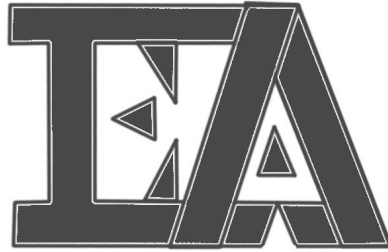

ETHEREAL



ARTS

SOFTWARE REQUIREMENTS SPECIFICATIONS



Datalight

Version: 1.0

Development and automation department

May, 2021

Content

Introduction	5
1.1 Purpose	5
1.2 Scope	5
1.3 Involved personnel	6
1.4 Definitions, acronyms and abbreviations	7
1.5 References	7
1.6 Document overview	7
Description	8
2.1 Product perspective	8
2.2 Product features	8
2.3 User characteristics	9
2.4 Restrictions	9
2.5 Assumptions and dependencies	9
Specific requirements	10
3.1 List of user requirements	11
External interface requirements	12
4.1 UI	12
4.2 Hardware Interfaces	12
4.3 Software interfaces	12
4.4 Communication interfaces	12
System Requirements	13
5.1 Functional Requirements	13
5.2 Non-Functional Requirements	23
5.2.1 Performance	23
5.2.2 Dressing Restrictions	23
5.2.3 System attributes	23
5.2.4 Other requirements	23

Document tab

Date	Version	Description	Author
11/05/21	1.0	Initial document	<ul style="list-style-type: none">● Arredondo Bonilla Cesar● Chavez Vargas Javier● Mancilla Mora Moises● Valerde Sanchez Alejandro

Document validated by the parties on date:

Client	Supplier
ITT	Jaime Leonardo Enriquez Alvarez

1. Introduction

This document is a Software Requirement Specification (SRS) for the "Datalight" knowledge preservation system. This specification has been structured based on the guidelines given by the IEEE Recommended Practice for Software Requirement Specifications ANSI / IEEE 830, 1998.

1.1 Purpose

The purpose of this document is to define the functional and non-functional specifications for the development of a web information system that will allow to preserve the knowledge of an organization through the creation and visualization of topics. This will be used by the work team and the client.

1.2 Scope

Satisfy the needs of any company that wishes to store the knowledge generated and that this platform be of its degree and useful to solve the problems that the company faces. This project will be based on the creation and development of a flexible platform applying design, programming and analytics, etc. In addition to complying with the established requirements to store knowledge, it is intended that this platform be useful for companies and enter into direct competitiveness with others. leading brands in the market

1.3 Involved personnel

Name	Arredondo Bonilla Cesar
Role	Project Manager
Professional category	IT
Responsibilities	Process management and control

Name	Chavez Vargas Javier
Role	Scrum Team
Professional category	IT
Responsibilities	Support with the design and development of the project

Name	Mancilla Mora Moises
Role	Product Owner
Professional category	IT
Responsibilities	Manager, verifier and administration of methods and processes

Name	Valerde Sanchez Moises
Role	Scrum Master
Professional category	IT
Responsibilities	Manager of work teams

1.4 Definitions, acronyms and abbreviations

Definición

IT: Information technologies

User: Person who will use the system to manage processes

DB: Data Base

NFR: non-functional requirement

FR: functional requirement

1.5 References

Reference	Title
IEEE	Standard IEEE 830 - 1998

1.6 Document overview

This document consists of three sections. The first section introduces it and provides an overview of the system resource specification.

In the second section of the document, a general description of the system is made, in order to know the main functions that it must perform, the associated data and the factors, restrictions, assumptions and dependencies that affect development, without going into excessive detail.

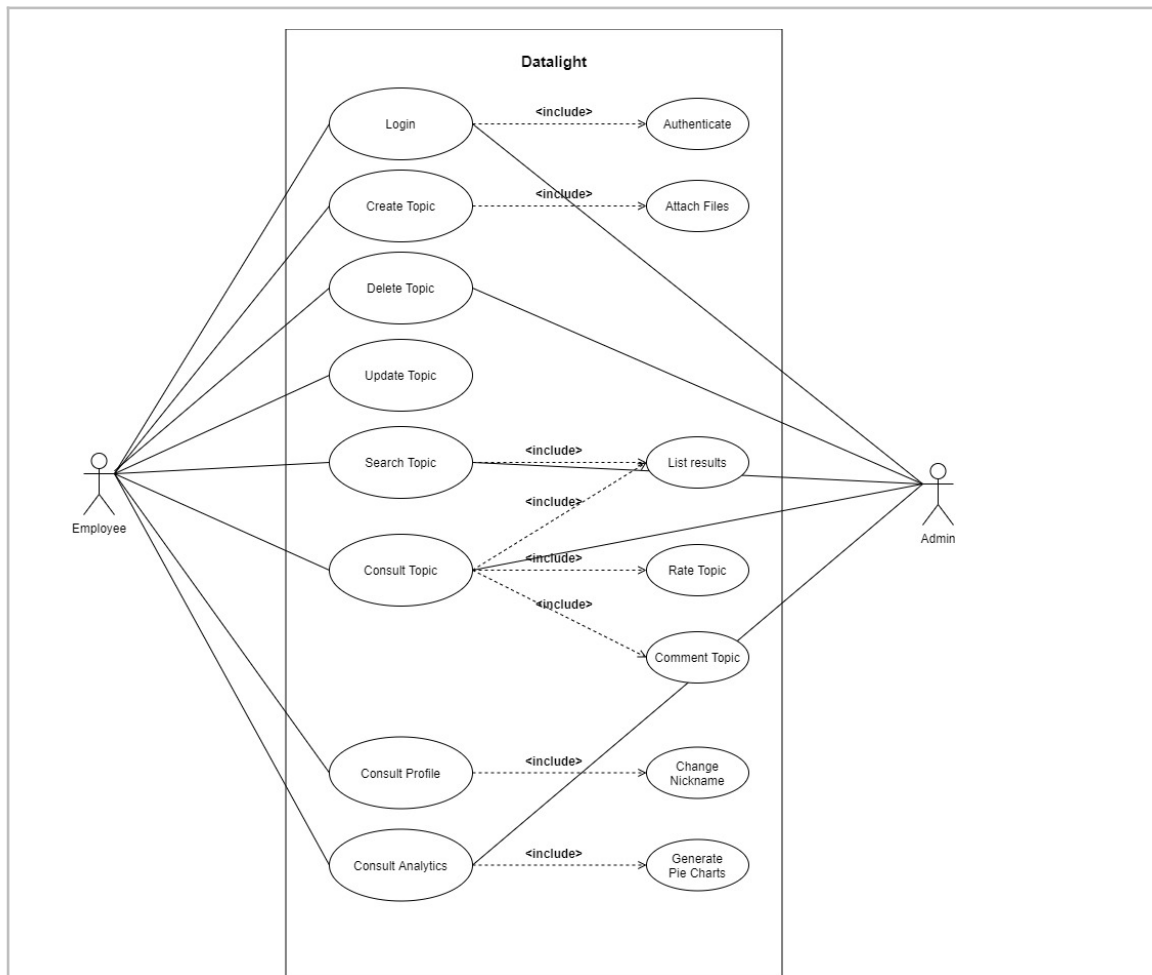
Finally, the third section of the document is the one in which the requirements that the system must satisfy are defined in detail.

2. Description

2.1 Product perspective

Application in which users belonging to an organization will be able to generate and consult topics related to problems and their solutions, in these users will be able to rate and comment, and it will be accessible at any time.

2.2 Product features



2.3 User characteristics

Type of user	Employee
Education	Anyone
Activities	Browse and use the platform in a matter of topics

Type of user	Administrator
Education	High School
Activities	Manage topics and the platform

2.4 Restrictions

The platform must be applicable to any requesting company, it must be generic, it must connect to the company's BD and provide unique access to registered users, there must be no external records for their access, not provide personal information of the employees and It must have the access of employees and administrator users.

2.5 Assumptions and dependencies

- The company has enough storage space for the application
- The company manages a database of employees
- The company has an internal communication network
- Users will consult the platform for information
- The company will assign the personnel in charge of managing the solution

3. Specific requirements

High-level project requirements:	success criteria
Offer users a platform that is available at all times, that is easy to use and attractive, as well as that guarantees security of the information that is registered there	24/7 access to the platform and only to registered users
When a user writes a problem, they will be offered a catalog with topics and solutions documented by other users.	section, display and listing of topics stored in DB
Allow the topics that are published to also attach photos, videos or presentations with a maximum limit of size and duration.	corresponding section, access to attachments in the publication and storage in the database
Offer the user the power to consult the topics that they have registered and that are valued by other users.	corresponding section, search box, display of results, and in each publication corresponding section for evaluation
Offer data analytics on the topics that are more concurrent, the topics to which users have solved their problem using the recommendations or solutions made by other users	administrator user, corresponding section and display of data, graphs and queries of what is stored in the database

3.1 List of user requirements

Number	UR-001		
Name	Creator		
Type	<input checked="" type="checkbox"/> Requerimient	<input type="checkbox"/> Restriction	
Description	A user is able to create a topic based on their experience		
Priority	<input checked="" type="checkbox"/> High/Esencial	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	UR-002		
Name	Searcher		
Type	<input checked="" type="checkbox"/> Requerimient	<input type="checkbox"/> Restriction	
Description	When a user writes a problem, they will be offered a catalog with topics and solutions documented by other users.		
Priority	<input checked="" type="checkbox"/> High/Esencial	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	UR-003		
Name	Attach Files		
Type	<input checked="" type="checkbox"/> Requerimient	<input type="checkbox"/> Restriction	
Description	Allow the topics that are published to also attach photos, videos or presentations with a maximum limit of size and duration.		
Priority	<input checked="" type="checkbox"/> High/Esencial	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	UR-004		
Name	Analytics		
Type	<input checked="" type="checkbox"/> Requerimient	<input type="checkbox"/> Restriction	
Description	Offer data analytics on the topics that are more concurrent, the topics to which users have solved their problem using the recommendations or solutions made by other users.		
Priority	<input checked="" type="checkbox"/> High/Esencial	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

4. External interface requirements

4.1 UI

The user interface will consist of a set of windows with buttons, lists and text fields. This must be built specifically for the system proposed.

4.2 Hardware Interfaces

It will be necessary to have computer equipment in perfect condition with the following characteristics:

- Internet or LAN connections
- 1.5GHz CPU or better.
- 4 GB RAM
- Mouse.
- Keyboard.

4.3 Software interfaces

- *Windows Vista, 7, 8, 8.1, 10*
- Chromium-based browsers

4.4 Communication interfaces

Servers, clients and applications will communicate with each other, using protocols BD standards, whenever possible. For example, to transfer files or documents should be used DB connections such as MySQL, or Firebase

5. System Requirements

5.1 Functional Requirements

Number	FR-01		
Name	Authentication		
Description	The user must be able to access the platform through the credentials that will be provided by the company		
Precondition	The access credentials must have been given to the user by the administrator or the company		
Normal sequence	Step	Action	
	1	The user will open or access the platform from the access terminal and enter their credentials	
	2	The user will press the access button and the system will confirm the existence of the credentials in the DB	
	3	The user will access the platform dashboard	
Postcondition	The user will be able to access all the functions of the platform through its interface freely until they log out		
Exceptions	Step	Action	
	1	The user's credentials are not correct	
	2	The system will display an alert message of incorrect credentials	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-02		
Name	Profiles		
Description	Users will have a specialized section where they can contract their basic information and the publications made and it will be visible to other users		
Precondition	FR-01 must have been met and the user must have entered the profile section		
Normal sequence	Step	Action	
	1	The user will press on their profile button or on the name of the specific user	
	2	The system display an interface where the content of the profile of the user display	
	3	User query information user specific	
Postcondition	The user can access and consult the requested profile until you exit this interface		
Exceptions	Step	Action	
	1	The selected user is a user no longer employed	
	2	The system will show the profile with less information than one if an employee	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-03		
Name	CRUD Operations		
Description	The system will connect to a database where publications will be created, read, modified and deleted. your attachments		
Precondition	The platform must be connected to the DB		
Normal sequence	Step	Action	
	1	The system will connect to the DB automatically	
	2	The system will ask, depending on the action carried out, to carry out the corresponding CRUD operation	
	3	The system will reflect the changes in the platform	
Postcondition	The user will not notice or should be disturbed while these processes are running and must be able to make full use of the platform		
Exceptions	Step	Action	
	1	The system has not been able to connect with the DB	
	2	The system will show an error message and close the platform	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-04		
Name	Analytics		
Description	The platform will provide analytics to the administrator user referring to publications so that it can view or export them		
Precondition	FR-01 must have been met and the user must have been defined as admin by the company		
Normal sequence	Step	Action	
	1	The administrator must access the analytics section of the platform and press the button to generate analytics	
	2	The system will generate analytics in the of pie charts and they will be displayed in the interface	
	3	The admin will consult graphically the analytics	
Postcondition	The admin will be able to consult these analytics until they exit the interface and will be able to export them and generate a file with them		
Exceptions	Step	Action	
	1	The system has not been able to read the analytics correctly	
	2	An error message will be displayed and the interface will reload to retry it	
Priority	<input checked="" type="checkbox"/> High/Essential	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	FR-05		
Name	Searches and results display		
Description	The user will be allowed to search for topics created by other users and the results will be displayed in relation to the keywords and shown in order of evaluation		
Precondition	The FR-01 must have been met and the cursor placed on the search bar		
Normal sequence	Step	Action	
	1	The user will capture the topic he wants to search and press the search button	
	2	The The system will search the database and display the results as a list	
	3	The user selected to the topic that most attracts their attention	
Postcondition	The user will be able to consult the topic until they exit their interface		
Exceptions	Step	Action	
	1	The system has not found related results	
	2	A text will be displayed indicating the search without results	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-06		
Name	Attachments		
Description	In the publications, the user will be able to decide whether to attach some types of files supported by the platform and that these are displayed in their publication		
Precondition	The FR-01 must have been met and be in the interface of the creation of topics		
Normal sequence	Step	Action	
	1	The user will select the button to add files	
	2	The system will show the window to select the files and the user will select the ones they want	
	3	The user will be able to see a list of the files that have been uploaded to their topic	
Postcondition	One Once the topic is published, users will be able to see and consult these uploaded files		
Exceptions	Step	Action	
	1	It has been selected an unsupported file	
	2	The system will display an alert asking you to select an allowed file type	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-07		
Name	Ratings and comments		
Description	The system will be able to provide the user with a space and the ability to access other topics and comment or generate feedback as well as assess the usefulness of the topic in a 1-5 numerical system		
Precondition	FR-01 must have been met and accessed a topic		
Normal sequence	Step	Action	
	1	The user will select the comment or rate button	
	2	The system will display the window corresponding to the case and the user will enter the data	
	3	The user will select the publish button	
Postcondition	Once the comment or assessment is published, they will be visible to the rest of the users		
Exceptions	Step	Action	
	1	The user has retracted their comment or assessment while performing	
	2	The user will select the cancel button and the changes will not be saved to the system	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

Number	FR-08		
Name	Main page		
Description	The platform will display in the main access to it a list of the most recent topics and the last ones consulted by the user.		
Precondition	The FR-01 must have been met		
Normal sequence	Step	Action	
	1	The user can consult and navigate through the main interface	
	2	The user will be able to consult and visualize the last topics searched for by the same	
	3	The user will select the option that he wishes to carry out next	
Postcondition	The user will be able to access any available function in the interface or remain in the initial page until logout		
Exceptions	Step	Action	
	1	The platform is not available or under maintenance and will not show the initial page	
	2	The system will return to login and display an unavailable alert message	
Priority	<input checked="" type="checkbox"/> High/Essential	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	FR-09		
Name	Background Update		
Description	The system should update its content from the database in the background without disturbing the user.		
Precondition	The platform must be open in the access terminal		
Normal sequence	Step	Action	
	1	The system will connect to the DB automatically	
	2	The system will perform an update every specified time	
	3	In case there is new data, the data will be updated on the platform every time the user performs an action	
Postcondition	The user will not notice or should be disturbed while these processes are running and must be able to make full use of the platform		
Exceptions	Step	Action	
	1	The system has not been able to connect with the DB	
	2	The system will show an error message and close the platform	
Priority	<input checked="" type="checkbox"/> High/Essential	<input type="checkbox"/> Medium/Wanted	<input type="checkbox"/> Low/ Optional

Number	FR-10		
Name	Evaluation of topics		
Description	The system must be able to evaluate and notify that the publications comply with the rules predefined by the publishing company		
Precondition	The user must have published a topic		
Normal sequence	Step	Action	
	1	The system will publish topic	
	2	The system will confirm the topic compliance with the rules defined by the company	
	3	The system will decide whether to leave the publication or delete it	
Postcondition	The system will show an alert message with a message of publication or denial of publication		
Exceptions	Step	Action	
	1	The system has not been able to evaluate the topic	
	2	The system will send the topic for review to the administrator	
Priority	<input checked="" type="checkbox"/> High/Essential		<input type="checkbox"/> Medium/Wanted
			<input type="checkbox"/> Low/ Optional

5.2 Non-Functional Requirements

5.2.1 Performance

- NFR-01 Flexibility The system must be able to operate in multiple communication schemes

5.2.2 Dressing Restrictions

- NFR-02 Colors must match company colors

5.2.3 System attributes

- NFR-03 Response time in requests 90% of the transactions will not exceed the response time between 3 and 4 seconds
- NFR-04 The platform must be able to support the simultaneous access of at least 80-90% of the DB users

5.2.4 Other requirements

- NFR-05 Availability The system will be accessible to the user 24 hours a day, with a minimum availability of 99.6%