PROJECT: ADVANCED JAVA

# Home Insurance:

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

The scope of this document is limited to addressing the requirements from a user, quality, and non-functional perspective.

**Purpose**

Home Insurance is a system that helps in buying insurance for your home through a web application. In the current process, User needs to reach insurance office to get the Quote before buying the policy by providing Home Owner Details, Location Details, and Property Details to the employee of the Insurance Company. The employee will go through all the details given by user and will provide quote details to the user. If the user is satisfied with the quote, then he/she will proceed to buy the policy. Since a lot of manual workflow is involved in this process, it takes a lot of time for employees to provide quotes as well as policies to the user.

A new system is required to automate existing manual processes in order to make the system more efficient and cost effective. By using this application, a registered user can get a Quote before buying an insurance policy by giving details like homeowner location, homeowner details, and property details.

**In Scope**

User Registration

Getting a Quote

Retrieving an existing Quote

Buying a policy

Viewing a policy

Renewing a policy

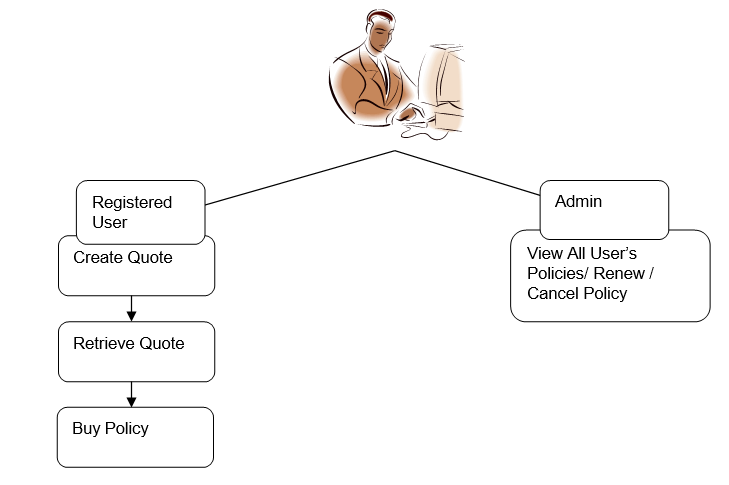
Canceling a policy

**Out of Scope**

Migration of current user list into the application

Notification process for the user to Renew and cancel a policy

**Current process flow**



**Business Requirement**

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| --- | --- | --- |
| **#** | **Rule Name** | **Definition** |
| 1 | Mandatory Fields in Location details | The system should check if the user has provided the following location details   * Residence Type * Address Line 1 * City * State * Zip * Residence Use   Appropriate message should be thrown if any one of these fields has been left blank. |
| 2 | Business Validations Location details | 1. Residence Type should be one of the following values: Single-Family Home, Condo, Townhouse, Row house, Duplex, Apartment. 2. Residence Use – Should be one of the following values: Primary, Secondary, Rental Property. |
| 3 | Mandatory Fields in Homeowner Information | The system should check if the user has provided the following home owner details:   * First Name * Last Name * Date of Birth * Are you retired? * Social Security Number * Email Address   Appropriate message should be thrown if any one of these fields has been left blank. |
| 4 | Business Validations Homeowner Information | 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. |
| 5 | Mandatory Fields in Property | The system should check if the user has provided the following Property details:     * 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?   Appropriate message should be thrown if any one of these fields has been left blank. |
| 6 | Business Validations Property | 1. Market value text box should have a symbol ‘$’ before the text. 2. Square footage text box should have a text ‘square feet’ following the text. 3. 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 4. Roof material drop down values – Concrete, Clay, Rubber, Steel, Tin, Wood 5. Type of Garage – Attached, Detached, Basement, Built-in, None 6. Number of full baths and half baths should be drop downs with values 1, 2, 3, or more. 7. Does your home have a swimming pool? – This should be ‘Yes’ or ‘No’ radio button. |
| 7 | Business Validations Quote | 1. 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 Row house. Calculate the monthly premium from the yearly premium by dividing it by 12.   1. 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.   1. Detached Structures is 10% of the dwelling coverage. 2. Personal Property is 60% of the dwelling coverage. 3. Additional living expense is 20% of the dwelling coverage. 4. Medical expense:   Default value of $5000 is offered as medical expense.Deductible: This is 1% of the market value of home. |
| 8 | Business Validations Retrieve Quote | All the below fields should be displayed:   * Quote Id * Residence Type * Address line 1 * City * State * Zip * Residence User |
| 9 | Business Validations Buy Policy Module – E sign Page | 1. Policy start date should not be more than 60 days from today’s date. It should be displayed below the text box for policy start date. |
| 10 | Business Validations Renewed/Cancelled Policy Details | 1. The Renewed/Canceled Policy Details should be displayed. |

**High level Business Requirements**

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| --- | --- | --- | --- | --- |
| **S.No** | **Business Requirement ID** | **Short Description** | **Description in detail** | **Interacting Business Processes** |
| 1 | BR001 | Login with different roles User, Admin | There should be provision to login as Admin or as User. | NA |
| 2 | BR002 | New User Register | There should be provision to register new user. | NA |
| 3 | BR003 | Get Started | There should be a Get Started menu. The user should be able to view the following options:  1.Get Quote  2.Retrieve Quote  3.Buy Policy  4.Renew Policy  5.Cancel Policy  6.Logout | NA |
| 4 | BR004 | Get Quote Module - Location Page | There should be provision for user to provide location details as   * Residence Type * Address Line 1 * Address Line 2 * City * State * Zip * Residence User | NA |
| 5 | BR005 | Get Quote Module - Homeowner Information Page | There should be provision for user to provide Homeowner Information as   * First Name * Last Name * Date of Birth * Are you retired? * Social Security Number * Email Address | NA |
| 6 | BR006 | Get Quote Module - Property Information Page | There should be provision for user to provide Property Information as   * 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? | NA |
| 7 | BR007 | Get Quote Module - Quote Page | There should be provision for user to view Quote Information once user has given the Location, Home Owner, and Property details.  The Quote information is as follows:   * Quote Id * Monthly Premium * Dwelling Coverage * Detached Structures * Personal Property * Medical expense * Additional living expense * Deductible | NA |
| 8 | BR008 | Retrieve Quote Module - Retrieve Quote Page | There should be provision for user to retrieve Quote Information. This should include   * Quote Id * Residence Type * Address line 1 * City * State * Zip * Residence User * Link for the rest of the information to be displayed | NA |
| 9 | BR009 | Retrieve Quote Module - Quote Summary Page | There should be provision for user to view the Location, Homeowner, Property, and Coverage details provided by them while creating the quote in the summary page. | NA |
| 10 | BR010 | Buy Policy Module – E sign | There should be provision for user to buy the policy from the quote created. | NA |
| 11 | BR011 | View Policy Module - Policy Details(For User) | There should be provision for user to view policy details once the user buys the policy. | NA |
| 12 | BR012 | Renew/Cancel Policy Module | There should be provision for admin to view, renew, and cancel policy. | NA |
| 13 | BR013 | Renew/Cancel Policy Module  - All Policy Details(For Admin) | There should be provision for admin to view all user policy details. | NA |
| 14 | BR014 | Renew/Cancel Policy Module  – Renewed / Cancelled Policy Details | There should be provision for admin to Renew/Cancel Policy Details | NA |
| 15 | BR015 | Logout | There should be provision for user to log out from application. | NA |

**Detailed Business Requirements**

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| --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Req. #** | **Business Requirement** | **Req. Type \*** | **Priority \*\*** | **Originator \*\*\*** | **BR Traced to Business Requirement/ Use case ID** |
| 1 | BR001 | There should be a provision to log in with two different roles, namely, Admin and User.  Admin should be able to view, renew, and cancel policy. User should not be able to do this. | F | 1 | Home Insurance Web App | NA |
| 2 | BR002 | New User Registration | F | 1 | Home Insurance Web App | NA |
| 3 | BR003 | There should be ‘Get Started’ menu, and user should be able to view the following options:  1.Get Quote  2.Retrieve Quote  3.Buy Policy  4.Renew Policy  5.Cancel Policy  6.Logout | F | 1 | Home Insurance Web App | NA |
| 4 | BR004 | There should be a Location page, and it should contain the following details:   * Residence Type * Address Line 1 * Address Line 2 * City * State * Zip * Residence User | F | 1 | Home Insurance Web App | NA |
| 5 | BR005 | There should be Home Owner Information page, and it should contain the following details:   * First Name * Last Name * Date of Birth * Are you retired? * Social Security Number * Email Address | F | 1 | Home Insurance Web App | NA |
| 6 | BR006 | There should be Property page, and it should contain the following details:   * 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? | F | 1 | Home Insurance Web App | NA |
| 7 | BR007 | There should be Quote page, and it should contain the following details:   * Quote Id * Monthly Premium * Dwelling Coverage * Detached Structures * Personal Property * Medical expense * Additional living expense * Deductible | F | 1 | Home Insurance Web App | NA |
| 8 | BR008 | In the Retrieve Quote Page, the following quote details should be displayed:   * Quote Id * Residence Type * Address line 1 * City * State * Zip * Residence User | F | 1 | Home Insurance Web App | NA |
| 9 | BR009 | On clicking ‘Buy Quote,’ the Buy Policy Page should display:   * Quote Id * Enter Policy start date (yyyy-MM-dd) | F | 1 | Home Insurance Web App | NA |
| 10 | BR010 | The confirmation page should display the following details:   * Quote Id * Policy Key * Policy Effective Date * Policy End Date * Policy Term * Policy Status | F | 1 | Home Insurance Web App | NA |
| 11 | BR011 | Once the user buys the policy, the user should be able to view the policy details once the user logs in.  The following policy details should be displayed.   * Policy Key * Quote Id * Policy Effective Date * Policy End Date * Policy Term * Policy Status | F | 1 | Home Insurance Web App | NA |
| 12 | BR012 | Admin should be able to view, renew, and cancel policy.  The ‘search user’ and ‘Link to zGet Started’ screens should be displayed once the admin logs in. | F | 1 | Home Insurance Web App | NA |
| 13 | BR013 | Admin should be able to view the policies the user has  The following policy details should be displayed:   * Policy Key * Quote Id * Policy Effective Date * Policy End Date * Policy Term * Policy Status * Renew Policy link * Cancel Policy link   ‘Link to Get Started’ page should be displayed. | F | 1 | Home Insurance Web App | NA |
| 14 | BR014 | The renewed or cancelled policy details should be displayed.  The following policy details should be displayed.   * Policy Key * Quote Id * Policy Effective Date * Policy End Date * Policy Term * Policy Status | F | 1 | Home Insurance Web App | NA |
| 15 | BR015 | There should be provision for user to log out from application. | F | 1 | Home Insurance Web App | NA |

**\* Req. Type**

F Core Functionality,

E Exception,

UI User Interface

R Reporting

**Business Objective Traceability Matrix**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Business Objective** | **Business Requirement Number** | **Priority** | **Requirement Title** | **How requirement satisfies objective** | **Status** |
| To maintain the policy details in an application | 1 | High | Home Insurance Web App | Allows the Admin to maintain the policy details effectively | Open |

**Integrated application features**

1. Application should have single login page. Login page should be the welcome page for the application.
2. Only registered users and administrators should be able to access the application.
3. Users must not be able to access the application features without logging in.
4. There should be logout feature. Once logged out, users should be directed to the welcome page or design logout page. Users can log in again from these pages.
5. At any point of time, user should be able to go back to homepage.
6. None of the features should be accessible if session expires.
7. Logged in user should be tracked through session.
8. If user clicks the back button after logout, browser pages should not be accessible.
9. On login, user credentials should be validated against those of the registered users in the system.
10. Log in page should have username and password fields to receive username and password. It should also have a login button.
11. Username and password cannot be blank.
12. If the username and password does not exist in the system, application should show proper error message.

**Integrated application non-functional features**

1. Exceptions should not be shown on web application.
2. No debug message should be displayed on web application.
3. All the errors and exceptions should be logged to log file.
4. Log file path should be configurable.
5. Database connections should be configurable and should not be hard coded.