Software Requirements Specification

for

Job consultancy firm

Prepared by:

Surya Shekhar Chakraborty 14BCE0853

Sarthak Arora 14BCE0089

Anurag Pant 14BCE0090

VIT University, Vellore

20th February, 2017

Table of Contents

| 1. | 1. Introduction | | | | | |
|------------------------------------|------------------------|--|--|--|--|--|
| | 1.1 | Purpose | | | | |
| | 1.2 | Intended Audience and Reading Suggestions | | | | |
| | 1.3 | Product Scope | | | | |
| | 1.4 | References | | | | |
| 2. Overall Description | | | | | | |
| | 2.1 | Product Perspective | | | | |
| | 2.2 | Product Functions | | | | |
| | 2.3 | User Classes and Characteristics | | | | |
| | 2.4 | Operating Environment | | | | |
| | 2.5 | Design and Implementation Constraints | | | | |
| | 2.6 | Assumptions and Dependencies | | | | |
| 3. External Interface Requirements | | | | | | |
| | 3.1 | User Interfaces. | | | | |
| | 3.2 | Hardware Interfaces | | | | |
| | 3.3 | Software Interfaces | | | | |
| | 3.4 | Communications Interfaces | | | | |
| 4. System Features | | | | | | |
| | 4.1 | A registration portal | | | | |
| | 4.2 | A login module for candidates | | | | |
| | 4.3 | A login module for the administrators | | | | |
| | 4.1 | A search module for the administrators | | | | |
| 5. | Nonfi | unctional Requirements | | | | |
| • | 5.1 | Performance Requirements | | | | |
| | 5.2 | Security Requirements | | | | |
| | 5.3 | Software Quality Attributes | | | | |
| | 5.4 | Business Rules | | | | |
| 6. | Appe | ndix A: Glossary | | | | |
| | . Appendix B: Schedule | | | | | |
| | ALDIO. | ≠±₩±₭₷ ₽₹ ₩₩±₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩ | | | | |

1. Introduction

1.1 Purpose

Our objective is to create a centralized web portal for an IT Consultancy Firm. This will help the firm maintain and update a database of job-seekers and their qualifications (in the form of resumes). This will facilitate the firm to reach out to clients, who will typically be agents from companies, ranging from well-established corporations to fledgling start-ups, and connect them to job-seekers with matching profiles. The matching will be done based on a variety of criteria, including but not limited to their qualifications, technical abilities, years of experience, geographical proximity to the client, and so forth.

1.2 Intended Audience and Reading Suggestions

This document is intended for developers of this project.

1.3 Product Scope

Clients will be able to hire, and candidates will be hired based on their credentials. As the consultancy firm, Job consultancy firm would charge a small fee for every candidate interviewed by the clients.

1.4 References

The resources we referred to for inspiration and ideas are:

- i. www.internshala.com
- ii. www.vhire4u.com
- iii. www.naukri.com

- iv. www.monsterindia.com
- v. www.schoology.com
- vi. www.elitmus.com
- vii. www.dice.com
- viii. www.cse.mse.edu
 - ix. www.ieeeexplore.ieee.org
 - x. www.scribd.com/document/36580099/ED-SRS-Textbook-20061009

2. Overall Description

2.1 Product Perspective

This is a standalone portal for a consultancy website.

2.2 Product Functions

This portal will allow:

- i. Candidates to enter and update their job profiles and other personal details
- ii. Administrators to access and view the database

2.3 User Classes and Characteristics

The different user classes are:

- i. Job seekers who will regularly update their personal and professional profiles
- ii. Employed candidates who might still be looking for jobs
- iii. Candidates who have been hired
- iv. Administrators who want to query the database

2.4 Operating Environment

Hardware specifications:

i. Processor: Intel i5

ii. Processor speed: 3.20GHz or higher

iii. RAM: 8GB or higher

iv. Hard disk: 500GB or higher

Software specifications:

i. Language: HTML, CSS, JavaScript, PHP

ii. Database: MySQL

iii. Operating System: Windows 7 or higher, or Linux

iv. Office suite: Microsoft Office 2010

2.5 Design and Implementation Constraints

The constraints we have are:

i. Server space is limited, so too many users may crash the server.

2.6 Assumptions and Dependencies

Assumptions:

 The administrator will be able to reliably understand client requirements and interpret the database accordingly.

3. External Interface Requirements

3.1 User Interfaces

When a user opens the website of our portal, they will be asked if they want to go for the candidate login or the administrator login.

After making their choice, they will be prompted to enter their username and password.

Once they enter their correct username and password, they will be routed to the correct home page, depending on whether they are going for the candidate login or the administrator login.

In the administrator login, there will be a search box where the administrator can enter his search terms (e.g. PHP developer, 3 years of experience, etc). Once he clicks on 'search', the portal will display a tabular list of candidates fitting the bill, along with their details.

In the candidates' login, they will only be able to view and update their personal and professional details.

3.2 Hardware Interfaces

Since ours is a web based application, it can be accessed from computers with basic hardware. It has no specific hardware requirements. The basic requirements are:

- i. Keyboard, for keying in the details
- ii. Mouse, for navigation
- iii. Monitor, for viewing

3.3 Software Interfaces

The software interfaces are as follow:

i. MySQL: Database management system

ii. Google Chrome browser: To support HTML and CSS design

iii. PHP: Deployment of application

iv. VAM server: To emulate a web server

3.4 Communications Interfaces

The communication interface we are using is HTTP.

4. System Features

The following are the major **functional requirements** of our portal:

4.1 A registration portal

This portal will be used for candidates to sign up.

A job consultancy portal, developed by Anurag, Sarthak, and Surya, 2017.

- Candidates will first have to enter their personal details, such as Name, Date of Birth, Address, and so on.
- Candidates will then have to enter their professional details, such as Skillset, Years of Experience, Employment Status, and so on.

4.2 A login module for candidates

Candidates after signing up, can login through this portal.

- i. He can update his resume.
- ii. He can change his employment status.

4.3 A login module for the administrators

Administrators will have a login to be able to access the entire database of candidates registered on the portal. Administrators will be added manually from the backend, and thus they do not need a registration portal.

4.1 A search module for the administrators

This module, which the administrator will land on after logging in, will allow him or her to search for candidates fitting the clients' requirements based on his search filter(s).

5. Nonfunctional Requirements

5.1 Performance Requirements

The performance requirements are as follow:

- i. There should be no runtime errors.
- ii. Retrieval time from database should be low.

5.2 Security Requirements

The following security requirements are enforced:

- i. The database of candidates is kept private and is accessible only by the administrator.
- ii. The client requirements are also kept private and are visible to administrators only.
- iii. Passwords are well encrypted.

5.3 Software Quality Attributes

The following are the quality attributes of our portal:

- i. Reusability: Because our portal can be remodeled to make other similar portals too.
- ii. Interoperable: Because our database can be operated for other purposes.
- iii. Reliability: Because our database is well protected.
- iv. Adaptability: Because our portal can be accessed on different portals.

5.4 Business Rules

- i. Only the administrators can view and/or modify the entire database of registered candidates.
- ii. The client will not be allowed access to our database.

6. Conclusion

This Software Requirements Specifications document starts off with the idea of the product, its vision and scope. We observe that the product we are developing is scalable. Following this, we describe the overall product and its different components, including the people who would be using it, what they would use it for, and so on. We follow this with the external requirements which encompass the hardware and software that our product would require for running smoothly. The functional and non-functional requirements of this product are enumerated following the external requirements. Functional requirements define the specific functions of a system or its components, whereas nonfunctional requirements are requirements that specify criteria that can be used to judge the operation of a system, rather than specific behaviors.

7. Appendix A: Glossary

- i. Administrator: Employees of the portal, who will be the middlemen between candidates and clients. Only administrators are allowed to view the database of candidates.
- ii. Candidate: Any person who has registered himself on this portal.
- iii. Client: A person who approaches the administrator, looking to hire employees for his firm from the candidate pool.

8. Appendix B: Schedule

| Task Name | Start Date | Duration | Finish Date |
|-----------------------------|------------|----------|-------------|
| Requirement Analysis | 06-01-17 | 24 | 29-01-17 |
| Design | 30-01-17 | 11 | 09-02-17 |
| Implementation/Coding | 10-02-17 | 21 | 02-03-17 |
| Testing | 03-03-17 | 28 | 30-03-17 |
| Verification and Validation | 31-03-17 | 14 | 13-04-17 |
| Release Version | 14-04-17 | 6 | 19-04-17 |

