

Addis Ababa Institute of Technology

Center of Information Technology

And Scientific Computing

SRS Sirafelagi.com

Group Members:

Abebe KiyamoATR/9006/08	
Mikiyas TonjiATR/8137/08	
Etsegenet MeleseATR/8845/08	
Eyosiyas DestaATR/3173/08	
Kena WakwoyaATR/4296/08	
Kalkidan GetenetATR/6219/08	3
Melkam BeyeneATR/3392/08	,

Advisor: Nathnael

2018

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	e Printed	l Name Title	Date
		Lead Software Eng	j.
	Nathnael	Instructor	

Table of Contents

Introduction	2
Objective	
Scope and Limitations	
Limitation	
Target Audience	2
Proposed system	1
product perspective	
product function	4
user characterstics	
General constraint	
Assumption and Dependencies	
Functional Requirement	2
Non-Functional Requirements	6
Performance Requirements	6
Security Requirement	
Maintainability	
Usability	
Use Case Model: Use Case Diagram	8
Use Cases	9
User Interface Prototypes	1
Glossary	
Index	
List of tables	
Table 2 : functional requirement 2	2
Table 2 :Tunctional requirement 2	.3
Table 3: functional requirement 3	4
Table 4: functional requirement 4	4
Tuote 1. Tuilettoilai requirement 1	• • • •
	4
Table 5: functional requirement 5	4
Table 6: functional requirement 6	4
*	
Table 7 : functional requirement 7	.5

Table 8: functional requirement 8
Table 9 : functional requirement 95
List of figures
Figure 1: Home page user interface
Figure 2: Log in page user interface
Figure 4: job seeker home page14
Figure 5:employer home page15
Figure 6:registration page for job seeker
Figure 7:Registration page for Employer
Figure 8:use case diagram7

Abbreviations

UC-USE CASE

SRS- Software requirements Specification

HTTPS – Hyper Text Transfer Protocol Secure

Fr -Functional requirement

Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included. We have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Introduction

Objective

This document is a software requirement specification document regarding applying job system. The main objective of the project is in order to develop searching and applying job for users. This section gives a scope description and overview of everything included in this SRS document.

Scope and Limitations

Our software product is sirafelagi.com Android application.

- The system gives an opportunity for applicants to easily access a job opportunity without going to the office for searching vacancy advertisement on papers and other advertising materials and also they are not supposed to go other cities like Addis Ababa for the sake of vacancy advertisement.
- Applicants can apply and search for the job vacancy from where ever they are by using the application .
- applicants able to get notification about their application if they apply for the job.

Limitations

- The system can't verify the documents of applicant's weather it is acceptable (real) or fraud without the intervention of the admin.
- Again the system can't verify the organizations that posts a vacancy advertisement for applicants weather they are authorized organizations or not.

Target Audience

The purpose of this SRS document is to give readers detailed information about the project structure which includes descriptions and requirements of the project. After reading this document it is expected that the reader has a clear understanding of what the project is about as a whole, the purpose of the project and how the delivered software is supposed to meet its requirement. The main purpose of this SRS document is to identify and elaborate what is going to be developed for the project. All development of the project must be based on this document. And, the document will be used as back bone for all next steps taken in progress of the project. This SRS document itself states function and capabilities a software system must provide as well as states any required constraints by which the system must abide.

Proposed System

Product Perspective

This system is android application which used to search, view updated job vacancy and apply job. Our system is not the first for our country there are other system in Ethiopia that are used for finding job easily.

Employethiopia.com is the one from the existed system in Ethiopia. It is free online platform open for employers and job seekers to post, search, and apply for job online.employethiopia.com is now an integral part of people's lives in Ethiopia when it comes to job search.

Product Functions

This system provide function

- ✓ search for job.
- ✓ apply for job.
- ✓ registration.
- ✓ post updated job vacancies.
- ✓ The system enable user to be notified for the latest vacancy of jobs.

User Characteristics

In this system there are two types of user this are the job seeker and employer. Each of the users have a different approach to use the system so they each have different requirement of their own to fulfill.

The job seeker can use the system to search, register, apply for job. The employer can use the system to post updated job vacancy, to view applicants and to update job.

General Constraints

Safety and security constraints: The users shall register to the system using their email accounts and phone number to make sure that only interested users are registered. This is also important to verify that no one has been registered more than once in the system. And also the system can be able to maintain users profile secure. Language constraints: Although the application is envisioned to be used in Ethiopia at all, this system targets on user that live in internet coverage area. Having this in consideration we expect them to have basic knowledge of internet.

Assumptions and Dependencies

For the android application however, it is assumed that the user is familiar with an android application and also with handling basic android device. As we mentioned in the above this system is based android there will be a need of our application has to be installed on their android device and it is assumed that the user has access to decent internet connection. The system shall function on a android device that satisfies the computer hardware specification mentioned. The system will be able to run in any android device. The system is going to use MySQL database management system (DBMS).

The limitation on the client side would be their android device that can operate all the new features At server side the hardware's must have a better performance to retrieve data fast from their database, so there must be computers which attain the latest technology the world is using.

Functional Requirements

Functional Requirement 02

ID	FR:02
Name	notification
Summary	Send message to user as notification
Description	The employer sends notification for the job
	seeker
Reference	UC-02

Functional Requirement 03

ID	FR:03

Name	Update any job
Summary	Add/delete/edit/approve/disapprove the job
Description	Employer control all over the posted job can add, remove and edit
Reference	UC-02

Functional Requirement 04

ID	FR:04
Name	apply for a job
Summary	Apply for job to compute
Description	Employee apply for the posted job to be
	competent
Reference	UC-02

Functional Requirement 05

T	
ID	FR:5
Name	search jobs
Summary	Search jobs if there is employee's want
Description	Employee search job to get there want and best
	job
Reference	

Functional Requirement 06

ID	FR:6
Name	view applicant history from profile
Summary	View applicant history to filter from competent
Description	Employer use the applicant history to select the
	competent
Reference	UC-02

Functional Requirement 07

ID	FR:07
Name	Post jobs with detailed job description
Summary	Post the jobs for employee to notify vacant
	space
Description	The employer post jobs to notify for the user
	and the employee to know the vacant space to
	apply on it
Reference	UC-02

Functional Requirement 08

ID	FR:08
Name	Register
Summary	Register the employee and job seeker to
	participate on the system
Description	The system register the job seeker to apply
	The system register employer to post the
	updated job
Reference	

Functional Requirement 09

ID	FR:09
Name	Reset password
Summary	Reset forgotten password
Description	The system allow a user to reset pervious password with a new one
Reference	UC-02

Non-Functional Requirements

Performance

There shall be no immediate delays in between different actions performed by the users. The users of this android application who have an internet connection should be able to load every page within 5 seconds. Opening new windows, clicking buttons and dismissing pop-up messages shall take less than 3 second on both the server-side and client-side version of the software. On the server-side application, accessing the database; whether it is for adding, deleting, searching or displaying information shall take no more than 2 seconds.

Reliability

This application is reliable and it should generate all the updated information in correct order.

Data as entered must be correctly stored in the database. In addition, the database should use transactions so that partial entries is not stored in the database.

Availability

The system should be highly available around the clock except for the time required for the backup of data.

Security

- The application will allow only valid users to access the system.
- Users of the server-side application shall be assigned to different levels of groups. The groups will be Administrator accounts, Authorized User account and Limited Accounts. The security is based upon the individual user ID and Password.
- Authorized users will have the same permission as the administrators except they won't have access to the different groups. Authorized users will be responsible for maintaining the employee information database.

Maintainability

The installation and operation manual of examination management system will be provided to user.

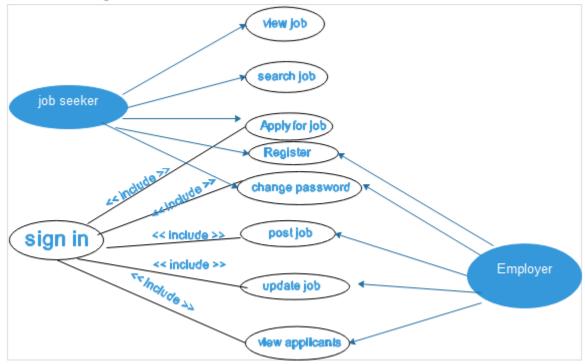
This program is written with future improvements in mind. The program shall be easy extend and the code shall be written in a way that makes it easy for new functionalities to be implemented in the future.

Portability

The application is portable on any operating systems like android device and Windows.

Use Case Model: Use Case Diagram

Use Case Diagram



USE CASE #1

Use case: UC-01

use case name :apply for job

Goal: users enable to apply for job that are posted on the web site

Primary actor: job seeker

Pre condition: uc-02 are performed

Post-condition: the job seeker information added to the list of competent

database if the user fulfills the qualification

Trigger: to get job

USE CASE#2

Use case: UC -02

use case name: Register

Goal: todo what they to do in the site

Primary actor: user

Pre-condition: none

Post condition : the information will be added to the database

Trigger: To become the partner of the website for the seek of their

benefit

Main success scenario

- 1. When the user select to register the next window is displayed
- 2. The system will display the registration form.
- 3. The user selects what type membership the user want to be.
- 4. The system prompts basic information about the user.
- 5. The user fills all required information.
- 6. The user submit information.
- 7. The system will verify that the user is not previously registered and display Confirmation dialog.
- 8. The system stores the user information.
- 9. The system display success message.

Extensions:

6a.connection to the database server fails.

6a1. Prompt the user to retry or cancel the operation.

7a. The user is previously registered

7a1. The system display that the user is already registered.

7a2. the user acknowledges the information and resume.

USE CASE #3

Use case: UC-03

Use case name -post job advertisement

Primary actor - employer

Goal - the employer sends a job to be posted on the web site to the authorized personnel.

Pre-condition - use case 02 must be performed.

Post-condition- the job sent by the employer will be posted in the system if it is verified by authorized personnel.

Main success scenario

- 1. the employer clicks to send vacant job
- 2. the system will display the job advertisement form
- 3. the user will fill the required information
- 4. the user will submit the information

- 5. the system will displays the confirmation message that the advertisement is successfully sent.
- 6. the user sent the job advertisements to the authorized personnel.

Extension

3a. the database fails to work

3a.1 the system will display the message that the information is not sent 3a.2 resumes @ 3

USE CASE #4

Use case: UC-04

Use case name: Reset password

Goal: reset users password

Primary actor: users, authorized personnel **Precondition**: users must have an account

Post-condition: the system resets the current password

Trigger: The users forgot their passwords

Main success scenario

- 1. The user clicks on forgot password link
- 2. The system request user to fill the email
- 3. The user enters the email and clicks reset password
- 4. The system sends reset link to the provided email
- 5. The user clicks on reset link
- 6. The system displays a new password form
- 7. The user follows the link and sets a new password

Extensions

7a.The user enters an incorrect email address 7a.1 the system requests to enter again

USE CASE #5

Use case: UC-05

Use case name: Send notification
Goal: Send notification for the users.
Primary actor: Authorized personnel.

Precondition: use case login must be performed.

Post-condition: users should be notified whether for examination day.

Trigger: The authorized personnel has a need to notify users.

Main success scenario:

- 1. The Authorized person clicks on send notification button.
- 2. The system prompts the type of user the notification needs to be sent.
- 3. The authorized person selects from the type of users.
- 4. The users
- 5. The authorized person fills the form and clicks the send button
- 6. The system displays a confirmation.

Extension:

6a. The database server fails to work.

6a.1The system goes back to the option to add the examination.

USE CASE #6

Use case: UC-6

Use case name: View an applicant

Goal: view his or her quality.

Primary Actor: Authorized person.

Pre-condition: Login use case must be performed

Availability of connection.

Post-condition: Authorized person viewed an applicant

Trigger: Authorized person wants to give a rate for the user.

Main Success Scenario:

- 1. The authorized person searches for an applicant he wants to view.
- 2. The System displays list of applicants based on the search.
- 3. The authorized person selects from the list he/she wants.
- 4. The system shows up all the information of the applicants.
- 5. Patron reviews the book based on a rating system or by adding a comment

Extensions:

- 2.a Required applicant doesn't exist
 - 2.a.1 System shows that the applicant is not does not exist in the system.

USE CASE #7

Use case: UC-7

User Case name: Sign In

Goal: Signing into his/her respective account

Primary Actor: Authorized person, employer, job seeker;

Precondition: Register use case must be fulfilled.

Post condition: The system lets the actor to enter to his/her respective level.

Trigger: The actor needs to log into the system.

Main Scenario

1. The system requests that the actor enters his/her name and password.

2. The actor enters his/her username and password.

3. The system verifies the entered username and password and logs the actor into the system.

Extension

3.a Wrong username or password entered.

3.a.1The system instructs the actor to try again.

USE CASE #8

Use case: UC-08

Use case Name: View Job Primary Actors: Job seeker

Goal: User can view different job advertisements

Pre-condition: None

Post-condition: If the user needs and fulfills the requirement he/she

performs UC-01

Trigger: to apply for the job advertised

Main success scenario

- 1. The user visit our site the user can view job advertisement
- 2. The user clicks the "more" link the user can see the detail information about the job
- 3. If he needs and fulfils the requirement he can perform UC-01

USE CASE#9

Use Case:UC-13

Use case name: Change Password

Primary Actor: employer, job seeker, authorized person

Goal: Changing the existing password by a new one

Precondition: Actor is logged in.

Post condition: The system replaces the password of the actor **Trigger:** The actor has a need to change the existing password

Main Scenario

- 1. Actor selects the change password option
- 2. The system prompt the current password and the new password
- 3. The actor enters both his/her current and new password
- 4. The system request the actor to re-enter the new password
- 5. The system matches the password and display confirmation message

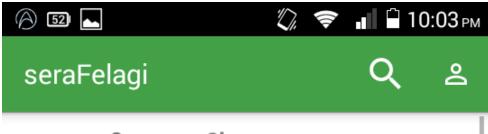
Extension

5.a The re-entered password doesn't match with the earlier password

5.a.1 The system notifies the actor to re-enter his/her new password again.

User Interface Prototypes

Home page user interface







Job title: Network Operator

This idnf adf aodifna fkadafa adfa adfefw adfadfa dfadf ever and join and apply for it right now

Posted on: 12/10/18

Company: Oasis



Job title : Manager

This akdf aoidnf adf aodifna fkadoifna faoindfjob ever and join and apply for it right now

Posted on: 13/10/18

Company: Tikur Ambesa



Job title: Clinical Nurse

This aodifna fkadoifna faoindfjob ever andThis aodifna fkadoifna faoindfjob ever and join and apply for it right now

Posted on: 14/10/18

Company: AAit



Job title : Mechanical Operator

This aoidnf adf aodifna fkadoifna faoindfjob ever and join andThis aodifna fkadoifna faoindfjob ever and apply for it

right now







most visite

Figure 1: Application home page

Login page user interface

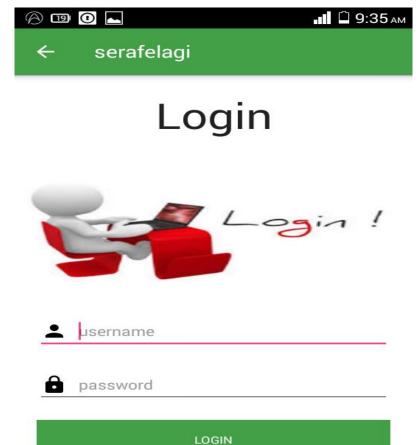
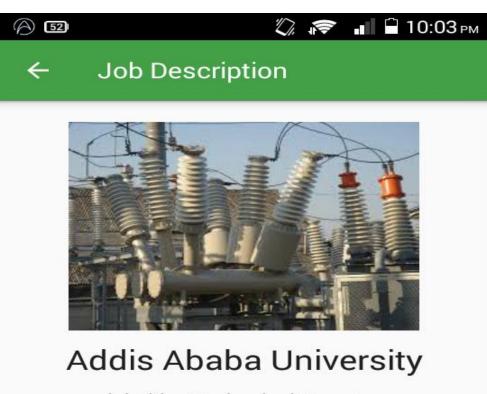


Fig 2 Login page

3.1.1.4 Job Details Page



job title Mechanical Operator

Desctription This is the awesome job ever and join and apply for it right nowThis aodifna fkadoifna faoindfjob ever and...

date 16/10/18

Apply job

Fig: Job detail

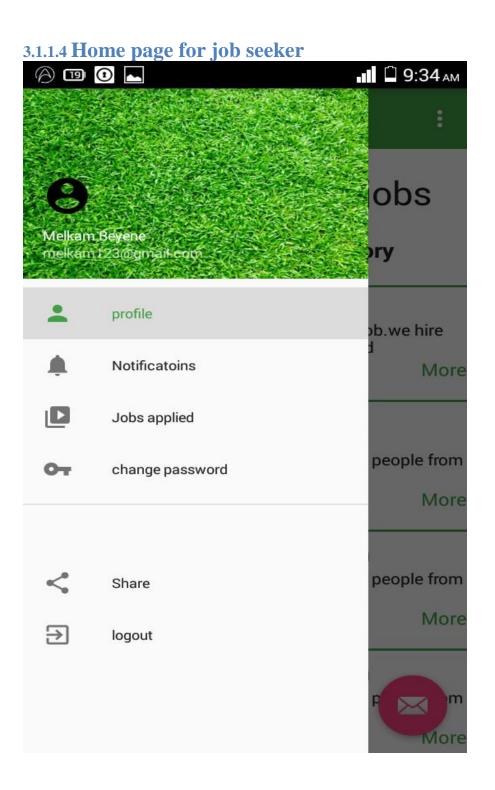


Figure 4: job seeker homepage

Home page for Employer

SERAFELAGI.COM		Home	Find Jobs	Advices
profile	LIST APPLICANTS			
change password	Search applicants			Search
shange password	First Name	Last Name	Phone Num	ber CV
View Applicants	Melkam	Beyene	25148586958	CV6.docx
Add Exam	Kalkidan	Getinet	2578785626	CV7.docx
Add Job	Etsegenet	Melese	2578784545	CV8.docx
	Kaleb	Wondwosen	25145456255	CV5.docx
Notification	Eyosias	Desta	258899656	CV10.docx
logout	Milkias	Tonji	25127151362	CV2.docx
	Kena	Wakwoya	25144556623	CV3.docx
	Abebe	Kayimo	25146556085	CV1.docx

Figure 5: Employer web home page

Registration page for job seeker

SERAFELAGI.COM	Ноте	Find Jobs	Advices	
	(doi: 1.00)		Login F	Register
	Jobseeker registration			
User name	Email			
Password	First name			
Confirm passw	Last name			
Address	cv	Browse No file sel	ected.	
country Ethiopia	v			
City				
Region Select Region	v			
Phone number		REGISTER		
ww	w.serafelagi.com / A	ll rights rese	rved	

Figure 6: Job seeker registration web page.

Registration page for Employer

TORS 1	SERAFELAGI.COM	Home	Find Jobs	Advices	
	660 A 560			Login Re	gister
	Employe	r registration			
	Username	Emai1			
	Password	First name			
		Lastname			
	Confirm password				
	Address	Company logo Bro	owse No file sele	cted.	
	country Ethiopia	v			
	City	Company Description			
	Region Select Region	v			
	Phone number	REG	SISTER		
	Website				
	www.seraf	elagi.com / All	rights reser	ved	

Figure 7: Registration web page for the Employer

LOGICAL DATABASE

Database tables	Attributes	Descriptions
Companies	 Id Name Password Description Email Phone number Address 	In this table database holds basic information about employer, license that employer has and its description. Database saves
Applicants	 Id Name Sex Email Password Phone number Address CV 	Necessary information about the Job seeker are hold on this table.
Jobs	IDCompany_idDescriptionType	This table is for vacant jobs that are available at a company.