Software Requirements Specification

INSURANCE PORTAL

ABAP.com

(अपना भारत अपनी पालिसी)

Submitted to:-
(Mr.VijayPradeep)

Submitted by:-
Arpit Shrma
Annu Kumari
Bidisha Kumari
Priyanshi Goel

Table of Contents

1. Introduction

1.1 Purpose

ABAP.COM has provide automatic insurance policy to the Indian people. ABAP.COM includes customer, agent and employee from verification and legal contract department. ABAP.COM provided system interface to ease some of the processes to the customer, agent and employee. ABAP.COM is web based application implemented for sending customer details through agents to the verification department; further verification department will enter all the details of the customer in to the system and sends the report to the legal contract department. Legal contract department prepare policy contract and sends to customer after payment has received from the customer.

1.2 Document Conventions

The System name is highlighted all over the document with bolded letters as well as underlined as well. Irrespective of that there is no specific convention provide. Every requirement statement has it's own priority.

1.3 Intended Audience and Reading Suggestions

This document is intended to provide a clear picture of the system for the users i.e ADMIN, STAFF and CUSTOMER, TESTER and DOCUMENTATION writer. And the SRS document got divided into sections which are classified as the scope of the project, the overall description about the system, the system features, external interface requirements as well as the non functional requirements.

1.4 Project Scope

This software system will be a **ABAP.com** System . This system will be designed to help customers to find best policy for them, which would otherwise have to be performed by manual searching. The software provide latest policy and overall solutions to their new policy and scheme. With a simple registration, new policies can register to the portal and can find good scheme and money. Admin can give comments on the registered customer under their guidance which may be reviewed by the staff and customers. It will meet the customers needs for policy while remaining easy to understand and use.

More specifically, this system is designed to provide a list of available policies to the searching customers. It will facilitate communication between customers, admin, and the staff via E- Mail.

a. Reference

Books:

- Fundamentals of Software Engineering- Rajib Mall

Websites:

- www.google.com
- www.w3schools.com
- www.roseindia.com

2. Overall Description

The Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next heading.

The Product feature, Operating Environment, Design and Implementation Constraints, of this document is written primarily for the developers and describes the details of the functionality of the product. This system will be completely web-based, linking to **ABAP.Com** and the remote web server from a standard web browser. An Internet connection is necessary to access the system.

a. Product Perspective

- APNA BHARAT APNI POLICY.Com is a self contained system. It is aimed towards the customers who want to search out the good policies who want good students and money. This project envisages bridging the gap between the student, and the tutor. The web portal should be user-friendly, 'quick to learn' and reliable for the above purpose. It is not a stand-alone product and depends on the availability of NetBeans software. It should run on Windows based platform.

Product Features

- It is easy to use the product with all the information provided in the form of links.
- The customer, admin and staff can access the portal with simple registration.
- The product enables the customers to choose whether he want to access the policy.
- User can access online policies materials by paying some monetary value.
- The product provides policies the facility to choose the different policies–online.
- Customers can discuss their problems with staffs via e-mail (if the respective staff is available).

User Classes and Characteristics

The user classes will be Customer, staff, Admin, and new user, existing user.

Operating Environment

Technologies to be used

Programming languages:

- **JAVA EE**: Java Enterprise Edition is a programming platform— part of the Java Platform-for developing and running distributed multi-tier architecture Java applications, based largely on modular software components running on an application server.
- **HTML**: Hyper Text Markup is the predominant markup language for web pages. It provides a means to describe the structure of text-based information in a document and to supplement that text with interactive forms, embedded images, and other objects.
- **JavaScript**: A client side scripting language used to create dynamic web content and user interface.

Tools & Development Environment:

- **Apache Tomcat 6.0.26 Server**: Apache Tomcat is a Servlet container developed by the Apache Software Foundation (ASF). Tomcat implements the Java Servlet and the JavaServer Pages (JSP) specifications from Sun Microsystems, and provides a "pure Java" HTTP web server environment for Java code to run.

- **NetBeans IDE** is a modular, standards-based integrated development environment (IDE), written in the Java programming language. The NetBeans project consists of a full-featured open source IDE written in the Java programming language and a rich client application platform, which can be used as a generic framework to build any kind of application.

Design and Implementation Constraints

- There is no maintainability of back up so availability will get affected.
- Limited to HTTP/HTTPS Protocols.

- Real-life credit card validation and Banking system is implemented.
- No multilingual support
- User do not have any rights to edit any data in the system

User Documentation

- The user should be familiar with the Online policies related terminology like to access portal/Using mail-account/Transaction etc.
- The user should be familiar with the Internet.

Assumptions and Dependencies

- The details related to the customers, policies, staff, payment and service transaction provided online.
- Administrator is created in the system already.
- Roles and tasks are predefined.
- Roles and responsibilities are already established.

3 . System Features

Registering New Users in the Database:-

3.1.1 Description and Priority

This feature will enable the new user whether he is a new customer/existing customer , new policies or existing policies, will enable him to enter his/her basic information in the database, so that the generation of profile for them may be done.

3.1.2 Stimulus/Response Sequences

This form will consist of basic fields such as Name, Username, E-mail Id, expected charge (for specific policies) , availability(with new offers)and the above including(policies). There are two buttons: Register and Reset. Register will submit the data to the database at the server tier, and as expected Reset will reset the input values of all the fields.

3.1.3 Functional Requirements

The most important requirement here is to input values in the database and store them there for future use. To implement the security and to ensure that no android is filling in the registration forms,the user has to enter the id generated during registration . If any field is left to provide the data, the system will prompt the user by using the scripts and will not submit the data until corrections/data entries are made completely.

Secure Login to the interface:-

3.2.1 Description and Priority

This feature will enable the user to have a secure and simple login to the system. To avoid handling a large number of errors and exceptions this feature will enable the user to provide only a limited number of inputs having constraints upon them and if there are any errors the system will notify the user about them.

3.2.2 Stimulus/Response Sequences

It will consist of three basic fields Username, Password and Id. There are two buttons: Login and Forgot password. Login will submit the entered data for approval followed by access, and Forgot password button will change the details of the user.

3.2.3 Functional Requirements

The most important function is to only grant access to users that are listed in the database. The customer will provide the information on who will be allowed access. To implement the security, the web page must check the database to see if the Username, Password and Id are valid. If they are not, the user will receive an "Enter correct username, password and id" as a response.

Searching for Policy:-

3.3.1 Description and Priority:

This feature will enable the user when he/she has successfully logged into the system or portal here to search for an insurance policy according to their needs and requirements. To avoid handling a large number of errors and exceptions this feature will enable the user to enter only a limited number of inputs having constraints upon them and if there are any errors the system will notify the user about them.

3.3.2 Stimulus/Response Sequences

This will consist of basic fields such as mode of policy, mode of payment (online). There are two buttons: view policies. The Search Policy button will search the database for the customers who are available in that portal .

3.3.3 Functional Requirements

The important function here is to suggest users a list of available policies according to the provided information. The user will then upon his sole discretion will select a suitable policy for him/her and will proceed to the payments to know more about the policy or to join them. If no suggestions are found then the system will return no records.

Reviewing of results:-

3.4.1 Description and Priority

This feature will enable the user to comment on the current status of their policies, of how they are performing in their provided policies.

3.4.2 Stimulus/Response Sequences

The comments are given by the admin/staff on the profile of customers so that they may see their performance.

3.4.3 Functional Requirements

The important function here is to make comments and review them accordingly and informing them about the status of their policies.

4 External Interface Requirements

a. User Interfaces

The user interface is screen shown on the browser. The Home screen of the Web-Portal is where admin, customers and staff can register and login. The portal screen acts as an interface to provide services to the user which are to be availed from the database.

b. Hardware Interfaces

A minimum of 40GB of HDD, with Pentium IV processor, a minimum of 256MB of RAM so that a suitable OS (Windows XP) may be installed, and a reliable internet connection is required for the client side/user side so that may be accessed easily.

c. Software Interface

The system uses:

- **JSP**: Java Server Pages. It is a technology that helps software developers serve dynamically generated web pages based on HTML, XML and other document types; uses java programming language.

- **Servlet**: Java web-containers which holds actions to be performed; a Servlet a java programming language class used to extend the capabilities of servers that host applications access via a request response programming model.

- **IDE NetBeans6.9.1:** IDE NetBeans6.9.1 is a platform framework for Java desktop applications.

- **MySQL:** is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is the most popular language for adding, accessing and managing content in a database.

d. Communications Interfaces

Internet connection and Browser are required in order for several functions to be executed such as downloading. The system uses the following browsers:-

- Mozilla Firefox
- Google Chrome
- Internet Explorer

5. Other Non-functional Requirements

a. Performance Requirements

Some Performance requirements identified is listed below

a. The database must be supports more than 100 policies, space for customers and customer and policies record.

b. Can support many user , policies at the same time.

c. High speed internet .

b. Safety Requirements

The policies uploaded or accessed must be for the authentic user this can be provided by there-strict communications between some areas of the program (constraints) . Policies should be accessed by intended user.

c. Security Requirements

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or
disclosure are described below. Specific requirements in this area could include the need to:

c

Keep specific log or history data sets.

1.Check data integrity for critical variables.

2.Communication needs to be restricted application is validating the user .

when the Providing Authentication.

d. Software Quality Attributes

There are a number of attributes of software that can serve as requirements. It is important that required attributes should be specified so that their achievement can be objectively verified. The following terms provide a partial list of examples

Portability

Some of the attributes of software that relate to the ease of porting the software to other host machines and/or operating systems. This may include: Java is used to develop the product. So it is easiest to port the software in any environment.

Maintainability

The user will be able to reset all options and all stored user variables to default settings.

d

Reliability

Some of the attributes identified for the reliability is listed below:

1. All data storage for user variables will be committed to the database at the time of entry.

2. Data corruption is prevented by applying the possible backup procedures and techniques.

Usability requirements

Some of the usability requirements identified for this system are listed below:

1. A logical interface is essential to an easy to use system, speeding up common tasks.
2. Error prevention is integral to the system and is provided in a number of formats from sanity checks to limiting free-text input.

Availability:

All cached data will be rebuilt during every startup. There is no recovery of user data if it is lost. Default values of system data will be assigned when necessary.

e

6. Other Requirements

Immediate Feedback:

The System must try to answer all the queries of the user and it should provide immediate feedback after getting any request from the customerss. The system must provid the illusion to the user that , they are in contact to administrator of the web-site.

Increase the Quality of the Process:

The system must increase the quality of the interface and the way of imparting policies by suggesting good policy at reasonable rate.

Make the Interface Simple as Possible:

The System must provide the simple and easy interface for beginners and also provide facilities for technical peoples who are using the system. The interface must be simple as possible.

Reduced Time:

To perform any task time is one of the important factors to consider. If the system not utilize properly time, than the entire aim of system is fails and the system is fails to reach its goal. So time take to process all these activities should be less but the output should be effective.

Appendix A: Glossary

f

Term	Definition
Database	Collection of all the information monitored by this system.
Administrator	Is a person responsible for maintaining one or many websites. The duties of the webmaster may include ensuring that the web servers, hardware and software are operating correctly, designing the website, generating and revising web pages, replying to user comments, and examining traffic through the site.

HTML	Hypertext Transfer Protocol is a transaction oriented client/server protocol between a web browser & a Web Server
HTTPS	Secure Hypertext Transfer Protocol is a HTTP over SSL (secure socket layer).
SRS(Software Requirements Specification)	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.
User	Student or tutor or parent
IDE	An integrated development environment (also termed integrated design environment, integrated debugging environment or interactive development environment) is a s oftware application that provides comprehensive facilities to computer programmers for s oftware development
Email	Electronic mail, commonly known as email or e-mail, is a method of exchanging digital messages from an author to one or more recipients

Appendix B: Analysis Models

Under the analysis model, we analyze the system to check the following:

1. Whether it meets the requirements that guided its design and development;
2. Works as expected; and
3. Can be implemented with the same characteristics.

To perform these analyses of the model, the following testing is to be implemented:-

Unit testing: Unit testing, also known as component testing, refers to tests that verify the functionality of a specific section of code, usually at the function level. In an object-oriented environment, this is usually at the class level, and the minimal unit tests include the constructors and destructors.

Integration testing: Integration testing is any type of software testing that seeks to verify the interfaces between components against a software design. Software components may be integrated in an iterative way or all together ("big bang").

Integration testing works to expose defects in the interfaces and interaction between integrated components (modules). Progressively larger groups of tested software components corresponding to elements of the architectural design are integrated and tested until the software works as a system.

System Testing: system testing is done to ensure whether the system meet all the requirements stated in the SRS.

System testing is performed on the entire system in the context of a F unctional Requirement Specification(s) (FRS) and/or a S ystem Requirement Specification (SRS). System testing tests not only the design, but also the behavior and even the believed expectations of the customer. It is also intended to test up to and beyond the bounds defined in the software/hardware requirements specification(s).

The system testing is categorized into three:

Alpha testing

Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developers' site. Alpha testing is often employed for off-the-shelf software as a form of internal acceptance testing, before the software goes to beta testing.

Beta testing

Beta testing comes after alpha testing and can be considered a form of external user acceptance testing. Versions of the software, known as b eta versions, are released to a limited audience outside of the programming team. The software is released to groups of people so that further testing can ensure the product has few faults or bugs. Sometimes, beta versions are made available to the open public to increase the feedback field to a maximal number of future users.

Acceptance testing

Acceptance testing performed by the customer, often in their lab environment on their own hardware, is known as user acceptance testing (UAT). Acceptance testing may be performed as part of the hand-off process between any two phases of development.

Appendix C: Issues List

The problems that might occur with the software product are:

It might occur that a customers searches for a particular policy but the content is not available.

During searching materials an error might occur.

No transaction is flawless. Transaction can break at multiple points during the process.

The portal is dependent on web services. Though we make every effort to ensure that services are provided on time but there is no guarantee The problems that might occur are: o Some web pages are lost . The user is looking for a specific Web page but try as they might, they can't find it.

- Web pages load slow or incorrectly. The user found the Web page he wanted but it took forever to load or things are jumping around on the page while loading.
- **JavaScript Errors.**

Forms are completely broken. After clicking submit button, an error might occur.

- Big security vulnerability. Someone to steal your login information and hack into your account
- Broken Registration Process
- Site won't load. Websites are supposed to work fine whether you type in the "www" or not. But an error might occur.