
SOFTWARE REQUIREMENTS SPECIFICATION

for

SKILL MANAGEMENT APPLICATION

Version 1.0

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1 Introduction

This software is intended to be used by Skilled workers in each district of the State Jharkand. which includes registration of Skilled workers, storing their Academic and Work Experience details into the system and then suggest appropriate Job Notifications According to their Qualification and Work experience. This software connects Skilled workers to the respected Job rules in in different companies.

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the “Skill Development” software application. It will illustrate the purpose and complete declaration for the development of the system. It will also explain system constraints, interface and interactions with other external applications. Unless otherwise stated, all requirements specified here are high priority and committed for release version 1.0.

1.2 Project Scope

This software take unemployed workers details,skills and work experience and suggest appropriate Job notifications,which are being required by other companies,to workers.This application only connects the skilled labour to the respected job roles.And there will be training for the Skilled labour according to the their performance in mock tests.

1.3 Document conventions

The document convention is very simple. All major section headings are in bold. Hyperlinks are indicated by blue.

1.4 Definition , acronyms , abbreviation

UID - User identification number

OS - operating system

API - application programming interface

S/W - software

H/W - hardware

ROM - read only memory

RAM - random access memory

SRS - software requirements specifications.

1.5 References

IEEE standard template for IEEE standard
Fundamentals of Software Engineering by R.Mall

1.6 Overview

The Rest of the document examines the comprehensive specification of Training Application. Section 2 of the SRS present the implementation of Strategies, guidelines to be followed, development process goes under how many phases? What will be the input to that phase? And what would be the expected output?, why it is necessary to go through these phases?. Section 3 is an answer to the question such as what is Training Application? What are the functions? Which functions make this product useful and different from other?, while as, why this product is necessary to be developed?, and ultimately who is going to use this system?. Section 4 is a detail discussion of requirements of functions of perspective users. Next, section is going to deal with the boundary or limitation and constraint within which product must perform well. Final Section is a concise study of the behaviour of system.

2 Overall Description

This software is designed to connect Skilled unemployed Workers with the respected companies. There will be three months mega training for the skilled workers. After that we will provide placements.

2.1 Product Perspective

This application software analyses the User details and connects them with the appropriate job roles. Users will enter details of their Qualifications and work experience based on which application will suggest appropriate job notifications. Application also manages their performance by providing training and conducting mock tests.

2.2 Product Functions

- Trainee module(profile,login)
- Training center admin module(profile,login)
- Trainer(profile,login)

2.3 User class and characteristics

The user has to give details of his qualification and work experience. User should be notified if there will be appropriate job notifications.

Training center Admin can add/ remove users according to their performance. 2. Users will get notified from the training centers according to their schedule.

2.4 Design and implementation Constraints

2.4.1 S/W requirements

- Front end (for web): java Script, react, css, html
- Front end (for android): kotlin, xml
- Back end : php (laravel)

2.4.2 H/W requirements

- OS : windows/ mac OS version higher than windows XP and android version
- Server
- RAM : 200 MB for smooth functioning on android
- ROM : 250 MB on android
- keyboard : standard qwerty keyboard for input
- mouse: standard mouse
- display screen

2.4.3 communication interface

API : An API helps in communication between the application and server.

OS : An operating system acts as a communication bridge (interface) between the application and computer hardware.

2.5 Assumptions and dependencies

Roles and tasks are predefined.

The Administrator is already created in the system.

3 Specific Requirements

3.1 Interfaces

3.1.1 User Interface

- Responsive images and font size which must be readable clearly.
- Login/ sign up page for both users and training centers.
- Training center admin can add,remove and view the performance of user.
- Main page contains link to different features of application like
 - Skills to learn
 - Success stories
 - Exams and Notifications

3.1.2 Software Interface

the languages used to develop the application are html, css, java script, react js, kotlin, xml, php. S/W requirements are specified in detail in section 2.4.1 of srs

3.1.3 Hardware Interface

H/W requirements have already been specified in detail in section 2.4.2 of SRS.

- We need a system with Pentium processor
- 1GB RAM for PC
- Android version higher than 5.0 with ram of 512 MB
- For android application LAN/ WiFi for internet connectivity

3.1.4 Communication Interface

- OS
- API

3.2 Functional requirements

3.2.1 admin

Admin has to send essential notifications to respected users. And he can view the report of every user

3.2.2 Trainee registration(sign up/ login)

Users have to register themselves and have to provide their qualification and work experience. They have to submit their details for training.

3.2.3 Training center registration(sign up/login)

The registration of the Training centers will be done by the done by the respected Admins of respected Training centers. They have to provide the details of their training centers and What are the skills they are going to teach. There will be Government training centers and private training centers. If it is Government training centers then they have to enter unique identification number provided by the Respected departments.

The Admin of training center should regularly update schedule of the training center. And admin should notify the things if there will special sessions will happen.

Admin can monitor performance of every user, who is taking training in his training center. And he can assign task tasks according to the user.

The application will be able to display report of user if admin of training center enters the UID of the user.

The admin of the training center can add trainer at any time. Where Trainer has to register first and he will be added in to the respected training center.

Trainer also can schedule their classes and notify the students whenever he is taking classes. And he can also share his material in the web application.

3.2.4 trainer(register/login)

Trainer has to register and he has to add too be any training center. He can schedule his classes and send messages to trainees. He may upload his study material in the application..

3.2.5 Data analysis and prediction

The application can predict the employment ratio in the state easily. It will inform the respected departments to take severe actions on the respected areas.

This application provides the users which center is has best rating and faculty in the

training center. So they can choose their likely training center.

3.3 Nonfunctional Requirements

This software should perform the same way irrespective to its Operating System environments. Time taken for importing files and publishing the multimedia presentation should be minimum.

3.3.1 Safety Requirements

This requirement does not apply for our software as this is can't pose a threat in no way.

3.3.2 Security Requirements

As all the operations are to be done within a single system security is not an issue for this software.

3.3.3 Performance Requirements

The primary performance requirement is speed of internet network so that the updates to database done elsewhere are accessible in real time. In case of large number of users accessing the database at once, the speed at which updates are refreshed might go down due to traffic.

3.3.4 Software quality Attributes

Availability

The users should be able to download/access the software if they have basic internet connection.

reliability

Unforeseen calamities like power shortage or system crash will not cause data loss.

Portability

It can be accessed by internet browser on any device, like personal computers/ laptops/ mobiles/ tablets having internet connection.

Maintainability

software updates will be done every few months to maintain smooth running of the software.

Security

There should not be any data leak. The stored data should be accessible only by the authorised personnel.

Modifiability

The Application is not open source and hence can not be modified without developers consent.

Data integrity

The system shall maintain data integrity by keeping backups of all updates to the database for every record transaction.

4 Other Requirements

"SKILL MANAGEMENT" needs maintenance as it is a long process software. It will need re-factoring and further the requirements can be changed as the field is changing frequently.