
Software Requirements Specification

for

Up the Ladder

Version 2.0

Prepared by

**Rahul Poddar (U101116FCS097)
Piyush Singhanian (U101116FCS282)
Anubhav Paul (U101116FCS012)
Jatin Gupta (U101116FCS052)**

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Revision History

Name	Date	Reason For Changes	Version
Up the Ladder	15.09.18	Initialisation of Project	1.0
Up the Ladder	24.09.18	Building and completing of SRS	2.0

Up the Ladder	19.10.18	Completion of SRS	3.0
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1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the application - Up the Ladder. It will explain the purpose and features of the system, the interfaces 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 both the users of the application and the developers of the system and will be proposed to the faculty-in-charge for his approval.

1.2 Document Conventions

This document strictly abides to the official IEEE template for Software Requirements Specification.

1.3 Intended Audience and Reading Suggestions

- Typical users of the application that encompasses school and college students, self-employed persons, company administrators and independent contractors.
- Professional/Technical Users such in different fields of Engineering, Human Resources, Psychology, Researchers who want to use Up the Ladder for more analysis of careers, persons and employment.
- Programmers who are interested in working on the project by further developing it, providing insights and fixing bugs.

1.4 Product Scope

The primary motive of this application is to enable users to get access to the success stories of individuals and corporations - what success means to them and how they got there. This web app gives an opportunity for people to share their inspiring and informative journeys. Users are able to list their education, job, experiences, references, skills required and advice. The web-app also allows you to search for professionals by their industry and education. This app should be a **one stop resources** for questions such as “**What can I do with this major?**”. “**What skills will I need for this job?**”. “**What training, certification, experience will I need to be successful?**”. In addition to that. users are also able to promote themselves and charge a fee for training.

1.5 References

- IEEE Software Engineering Standards Committee, “IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications”, October 20, 1998.
- Davis MA “Just Enough Requirements Management: Where Software Development Meets Marketing “, New York, Dorset Publishing House, 2005.

2. Overall Description

This section will give an overview of the whole system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it. It will also describe what type of stakeholders that will use the system and what functionality is available for each type. At last, the constraints and assumptions for the system will be presented.

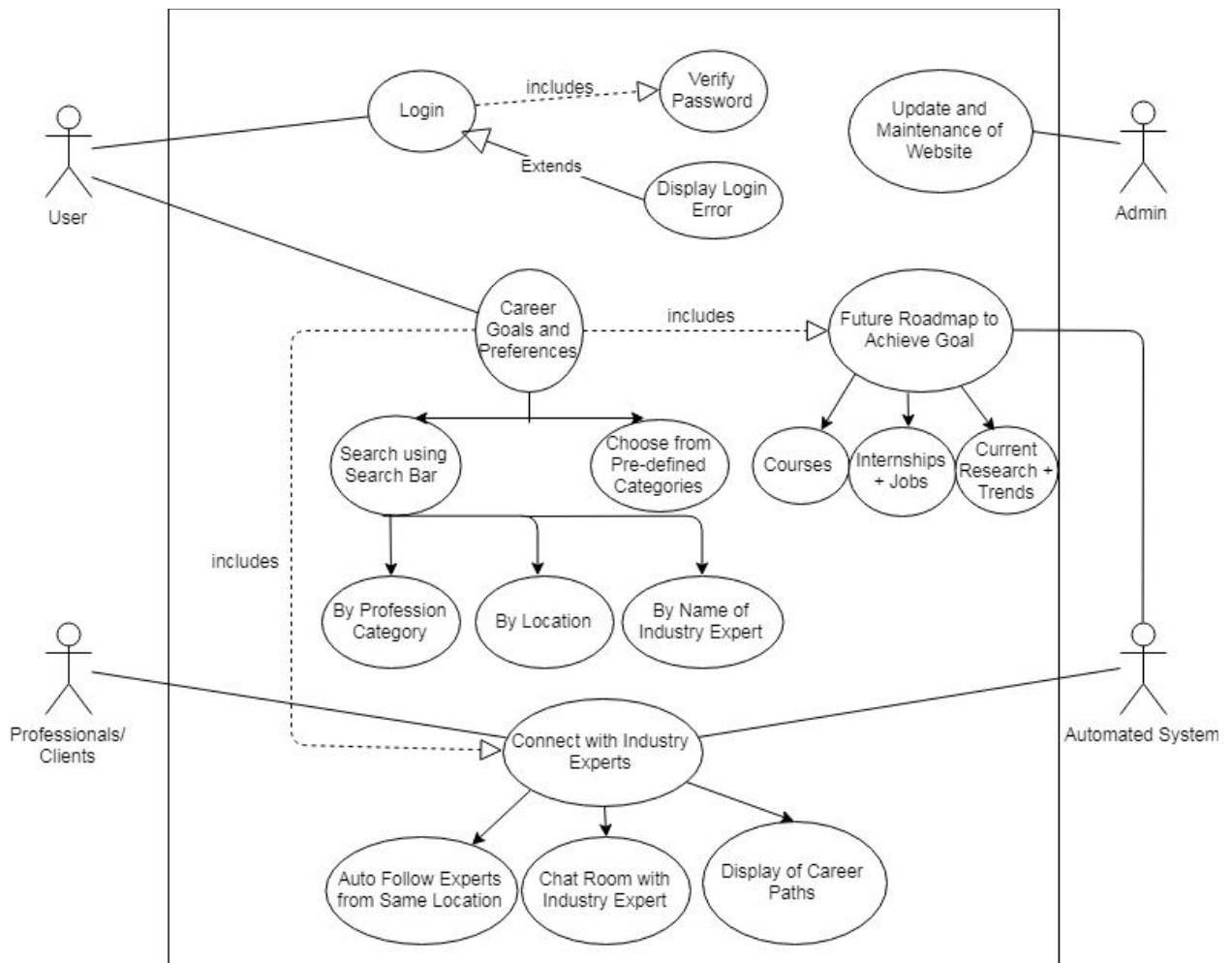
2.1 Product Perspective

Our webapp is inspired from LinkedIn and other career development platforms. LinkedIn is one of the major social sites for career development, Our product does not just allow people to interact with each other but they can also share their success stories and get inspired through our platform. Safe to say, this has taken inspiration from LinkedIn but it's a completely unique and stand-alone app and it cannot be seen as an extension of LinkedIn.

It is completely different from LinkedIn as the other is a service primarily used by professionals and business persons to put up their own skills and achievements only for their self-promotion with little or no emphasis on helping fellow colleagues and budding entrepreneurs.

However, Up the Ladder will serve as a third-party service wherein successful people's stories and skill sets will be uploaded on the forum by us, with the sole purpose of connecting them with fellow students and professionals looking for guidance and inspiration.

2.2 Product Functions



2.3 User Classes and Characteristics

Typical users of the application that encompasses school and college students, self-employed persons, company administrators and independent contractors.

Professional/Technical Users such in different fields of Engineering, Human Resources, Psychology, Researchers who want to use Up the Ladder for more analysis of careers, persons and employment.

Programmers who are interested in working on the project by further developing it, providing insights and fixing bugs.

2.4 Operating Environment

Windows 8
Windows 10
Mac OS X
LUbuntu
Parrot
Kali Linux
Ubuntu
BackBox

2.5 Design and Implementation Constraints

One of the major constraints that we are going to face while implementing the project would be to create a legitimate database. Since this would be an application that is going to require success stories of emerging and established persons, we would first need to establish a certain level of credibility to get any respectable number of clients.

Secondly, we face the constraint of showing the implicit qualities and skill sets that helped the registered persons to reach the level of success that they did. For example, a successful investor will explicitly mention the advantages of reading investment books, following stock market trends and being active in the market for a long time. However, he will not mention things like the power of habit, acumen and instinct. We need to keep an account of the implicit qualities that generally are ignored or we are not able to document.

Thirdly and foremostly, our primary aim is to make the software automated and have real time features for customers. Initially, the software would be part static, part dynamic but with time we want to be able to make it as dynamic as possible as it would mean more customer prioritisation and customisation.

2.6 User Documentation

This webapp shall have an online help section and video tutorials as to how the users should go about to perform their desired tasks. There shall be a FAQ section as well, wherein the maintenance team shall answer all webapp related queries reluctantly if and when posted in the forum.

2.7 Assumptions and Dependencies

We are assuming that we would not be facing any legal bound constraints while associating with our clients and putting their data (professional and personal), both from the side of the client as well as the side of the Government.

One assumption about the product is that it will always be used on mobile phones that have enough performance. If the phone 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 GPS components in all phones work in the same way. If the phones have different interfaces to the GPS, the application need to be specifically adjusted to each interface and that would mean the integration with the GPS would have different requirements than what is stated in this specification.

3. External Interface Requirements

3.1 User Interfaces

TBD

3.2 Hardware Interfaces

Since neither the mobile application nor the web portal have any designated hardware, it does not have any direct hardware interfaces. The portal is managed by the application in the mobile phone and the hardware connection to the database server is managed by the underlying operating system on the mobile phone and the web server.

3.3 Software Interfaces

The web application communicates with the GPS application in order to get geographical information about where the user is located and the visual representation of it, and with the database in order to get the information of nearest entrepreneurs. The communication between the database and the web portal consists of operation concerning both reading and modifying the data, while the communication between the database and the mobile application consists of only reading operations.

3.4 Communications Interfaces

The communication between the different parts of the system is important since they depend on each other. However, in what way the communication is achieved is not important for the system and is therefore handled by the underlying operating systems for both the mobile application and the web portal.

4. System Features

4.1 Stream/Goal based in-demand course suggestion.

4.1.1 Description and Priority

This feature guides the user by providing him/her a custom made roadmap designed to suit his/her needs required to attain the goal that one is looking forward to. For instance, a person sets his goal as an “*Artificial Intelligence expert*” then the roadmap shall display all courses and experiences he is required to learn/have in order to reach his desired stature. This feature shall host a series of courses which will enable the person to master his interests starting from scratch. The best part about this is that there shall be no prerequisites in order to attain your goals, this shall be the one stop shop that will answer and help you build from scratch.

This feature holds a very high priority as this acts as the very backbone of the entire framework of the idea.

4.1.2 Stimulus/Response Sequences

Stimulus: The user chooses his/her stream of choice.

Response: The system records the user's choice and uses it to suggest relevant and in-demand goals to the user.

Stimulus: The user selects his/her goal.

Response: The system records the user's choice and uses it to design the custom roadmap required by the user to attain his/her goal.

Stimulus: The user wishes to view his own roadmap.

Response: The system generates and shows an interactive infographic roadmap, where-in there will be sub-goals which will direct the user what to pursue at that particular time.

4.1.3 Functional Requirements

REQ-1:

The user must be genuinely interested and committed towards the provided roadmap as it shall contain detailed and very specific informations as to how and what one should approach at a specific time.

REQ-2:

ERROR CASES: TBD

REQ-1:

REQ-2:

4.2 Finding the “nearest” success story.

4.2.1 Description and Priority

This feature enables the user to get in touch with the successful people residing geographically in the same region as the user. It is very obvious that such people shall be the ones who have thrived in the field of choice of that of the user. The success stories shall appear on the wall of the user from time to time. These people will be enlisted on the dataset of the system as industry experts. These industry experts will be documenting their journey to the summit using a template wizard which will be provided to them, the collected data would now appear on the users' walls in an infographic easy to understand form. The users can ping up the industry experts for suggestions or recommendations. This would enable the system to function efficiently as the relevance of suggestions from industry experts residing in the same socio-economic area would be undoubtedly very high.

This system would also allow users to follow industry experts of their own sweet choice.

This feature holds a very high priority and serves as the USP of this system.

4.2.2 Stimulus/Response Sequences

Stimulus: The user enters his/her address of residence

Response: The system records the user's address and makes suggestions of goal oriented industry experts based on the user's PIN-code.

Stimulus: The user does a "find experts" search.

Response: The system makes suggestions based on the selected stream/goal.

4.2.3 Functional Requirements

REQ-1:

The user must be genuinely interested and committed towards the provided roadmap as it shall contain detailed and very specific informations as to how and what one should approach at a specific time.

REQ-2:

ERROR CASES: TBD

4.3 Find my course

4.3.1 Description and Priority

This feature will enable the user to compare courses from various websites and weigh them against each other on various aspects and this would enable the users to gain access to one stop shop for online certification courses. This would save people the trouble of going through multiple websites and also the inconvenience caused when comparing one website with the other.

This feature holds a high priority since this feature can potentially be used to generate a healthy amount of revenue.

4.3.2 Stimulus/Response Sequences

Stimulus: The user chooses his/her stream of choice.

Response: The system records the user's choice and uses it to suggest courses relevant to the user's current standings in the roadmap.

Stimulus: The user chooses to compare multiple websites for a particular course.

Response: The system compares the selected websites and comes up with an aspect based comparison.

4.3.3 Functional Requirements

REQ-1:

The user must be genuinely interested and committed towards the provided roadmap as it shall contain detailed and very specific informations as to how and what one should approach at a specific time.

REQ-2:

ERROR CASES: TBD

5. Other Nonfunctional Requirements

5.1 Performance Requirements

This webapp has no performance requirement as such. A healthy internet connection shall be sufficient for the smooth functioning of the webapp. However we need to have proper lexicographic search algorithm which shall guarantee us fast and smooth responses when we search for people or course specifications on this network. The mobile-app shall require Android versions over 5.0 and IOS version over 8.0, the mobile app shall require a minimum app requirement of 2GB , processor clock of 1.2Ghz or more and a disk space of about 20MB.

5.2 Safety Requirements

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

5.3 Security Requirements

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.

5.4 Software Quality Attributes

- **AVAILABILITY:** The portal should be available to all at all points of time without interrupting any pre-existing browser process.
- **CORRECTNESS:** The login system and page posting shall work correctly without any fail.
- **MAINTAINABILITY:** The administrators in chargers should maintain correct date provided by customer.
- **USABILITY:** The web portal should satisfy a maximum number of customers needs and serve the exact purpose that they are trying to access through the service. Different segments of the users should be able to access different services conveniently, efficiently and

5.5 Business Rules

Up the Ladder will be on a server with high speed Internet capability. The software developed here assumes the use of a tool such as Tomcat for connection between the Web pages and the database. The speed of the Reader's connection will depend on the hardware used rather than characteristics of this system.

Also, all features provided by the software would not be accessed by all the users. There would be some real-time automated features like master video classes by some prominent businessmen, infographics and graphs, etc for premier users.

The primary source of revenue for the app would be through advertisements and subscription-based model of the app for premier users, monthly and annually.

Appendix A: Glossary

Term	Definition
Active Article	The document that is tracked by the system; it is a narrative that is planned to be posted to the public website.
Author	Person submitting an article to be reviewed. In case of multiple authors, this term refers to the principal author, with whom all communication is made.
Database	Collection of all the information monitored by and user information entered into this system.
Field	A cell within a form.
Member	A member of the Up the Ladder community.
Reader	Anyone visiting the site to read articles.
Review	A written recommendation about the appropriateness of an article for publication; may include suggestions for improvement.
Reviewer	A person that examines an article and has the ability to recommend approval of the article for publication or to request that changes be made in the article.

Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.
User	Reviewer or Author.

Appendix B: To Be Determined List

Functional Requirements.