

Software Requirement Specification (SRS) for Recruitment Portal (RP)

1 Introduction

1.1 Purpose

Recruitment Portal (RP) is intended to digitize the faculty application process, wherein all the details of faculty are captured using a web portal. This document is meant to delineate the features of RP, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other.

1.2 Scope

We describe what features are in the scope of this software and what are not in the scope of this software to be developed.

In Scope:

1. User authentication through Google API.
2. Managing the application before and after submission.
3. Facility to update attachments like CV and the list of publications while retaining previous versions.
4. Automatically sending emails to the referees mentioned by the applicant.
5. Minimal responsive web design

Out of Scope:

1. Change of status of application (in-progress, under-review) can't be shown.
2. Verifying the data entered by an applicant.
3. Giving alerts to the user, whenever sensitive data or application data are changed.
4. Provision to update attachments once the application is submitted.
5. Tracking applicant's login and data change details.
6. Any changes or security issues associated with Google API.

1.3 Definitions, Acronyms, and Abbreviations

Acronyms and Abbreviations

- a. RP: Recruitment Portal
- b. SRS: Software Requirements Specification
- c. GUI: Graphical User Interface
- d. CV: Curriculum Vitae
- e. DBLP: Digital Bibliography Library Project

Definitions

- a. Applicant: A remote individual who wants to apply for a faculty position at IITH
- b. Interface: HTML webpage rendered by our software
- c. Application: An online form that the interface presents.
- d. Referee: A remote individual mentioned by the applicant in his/her application under the references section.
- e. DBLP: An online service that provides open bibliographic information on major computer science journals and proceedings.

1.4 Overview

The rest of this SRS is organized as follows: Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed. Section 3 gives specific requirements which the software is expected to deliver. Functional requirements are given by various use cases. Some performance requirements and design constraints are also given.

2 Overall Description

2.1 Product Perspective

RP is aimed toward a person who would like to apply for the position of faculty at IITH, and so needs software assistance for storing and reviewing the data in the application. RP should be user-friendly and reliable software for the above purpose. RP is a stand-alone product. It depends on the functionality of Google API. It should run on UNIX, OSX and Windows based platforms. And multiple users should be able to use the service simultaneously at a time according to their convenience.

2.2 Product Functions

RP should support the following use cases:

Class of use cases	Use cases	Description of use cases
Use case related to system authorization	Login	Login to RP
Use cases related to entering data/info	Uploading photo	Uploading photo in application
	Uploading signature	Uploading image in application
	Uploading documents	Uploading CV/Teaching statement/Research Statement in the application
	Uploading Referee Details	Uploading email,name,designation,address of referee in the application
Use case related to Updating Data	Updating documents	Updating CV or research statement in the application
Use case related to Information display	Display Profile	Display information entered so far

2.3 User Characteristics

- a. The user should be familiar with the terminology like dblp and CV.
- b. The user should have a google account and internet connection.

2.4 Principal Actors

The principal actors in RP are “user” and ”system”.

2.5 Assumptions and Dependencies

- a. Working of RP is dependent on the availability of Internet connection.
- b. The user needs to have a google account to login to RP.

3 Specific Requirements

3.1 Functional Requirements

We describe the functional requirements by giving various use cases.

Use cases related to system authorization:

Use case 1: Login

Primary Actor: User

Pre Condition: User has a google account and Internet connection is available

Main Scenario:

1. Start the application.
2. User is prompted for login and password through google api.
3. User gives the gmail address and password.
4. System does authentication through google api.
5. Applicant’s application is displayed.

Alternate Scenario:

- 2(a). Authorization fails due to invalid gmail address.
 - 2(a) 1. System asks user to enter valid gmail address.
- 4(a). Authorization fails due to incorrect password.
 - 4(a) 1. System asks user to enter correct password or change password.

Use cases related to data entry:

Use case 2: Uploading photo

Primary Actor: User

Pre Condition: User should be logged in and Internet connection is available

Main Scenario:

1. User selects option to upload photo.
2. System asks user to upload photo from local system.
3. User selects photo to upload.
4. System uploads photo.

Alternate Scenario:

- 4(a) Photo is not of png/jpg/jpeg format.
 - 4(a) 1. System displays error and asks user to upload file of png/jpg/jpeg format.
- 4(b) Photo doesn’t satisfy size requirements.
 - 4(b) 1. System displays error and asks user to upload photo of specified size

Use case 3: Uploading signature

Primary Actor: User

Pre Condition: User should be logged in and Internet connection is available

Main Scenario:

1. User selects option to upload signature.
2. System asks user to upload signature from local system.

3. User selects signature to upload.
4. System uploads signature.

Alternate Scenario:

- 4(a) Signature is not of png/jpg/jpeg format.
 - 4(a) 1. System displays error and asks user to upload file of png/jpg/jpeg format.
- 4(b) Signature doesn't satisfy size requirements.
 - 4(b) 1. System displays error and asks user to upload signature of specified size

Use case 4: Uploading Documents

Primary Actor: User

Pre Condition: User should be logged in and Internet connection is available

Main Scenario:

1. User selects option to upload document.
2. System asks user to upload document from local system.
3. User selects document to upload.
4. System uploads document.

Alternate Scenario:

- 4(a) Document is not of pdf format.
 - 4(a) 1. System displays error and asks user to upload file of pdf format.
- 4(b) Document doesn't satisfy size requirements.
 - 4(b) 1. System displays error and asks user to upload document of specified size

Use case 5: Uploading Referee Details

Primary Actor: User

Pre Condition: User should be logged in and Internet connection is available

Main Scenario:

1. User enters referee details and clicks on submit.
2. System uploads referee details.

Alternate Scenario:

- 2(a) Number of referees is less than 3
 - 2(a) 1. System displays error and asks user to enter atleast 3 referee names.
- 2(b) Referee email address is not valid.
 - 2(b) 1. System displays error and asks user to enter valid email address.

Use cases related to updating data:

Use case 6: Updating CV/Research Statement

Primary Actor: User

Pre Condition: User is logged in and Internet connection is available

Main Scenario:

1. User selects option to update document.
2. System asks user to upload document from local system.
3. User selects document to upload.
4. System updates document.

Alternate Scenario:

- 4(a) Document is not of pdf format.
 - 4(a) 1. System displays error and asks user to upload file of pdf format.
- 4(b) Document doesn't satisfy size requirements.
 - 4(b) 1. System displays error and asks user to upload document of specified size

Use cases related to Information Display:

Use case 7: Display Profile

Primary Actor: User

Pre Condition: User has submitted application and Internet connection is available

Main Scenario:

1. User selects option to view profile.
2. System displays the data entered by the user in the application

3.2 Performance Requirements

- a. 90% of the responses should load in 2 seconds.
- b. RP should be able to handle multiple users simultaneously.

3.3 Design Constraints

- a. Tolerance against data race: Data should be correctly maintained even when multiple users are operating simultaneously.
- b. Fault Tolerance: Data should not become corrupted in case of system crash or power failure.

3.4 External Interface Requirements

The user screen is split vertically into two panes. The left pane shows the different sections of the application, which expands and contracts as per user action. The right part displays the information related to section that is specified on the left pane.

4 Future Extensions

- a. RP doesn't support storing data if the user hasn't saved the application. The user has to again start filling details from the beginning. One extension is to make sure that this is supported.