.   * Deductible   This is 1% of the market value of home. | |
| **User Interface Requirements**   1. Retrieve a quote link should be displayed. 2. Logout option should be available. 3. Additional details screen should have a brief description of the details displayed in the quote screen. The link to the additional info screen should be available in the quote screen. | |

### Retrieve Quote Module

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| --- | --- |
| Home Insurance\_Req-2.1.4.1 | Retrieve Quote |
| **Functional Requirements**  User should able to view the quotescreated by them.  On clicking on ‘Retrieve Quote’ the below quote details should be displayed.   * QuoteId * Residence Type * Address line 1 * City * State * Zip * Residence Use * Link for the rest of the information to be displayed   On clicking the link the rest of the quote summary should be displayed in the quote summary screen. | |
| **User Interface Requirements**   1. Logout option should be available. | |

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| --- | --- |
| Home Insurance\_Req-2.1.4.2 | Quote Summary |
| **Functional Requirements**  User should able to view the Location, Homeowner, Property and Coverage details provided by them while creating the quote.  ‘Buy Quote’ link should be displayed in the top and bottom of page. | |
| **User Interface Requirements**   1. Logout option should be available. 2. On clicking ‘Buy Quote’ the Buy Policy Module should continue. | |

### Buy Policy Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.5.1 | Esign |
| **Functional Requirements**  User should able to view the buy the policy from the quote created.  The below quote details should be displayed.   * QuoteId * Read terms and conditions before buying policy * Enter Policy start date (yyyy-MM-dd) * This is to acknowledge that I have read the terms and conditions of the policy. | |
| **User Interface Requirements**   1. Logout option should be available. 2. ‘Read terms and conditions before buying policy’ should be a link to the policy terms and conditions which should be opened in a separate window. 3. ‘Policy start date should not be more than 60 days from todays date’ should be displayed below the text box for policy start date. 4. This is to acknowledge…; should have a check box preceded to the text and should be enabled only after the terms and conditions link has been pressed. 5. On clicking submit, perform validation to check if the user has esigned by checking the check box. Display alert message: ‘Please e-sign to buy policy’ and then display the confirmation page should be displayed. | |

|  |  |
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| Home Insurance\_Req-2.1.5.2 | Confirmation |
| **Functional Requirements**  User should able to view the below confirmation details of the policy.  The below quote details should be displayed.   * QuoteId * PolicyKey * Policy Effective Date * Policy End Date * Policy Term * Policy Status | |
| **User Interface Requirements**   1. Logout option should be available. 2. “Our customer service representative will contact you shortly for premium collection arrangements.” Message should be displayed. | |

### View Policy Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.6.2 | Policy Details(For Admin) |
| **Functional Requirements**  Once the user buys the policy, the user should be able to view the policy details once the user logs in.  The below policy details should be displayed.   * PolicyKey * QuoteId * Policy Effective Date * Policy End Date * Policy Term * Policy Status * Link to Get Started page should be displayed. | |
| **User Interface Requirements**   1. Logout option should be available. 2. The details should be displayed in table format. | |

### Renew/Cancel Policy Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.7.1 | Search User |
| **Functional Requirements**  Admin with Role ‘Admin’ [Sample: username ‘admin’ and password ‘admin’] should be able to view, renew and cancel policy.  The search user screen should be displayed once the admin logs in.   * Search user * Link to Get Started page should be displayed. | |
| **User Interface Requirements**   1. Logout option should be available. 2. Text box should be displayed before the Search user button. 3. On clicking the search user button the policy details of that user should be displayed if available. Or Invalid user message should be displayed. | |

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.7.2 | All Policy Details |
| **Functional Requirements**  Admin with Role ‘Admin’ [Sample: username ‘admin’ and password ‘admin’] should be able to view the policies the user has.  The below policy details should be displayed.   * PolicyKey * QuoteId * Policy Effective Date * Policy End Date * Policy Term * Policy Status * Renew Policy link * Cancel Policy link * Link to Get Started page should be displayed. | |
| **User Interface Requirements**   1. Logout option should be available. 2. The details should be displayed in table format. 3. On clicking the Renew policy link, ‘Are you sure you would like to Renew policy with Policy key: value?’ confirmation should be checked. The policy should be renewed and the renewed policy details page should be displayed. 4. On clicking the Cancel policy link, ‘Are you sure you would like to Cancel policy with Policy key: value?’ confirmation should be checked. The policy should be cancelled and the cancelled policy details page should be displayed. | |

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| --- | --- |
| Home Insurance\_Req-2.1.7.3 | Renewed/Cancelled Policy Details |
| **Functional Requirements**  The renewed or cancelled policy details should be displayed.  The below policy details should be displayed.   * PolicyKey * QuoteId * Policy Effective Date * Policy End Date * Policy Term * Policy Status | |
| **User Interface Requirements**   1. Logout option should be available. 2. The details should be displayed in table format. 3. Link to the GetStarted screen and Search user screen should be displayed. | |

### Logout Module

|  |  |
| --- | --- |
| Home Insurance\_Req-2.1.7.1 | Search User |
| **Functional Requirements**  The logout link should be available in all the pages except logon and new user registration in the left corner. | |
| **User Interface Requirements**  ‘Thanks for Visiting Us !!! You have been logged out’ should be displayed.  ‘Want to login again? Click below’ should be displayed with a Login button to go to the login screen. | |

# Change Log

Please note that this table needs to be maintained even if a Configuration Management tool is used.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version Number** | **Changes made** | | | |
| V1.0 | *<First version>* | | | |
| V1.1 | *<If the change details are not explicitly documented in the table below, reference should be provided here>* | | | |
| Page no | Changed by | Effective date | Changes effected |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| V1.2 | *<If the change details are not explicitly documented in the table below, reference should be provided here>* | | | |
| Page no | Changed by | Effective date | Changes effected |
|  |  |  |  |
|  |  |  |  |
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