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# **Software Requirements Specification** for **Publisher Subscriber Problem**

Version 1.0

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# **1. Introduction**

## **1.1 Purpose**

The Software Requirements Specification (SRS) will provide a detailed description of the requirements for the Publisher Subscriber Problem. This SRS will allow complete understanding of what is to be expected from the newly introduced system which is to be constructed. The clear understanding of the system and its' functionality will allow correct software to be developed for the end user and will be used for the development of the future stages of the project. This SRS will provide the foundation for the project. From this SRS, the Publisher Subscriber Problem forum can be designed, constructed, and finally tested.

## **1.2 Document Conventions**

The document is prepared using LibreOffice Writer and has used the font type "Times New Roman". The fixed font size that has been used to type this document is 12pt with 1.5 line spacing. It has used the bold property to set the headings of the document. Standard IEEE template is the template used to organize the appearance of the document and its flow.

## **1.3 Product Scope**

The purpose of the product is to ease communication between Publisher and Problem solver for solving the problems on-line. Publisher will post the problems and Problem solver will solve the problems posted by Publisher.

There are two End Users for Publisher Subscriber Problem forum, User and Admin. A User can act as Publisher,Subscriber and Problem Solver.

## **1.4 References**

[http : //rubyonrails.org/](http://rubyonrails.org/)

## 2 Overall Description

### 2.1 Product Perspective

The Publisher Subscriber Problem (PSP) is a self-contained application product which will be produced by the project team in order to overcome the problems that have occurred due to the less communication by individuals. The newly introduced system will provide an easy access to the users and it will contain user friendly functions with attractive interfaces. The system will provide different functionalities to users such as posting the problem and solving the problems based on the response of publisher.

### 2.2 Product Functions

- User Registration
- Log In
- View and Edit the profile
- Posting a Problem
- Posting a Solution
- Tag based filtering
- Log Out

#### 2.2.1 Functional Requirements

Function 1	<b>User Registration</b>
Input	Name,DoB,Email>Password,Gender
Output	View Profile

Function 2	<b>Log In</b>
Input	Username, Password
Output	Home Page

Function 3	<b>View and Edit Profile</b>
Input	Adding Educational details and reviewing the activities of the user
Output	View Profile

Function 4	<b>Posting a Problem</b>
Input	Type,Subject, Description,Tags
Output	Posted Problem and Redirect to View Problem

Function 5	<b>Posting a Solution</b>
Input	Description about Problem and Attachments
Output	Solution Posted and Redirect to View Problems Page

Function 6	<b>Tag Based Filtering</b>
Input	Tags
Output	View Problems based on the Tags

Function 7	<b>Log Out</b>
Input	Onclicking log out button
Output	Destroy the session and redirect to Index Page

## 2.3 User Classes and Characteristics

### User Classes

There are two user levels in PSP.

1. Admin
2. User

## **Characteristics of User Classes**

**Admin:-** Admin will take care of Database Management and Site Management.

**User:-** User has privilege to Post the Problem, Solve the existing Problem and can view the solved problems. Problem Solver can request Publisher to solve the problem and Publisher will give access to the Problem Solver to post the solution or not.

## **2.4 Operating Environment**

### **At client:**

Browsers like Google Chrome, Mozilla Firefox, Safari etc..;

### **At Server:**

The application will be deployed on mysql2 which supports Ruby on Rails applications .

## **3 External Interface Requirements**

### **3.1 User Interfaces**

#### **1. Index Page:**

This page will display all the necessary details of the Publisher Subscriber Problem.

#### **2. User Registration :**

This page will allow user to enter their personal details viz. Name,Gender,Phone, Email,DoB,Password .

It contains 'Register' button which will Register the User on the website and on Clicking the Register button, User will be Redirected to View Profile Page.

#### **3.Log In Page :**

This page will allow user to enter their login credentials viz. User Name and Password.

It Contains 'Log In' button which will redirect to User Homepage.

**4. View Profile Page :**

This page is responsible to view all the User details. It contains two buttons 'Edit\_Profile' and 'Home'. On clicking 'Edit\_profile' button, User will be shifted to Edit Profile Page and On Clicking 'Home' button User will be redirect to User's Home page.

**5. Edit Profile Page :**

This page will also show the details entered by user at the Registration time . User can enhance its profile by adding more details such as its Interests, Education details, skills etc.

**6. Users Homepage :**

This page contains shows User its activity viz Problems Posted, and some details about Post a Problem, View Profile, Edit Profile ,Logout.

On Clicking a Particular problem User will be redirect to View Problem Page.

**7. Post a Problem Page :**

This page will allow User to Enter the necessary details about the problem viz. Type, Subject, Description, Tags, Payment, Group/Individual, Links, and Images. Out of which some are optional. After entering the details User will be redirected to View Problem Page for the Problem he/she just Posted.

**8. View Problem Page :**

This page will show show all the details about the Problem in a brief manner and the solutions posted.

**9. Post Solution Page :**

This page will contain all the fields to post the solution such as Type, Subject, Description, Tags, Payment, Group/Individual, Links, and Images. Out of which some are necessary and some are optional.

**10. Users Page:**

On Clicking a Username or by searching a Username, user will be redirected to view profile page of the particular user.

## 4 System Features

### 4.1 ER Diagram

