

Software Requirements Specification

For

Job Compass Project

Version 1.0

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1. Introduction

1.1.Purpose

The purpose of this document is to present a detailed description of the platform both mobile and web application that will help jobseekers find jobs in Tunisia and recruiters find the suitable candidates. It will explain the purpose and features of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for the software developers, professors, the stakeholders, and the students.

1.2.Scope

This platform will be a job compass for people that are looking for a job and recruiters that are looking for the candidates and profiles. This platform will be designed to help jobseekers find opportunities in different fields specifically in Tunisia and human resources managers to meet the diverse profiles.

More specifically, this platform is designed to allow recruiters post jobs, edit them, and filter applicants resume. On the other side, its designed to help job hunters create their resume, find new opportunities, and submit applications.

1.3.Definitions, acronyms, and abbreviations

1.3.1. Definitions

Term	Definition
Recruiters	Person that creates job offers in the platform. Manage their status and aim to find the adequate profiles that matches the job requirement.

Jobseekers	Person looking to find and apply to job offers.
Software developers	Person that can develop applications and understand the basics of algorithmic.
User	Can be either a recruiter or a human resources manager or a candidate that wants to apply for jobs or admin.
Professors	A university professor that teaches computer science related courses.
Students	Person that takes computer science related courses in university.
Software Requirements Specification	A document that completely describes all the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholders	Persons with interest in the project or investment.

1.4.References

IEEE.	IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.
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1.5.Overview

In the overall description section of the software requirements specifications document, we are going to provide an overview of the platform's capability and functionality. Its purpose is to define the basic elements that influence the product and its requirements, and to provide a background of the requirement that will be covered extensively in the third section of this document.

Specific Requirements, the third and last component of this document, is created primarily for technical backgrounds and utilizes technical words to define the software's functionality.

Both parts of the document cover the same software product in detail, but they are written for different audiences and hence use different vocabulary.

2. Overall description

2.1.Product perspective

This platform has 3 actors: the jobseeker, the recruiter and admin of the system. These actors can download job compass through their smartphones or access it through the internet using their computer from a web browser. This product is independent and totally self-contained.

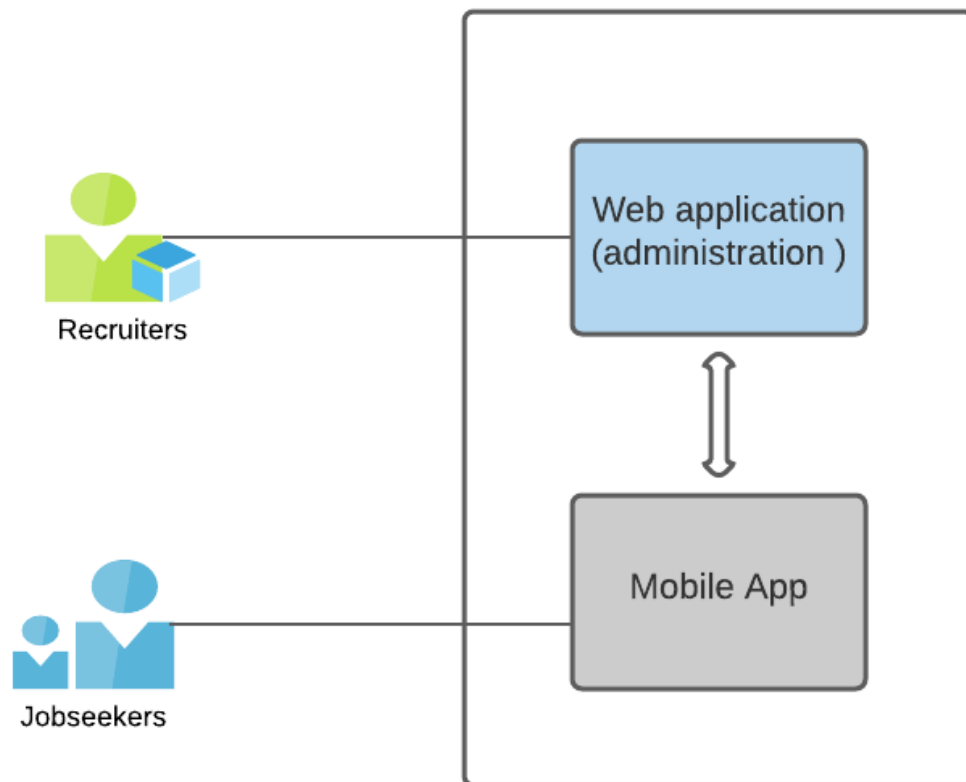


Figure 1: System Environment

2.2.Product functions

- The general use case diagram :

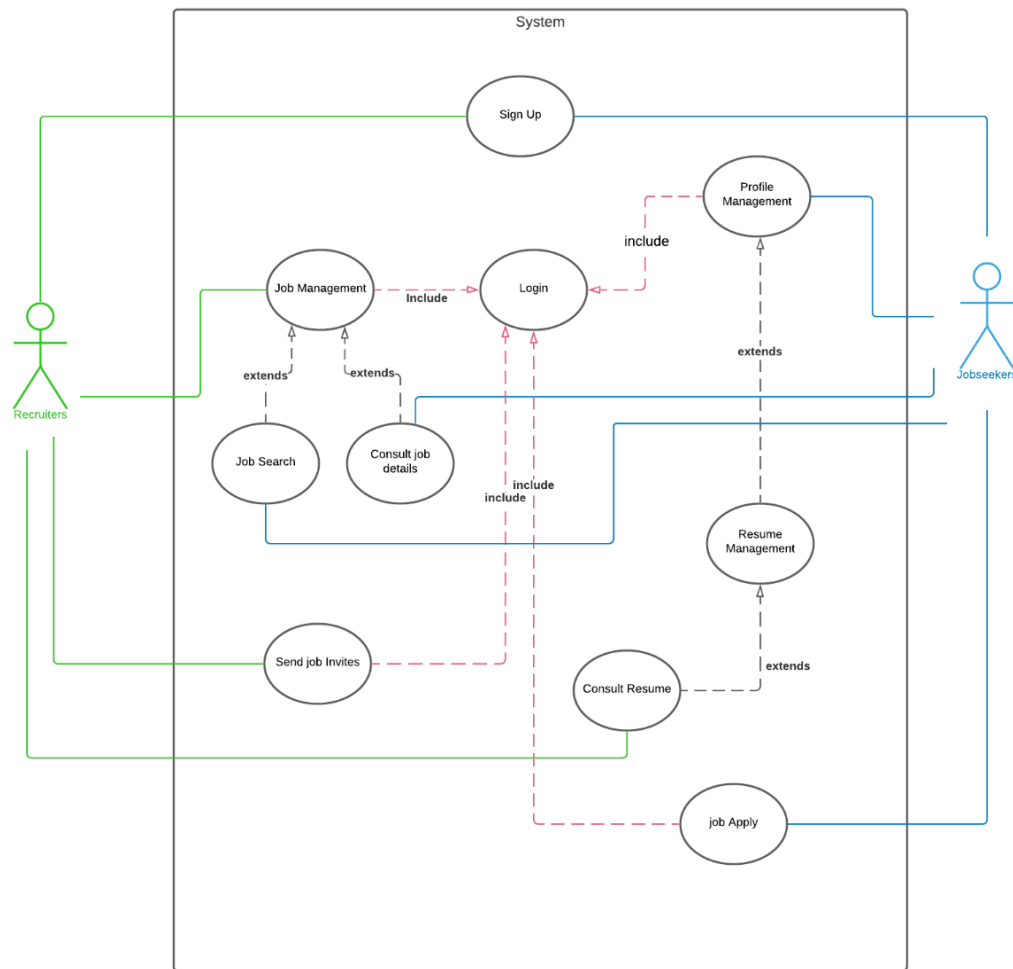


Figure 2: General use case diagram of the system

The job compass web and mobile application provides the job searchers with opportunities to apply to and recruiters with candidates to get matched with. The main purpose of this project is to help students, fresh graduates or anyone that is looking to find a job to get matched with a Tunisia company according to their skills, experience, and education. This software is capable of various functionalities such as: authentication, profile management, resume management, jobs management, job apply, job search filters based on experience and location, candidates filter and resume filter and finally send job invites feature.

2.3.User characteristics

The recruiter is expected to be a human resources manager that interested in posting new jobs and recruiting new employing in any role in their company.

The jobseeker is expected to be a Tunisia student or fresh graduate or someone between the age of 20-35 and is interested in finding a new job and networking with recruiters.

2.4.Constraints

- Learning flutter for the first time and practicing it at the same time
- The team members are limited to 2 people only and beginners in the mobile development
- Not enough time
- Must respect android and IOS regulation

2.5.Assumptions and dependencies

The assumptions are:

- The coding should be error free
- The system should be user-friendly so that it is easy to use for the users
- The information of all users, resumes and job application must be stored in a database that is accessible by the website and mobile application
- The system should have more storage capacity and provide fast access to the database
- Users may access from any computer that has Internet browsing capabilities and an internet connection as well as for the mobile application
- Users must have their correct email and password to access the platform whether from a smartphone or a computer

The dependencies are:

- The specific hardware and software due to which the product will be run

3. Specific requirements

3.1.Software configuration:

The system is developed using flutter for the mobile application, Vue JS as front end for the web application, Node JS as the back end and Mongo DB for the database.

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Operating system	Windows 11	Windows 10
Editor	Vs Code	
Database	Mongo DB	
Processor	AMD Ryzen 5 3550H with Radeon Vega Mobile Gfx	
RAM	16.0 GB	

Tableau 1: Software and Hardware configuration

3.2.Data requirement

The inputs consist of the query to the database and the output consist of the query response. For instance, the output includes the user receiving the details of their accounts. In this project the inputs will be the queries sent by the users like create a new account, selecting jobs in the field of web development and adding new job opportunity.

3.3.External interface requirement

3.3.1. Sign Up and Login

The recruiter and the jobseeker can create a new account if they don't have already one. On the register form, the user should enter their information such as: full name, email, password, and select their role. If all the information entered is valid the user can be redirected to the welcome page. Users should be able to change their data anytime they want from the settings. If the user entered either his email or password incorrectly then an error message should appear.

3.3.2. Profile Management

The recruiter and the jobseeker can edit their personal information such as: name, photo, password...

3.3.3. Resume Management

The jobseeker can create his own resume, edit the information such as: experience, diploma, education, skills...

3.3.4. Job Search filter based on experience, location, keyword search, salary expectations, etc.

The jobseeker can search for job to apply for and filter them by salary or status such as: open, closed.

3.3.5. Job apply

The jobseeker can apply to the selected jobs using their created resume.

3.3.6. Job management

The recruiter can create job offers, edit their status such as: open, cancel, closed.

3.3.7. Candidate's filter and resumes filter

The recruiter can search for candidates based on the experience, location or certain keywords related to the job.

3.3.8. Send job Invites

The recruiter can send job invites via email to candidates that are adequate for the job.

4. Non-functional requirement

4.1. Performance requirements

- Response type of the system should be fast.
- The system should handle a large amount of data.

4.2. Security requirement

- The system will have 2 types of users and every user has access constraints for instance a jobseeker cannot create a job opportunity.
- System must use secured database.
- Normal users can just read information but they cannot edit or modify a
- their personal and some other information.

- Users can only consult information that is related to job except the creator of the job they can change the information.
- A proper user authentication with field validation should be provided.

4.3.Portability

- The usability of the same software in different environment since our mobile application is cross-platform.
- The web application should be responsive.

4.4.Maintainability

- The code should be clean and include comments.
- The code should respect the best practices.