
Software Requirements Specification

for

<RESUME MAKING AND PROGRESS ANALYSIS>

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1 Introduction

1.1 Purpose

The project “**Resume making and Progress analysis**” was created with a purpose of creating a hassle free solution for creating a resume and provide guidance to students, teenagers and elders who work everyday for a better tomorrow. This project helps people get their resume once they provide details in our website about their qualifications, interests, hobbies.

1.2 Document Conventions

In this document the name of the project and its functionalities are written in bold which takes priority in our project.

1.3 Intended Audience and Reading Suggestions

This document is intended to be read by developers and project managers to understand the functions which can be done by the product and implement the same, it is also intended to be read by marketing staff to understand the attractive and important functions provided by it to create a marketing campaign which gives an idea about scope and efficiency.

1.4 Product Scope

This product mainly focuses on producing hassle free experience in creating your resume just by entering your details in our website. This product is useful for every person who steps into the modern corporate world after finishing their education with flying colors and aspirations. This product helps these graduates show the uniqueness in how they pursued their life until then in the resume. This product also helps everyone get a clarity of how a particular degree helps them in reaching their goal using our optional career guidance tool in the official website which can be accessed by everyone.

1.5 References

The reference for the technologies mentioned in the document below are:

<https://docs.mongodb.com/guides/>

<https://www.mongodb.com/blog/post/getting-started-with-python-and-mongodb>

The diagrams used in the documents are

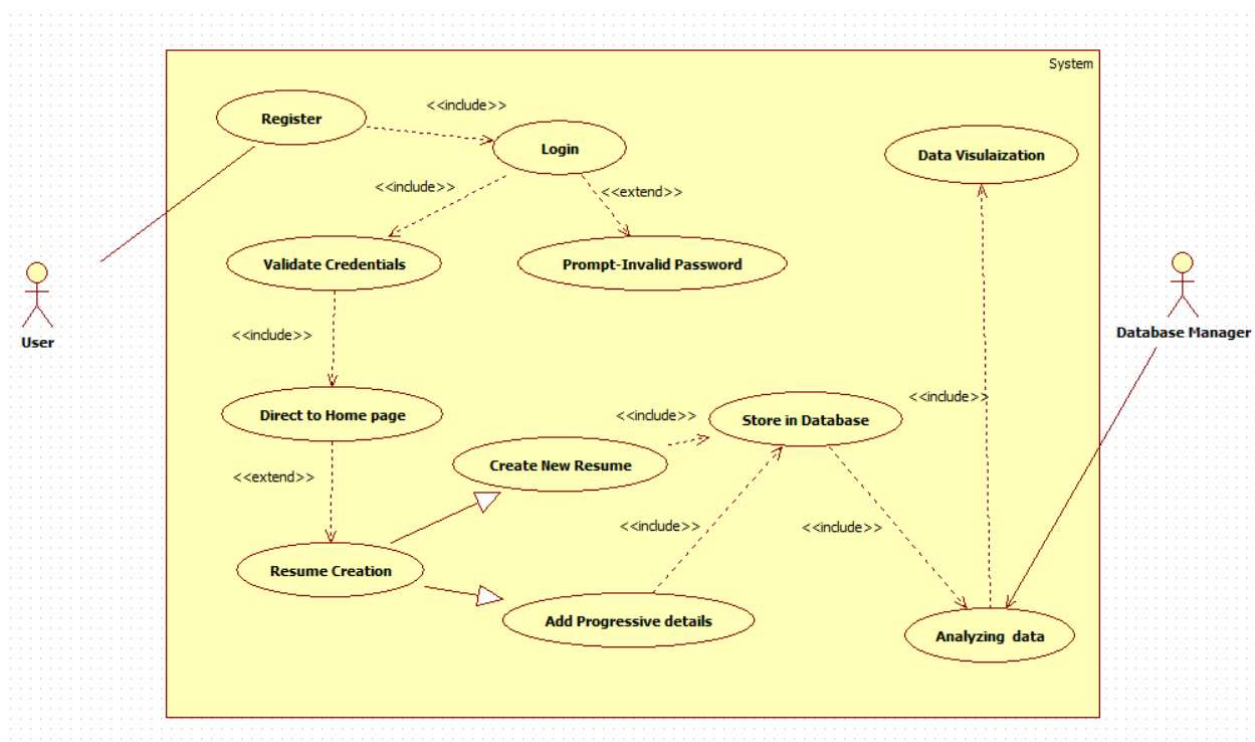
1. Use case diagram (Tool) : <https://docs.staruml.io>

2. data flow diagram (tool) : <https://www.lucidchart.com/pages/>

2 Overall Description

2.1 Product Perspective

This is a self contained product with a user centered approach. This system will consist of a single portal through which the user can log in and enter the details of their career. Since this is a data-centric product it will need somewhere to store the data. For that, a database will be used. The database can be accessed by both the user and the software. The user can access their data and modify the data whereas the software can read all the data to produce an identification profile that can be used for various purposes.



2.2 Product Functions

- Generate a unique resume for the user based on the data given.
- The user can choose which information can be included and which can be avoided.
- Analyze the data of other users which is similar to the current user and give career recommendations based on the previous users
- Give a graphical representation of the path they choose based on the previous users.
- Analyse the current job opportunities and study demand-supply to give users information about the path they choose.

2.3 User Classes and Characteristics

The target users are school ,college students and administration although this can be utilised by a wider range of audience.The user log in to the web portal through the user id and password.The user enters the details such as name, age, profile picture ,contact info,achievements till date in the portal.After each milestone is completed the user can update their data in the portal. administrators are primarily responsible for maintaining the academic portal. They contribute minimally to the data themselves, but spend more time modifying the software configuration and making appropriate updates.

2.4 Operating Environment

The application is browser based so it is independent of the operating system. It can run in any web browser provided it is connected to the internet.It supports all major browser such as chrome, safari, firefox .So it can support almost all popular OS such as windows,mac ,linux .Since it is not restricted by the hardware it can even perform well on a smartphone.

2.5 Design and Implementation Constraints

- The product requires the user to have an active internet connection at all times.
- Implement the database at least using a centralized database management system.
- The system is limited by its operating server in terms of the maximum number of users it can support at a given time.
- The system will be intended to run on Firefox 4 and above, Google Chrome 10 and above and Internet Explorer 8 and above.The system should work on most home desktop and laptop computers which support JavaScript and HTML5.

2.5 User Documentation

A tutorial will be included at the sign up of the user and it can be further assessed if necessary.Online help and faq will also be included to improve overall system experience of the user

2.6 Assumptions and Dependencies

One assumption about the product is that it will always be used on devices that have enough performance. If the system does not have enough hardware resources available for the application, for example the users might have allocated them with other applications, there may be scenarios where the application does not work as intended or even at all.

Another assumption is that the data entered by the user is credible and accurate enough to produce a profile and provide career guidance.

3 External Interface Requirements

3.1User Interfaces

Registration:

Name

:

E-mail

:

Password

:

Sign-Up

Login:

E-mail

:

Password

:

Sign-In

Personal Information:

Courses Completed

:

Technical Skills :

Projects :

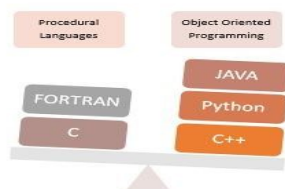
Work Experience :

Achievements :

Languages Known :

Extra-Curricular Activities :

Home Page :



Looking for a JOB, create a resume that helps you get one.

3.2 Hardware Interfaces

The system is to be designed as a web based application so there are no particular hardware requirements. The system must be able to support the next mentioned browsers with respective versions:

*Google Chrome 51+
Safari 9.0 +
Mozilla firefox 95.0+
Microsoft edge 45.0+
internet explorer 7+*

3.3 Software Interfaces

The softwares and tools used in the system are html 5,css 3, javascript, css-framework(Bootstrap) ,jquery in the front end.Python framework django is going to be used for as the backend driver.Data is going to stored as a cluster in Nosql database mongodb.The connection is used with packages pymongo . Installation of a local server of mongodb will not be required as the data is going to be stored in the cloud cluster offered by mongo.the total space for the storage cluster will be 512MB.

3.4 Communications Interfaces

The application will store and retrieve data from the respective collections in the database from the cluster in the mongodbcloud.Connections to the cluster will be initiated through the MongoClient() function from the pymongo module.Connections will be made at the time of profile creation,extension and retrieval.The amount of data a user can store will have no restrictions.

4 System Features

The proposed system is designed to help all the study aspirants to guide in their career and help them to build a resume. The system shall be responsible for maintaining information about students:

- *Student profiles*
- *Personal information*
- *Academics*
- *Achievements*
- *Monitoring progress*
- *Providing real time analysis*
- *Resume making*
- 1. *Resume creation*

4.1.1 Description

The system maintains information of students such as name, age, email id, number and it contains their academic and also other achievements to add them to their resume. This system helps students to understand better about the opportunities available after the certain course. This system is available for everyone if they register in the system with their details.

4.1.2 Stimulus/Response Sequences

The system provides real time analysis to the problem and it also monitors the progress.

4.1.3 Functional Requirements

REQ-1: Authentication

- *Login- The user can login to the system with his/her username and password.*
- *Logout- The user can log out from the system.*

Login failure- If the user does not exist in the database or the user has not yet been authorized by the system.

REQ-2: Authorization

- *User role check- After logging in, the user role will be checked from the database and the user interface will be displayed according to their role.*

REQ-3: Process Data

- *Display-* Users with defined roles can display the content of the database. To Be more specific, a student can only view his/her personal information. System can not only see his/her personal information but also the student's information who registered in the system.
- *Edit-* A user with a student role can edit his/her specific personal information.
- *Search-* Users with student roles can search the content of the database for the students' who are under his/her coverage. Search feature works on specific keywords showing system's characteristics, peculiarities, skills, features, and etc.

REQ-4: Registration

- *Add a new student-* system role type is able to add a new student to the database. The new student will have all the required personal information related to him/her. The new created student will have a log-in id .

REQ-5: Report generation

Report generation- System shall be able to generate a report in pdf format for each student based on the information in the database such as the students profile and their personal details

The generated Report is also stored in the system for future requirements of other students and also for the system.

2 .CAREER GUIDANCE

DESCRIPTION:

This feature of the system allows users to access data about the fields of work which they are interested in and shows the scope of a particular subject or a field in the world on a monthly basis.This gives ideas to the users about their fields of interest.

STIMULUS/RESPONSE CONDITION:

When a user wishes to access this information he will be given a wide variety of disciplines of science, engineering etc.,he needs to choose the discipline of his interest and surf on to the scope of a particular job in the market which is denoted using a color scheme like if it has high demand red and very low demand a pale yellow/white.

FUNCTIONAL REQUIREMENTS:

REQ-1: Authentication

- *Login-* The user can login to the system with his/her username and password.

- *Logout- The user can log out from the system.*

Login failure- If the user does not exist in the database or the user has not yet been authorized by the system.

REQ-2: Authorization

User role check- After logging in, the user role will be checked from the database and the user interface will be displayed according to their role.

REQ-3: DATA CORRECTNESS

The data which is shown to users should be authentic and shouldn't be corrupted in any case ,it should satisfactorily provide details of all the fields.

5 Other Nonfunctional Requirements

5.1 Performance Requirements

The application is a web based application so the performance will be based on the respective web browser and its respective version all browsers that have support for css3 will be able to run the UI design smoothly.The web browser must support jquery version 3.5.0 and above.

The web browsers recommended are :

Google Chrome 51+

Safari 9.0 +

Mozilla firefox 95.0+

Microsoft edge 45.0+

5.2 Safety Requirements

The system will be providing relative analysis based on the users respective field of interests and it is left up to the users to make choices.It is not advisable to blindly trust the application.Possible data may be an aberrant factor.So it is advisable for the users to have a copy of the data somewhere else in case of a plausible data loss.

5.3 Security Requirements

Users by creating a profile must agree to all terms and conditions provided on the policies regarding use of their data. Data will not be shared or viewed by any other external entity the data will be used for analytical purposes to provide guidance and miscellaneous features. The only entity that has permission to the access of the data will be the main server. Other security requirements : Users are prohibited from entering private data as a means of storage as the admin will be not be responsible for third party scrutiny on any of the data deemed impertinent.

5.4 Software Quality Attributes

The application needs to be scalable for future uses. The cloud storage must be scalable in terms of both bandwidth and cluster storage spaces. If the application is deployed in a different platform in the future (mobile applications) the databases must still be interoperable.

5.5 Business Rules

The following are the principles for the maintenance of the application:

- 1. The application is responsible for the safety and integrity of user data assuming that the user followed all the usage norms .*
- 2. No member other than the user can view his/her data from the database.*

Appendix :

The diagrams used in the document are use case diagram and data flow diagram. Use case diagram presents all the scenarios a user could encounter while using the application and the data flow diagram presented below will generalise about the flow of data in the system.

