

# SOFTWARE REQUIREMENTS SPECIFICATION



**Project: Conservance** 

Review: 1.0

# **Development Department**

May, 2021





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## **Document Sheet**

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## 1. Introduction

This section will provide an introduction to the entire software Requirements Specification (ERS) document. It consists of several subsections: purpose, scope of the system, definitions, references and overview of the document.

#### 1.1 Purpose

Having services or platforms that facilitate the search for topics is extremely essential, as well as to acquire and retain knowledge, so this project will be focused on the user to acquire and retain knowledge from a given problem.

#### 1.2 Scope

With the development of this project it is intended to cover the following points:

- 1. The resolution of problems introduced by users.
- 2. Show a catalog of topics related to the problem drafted with the best ratings.
- 3. A data analysis of the most recently consulted topics.
- 4. The possibility of publishing topics with the use of multimedia resources.
- 5. Login registration and login credentials to ensure access to the platform.

#### 1.3 Personal involved

Name	Chavez Villaseñor Antonio Joseph
Role	Scrum Master
Professional category	Computer Systems Engineering/ or to end
Responsibility	Manage the scrum process and remove impediments

Name	Ibarra Barajas Antonio Harán
Role	Developer/designer
Professional category	Computer Systems Engineering/ or to end

#### **Content**

Name	Ibarra Barahas Edson Paul
Role	Developer/designer
Professional category	Computer Systems Engineering/ or to end
Responsibility	Design and programming of the conservance system

Name	
Role	
Professional category	
Responsibility	

#### 1.4 Definitions, acronyms and abbreviations

### Definición

#### **PO (Product Owner):**

It is one of the roles within the Scrum team, in charge of maximizing the value of work delivered and the return on investment. He is the customer representative within the team, his voice, represents internal stakeholders and is responsible for delivering the highest possible value to the business.

#### **SM (Scrum Master):**

The Scrum Master is a very substantial role within a Scrum team, its participation in all events of a Sprint and making a leader at the service of others, make it an essential ingredient for the harmony of the team.

#### ST (Scrum Team):

A Scrum team is usually composed of working groups of 3 to 9 members of the development team, plus the Scrum Master and the Product Owner. Each of these roles has different responsibilities and must be accountable in different ways, both to each other and to the rest of the organization. The sum of all roles is what we call Scrum Team.

#### Java platform:

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The Java platform is the name of a computer environment or platform originating from Sun Microsystems, capable of running applications developed using the Java programming language or other languages that compile to bytecode and a set of development tools.

### MySQL Workbench:

This is a visual database design tool that integrates software development, database management, database design, creation and maintenance for MySQL database system.

**React:** React (also called React.JS or ReactJS) is an open source Javascript library designed to create user interfaces with the aim of facilitating the development of applications on a single page.

**JS(JavaScript):** JavaScript is a programming or scripting language that allows you to implement complex functions on web pages, every time a web page does more than just sit there and show static information for you to see, shows timely content updates, interactive maps, 2D/3D graphics animation, scrolling video playback machines, etc.

#### 1.5 Reference

Reference	Title	Link
Scrum	Product Owner	https://www.scrummanage r.net/bok/index.php?title= Propietario_del_producto
Scrum	Scrum Manager	https://www.scrummanage r.net/files/sm_proyecto.pdf
Scrum	Scrum Team	https://www.visual- paradigm.com/scrum/what -is-scrum- team/#:~:text=%20Structu re%20of%20Scrum%20Te am%20%201%20Product,

#### **Content**

		by%20the%20organization %20to%20organize%20an d%20More%20
Java	Java platform	https://www.java.com/es/a bout/whatis_java.jsp
MySQL	MySQL Workbench	MySQL :: MySQL Workbench
React	React	https://es.wikipedia.org/wi ki/React
JS	JavaScript	¿Qué es JavaScript? - Aprende sobre desarrollo web   MDN (mozilla.org)

#### 1.6 Document Overview

The following document consists of five parts which are as follows:

- 1.Introduction: topics related to purpose, scope, people involved, some definitions, acronyms and abbreviations, as well as references are presented.
- 2.Overview: this second section presents the perspective, product functions, user characteristics, constraints, assumptions, and dependencies.
- 3. Specific requirements: in this third section you can see the list of user requirements.
- 4. External interface requirements: in this penultimate section we can see the interfaces corresponding to the user, hardware, software and communication.
- 5.System requirements: finally we can see the system requirements such as functional/non-functional requirements, performance, design constraints, system attributes, other requirements and appendices.

### **Content**

# 2. General Description

### 2.1 Project Perspective

The conservance platform will be a product designed to work in the web environment, which will allow its use quickly and efficiently, it will also be supported with a dedicated server for a better response time to users of the platform.

# Content

### 2.2 Product functions



# Content

## 2.3 User Characteristics

User Type	Normal user
Training	Anyone
Activity	Sign up on the platform, Login in, write, consult and rate topics, add media content, watch comments, add comments and watch data analytics.

User Type	Administrator
Training	Anyone
Activity	Sign up on the platform, Login in, modify topics, user management
	(add user, modify user profile and delete user).

#### **Content**

#### 2.4 Restrict

- 1. The development time of the software must be between the established deadlines.
- 2. The platform can be accessed from anywhere in the company.
- 3. The code will be restricted only to manipulate between developers.
- 4. The cost of the system will increase correspondingly to the user's specifications.

#### 2.5 Assumptions and dependencies

- 1. The weekly time of the team dedicated to the development of the software will be 40 hours weekly.
- 2. The time of presentation of progress and / or corrections will be in time and form previously set.
- 3. Equipment costs will not increase, unless special modifications are required by part of the client.
- 4. The proposed scope of the project will be respected unless new plans arise or suggestions from the client.
- 5. The project will be developed under a version driver software.
- 6. It is intended to carry out the development in a daily time frame to show progress.
- 7. The agreed methodology will be followed.

# 3. Specific Requirements

### 3.1 List of user requirements

Number	RUS-001
Name	Problem writing

			Page   13	
Content				
Type	☐ Requirement ☐ Restriction			
Overview	-	When a user writes a problem, they will be offered a catalog with topics and solutions documented by other users.		
Priority	☐ High/Essential	☐ Medium/Desired	☐ Low/ Optional	
Number	<b>RU</b> -002			
Name	Publication of topics			
Туре	Requirement	☐ Restriction		
Overview	_	Allow to the topics that are published can also attach photos, videos or presentations with a maximum limit of size and duration.		
Priority	☐ High/Essential	☐ Medium/Desired	☐ Low/ Optional	
Número	<b>RU</b> -003			
Name	Consult topics			
Type	☐ Requirement	☐ Requirement ☐ Restriction		
Overview	To offer the user the abi	•	es he has registered and	
Priority	☐ High/Essential	☐ Medium/Desired	☐ Low/ Optional	
Número	<b>RU</b> -004			
Name	Data analytics			
Type	□ Requirement	☐ Restriction		
	·			

PERSONAL			Requirements	engineering document
		'		Page   14
Content				
Overview	which users	Offer data analytics on the topics that are most concurrent, the topics to which users have solved their problem using recommendations or solutions made by other users.		
Priority	☐ High/Esser	ntial	☐ Medium/Desired	☐ Low/ Optional
4.1 User interface		ce requi	rements	
<ul><li>The vis</li><li>Keep tr</li></ul>	aual order to ha	ndle plugins	for user interfaces.  and prevent them from be used throughout the mplements are adapted	web platform.
4.2 Hardware in	terfaces			
• One of interact with the	•		*	with internet access to
4.3 Software int	erfaces			
• Operati	ng system linu	x, windows,	, os.	

### **Content**

• The Chrome browser is recommended.

#### 4.4 Communication interfaces

• The communication will be jointly with the server from the platform, making transactions and avoiding the least loss of data. The communication protocols will be those used for internet connection and the FTP protocol for File Transfer.

# 5. System requirements

### 5.1 Functional requirements

Number	RF-001		
Name	Sign in		
Overview	The user must enter their credentials, in case of not having one, they must register.		
Preconditions	<ol> <li>The user must access the platform page.</li> <li>In the login section the user must enter their credentials.</li> </ol>		
Normal	Step	Activity	
Sequence	1	Enter the platform page.	
	2	Enter data in the login section.	
	3	If he is notified of incorrect credentials, the user must register on the platform.	

Postcondition		<ol> <li>The user will have access to the main interface of the platform.</li> <li>The user will have access to his profile and other</li> </ol>
		functionalities.
Exemption Step		Activity
	1	Notification of incorrect credentials, in this case the user must register.
	2	Error when registering there is already a registered user with those credentials.
Priority	□ High/E	ssential

Number	RF-002		
Name	Message	not registered on the platform.	
Overview	In the event that the user does not have access credentials, the system must indicate to the user that he must register to be able to access.		
Preconditions	<ol> <li>The user must enter the main page of the platform.</li> <li>The user has entered their login credentials.</li> </ol>		
Normal	Step	Activity	
Sequence	1	Enter the platform page.	
	2	Enter data in the login section.	
	3	If the credentials do not match the platform will notify the user that he is not registered, therefore, he must register to access.	
Postcondition		<ol> <li>The user must go to the registration section on the platform.</li> <li>Once you have registered the platform will tell you if your registration has been successful.</li> </ol>	
Exemption	Step	Activity	
	1	Error entering incorrect login credentials.	
	2	Error when registering there is already a registered user with those credentials.	

restaux	Requirements engineering document

Priority	☐ High/Essential	☐ Medium/Desired	☐ Low/ Optional

Number	RF-003			
Name	Drafting o	Drafting of the problem		
Overview	The platform must allow the user to enter a problem to look for.			
Preconditions	1. Functional requirement RFN-01 must be met.			
	2. The use	er must write hi	s problem in the search	n engine.
	3. The use	er must click to	search your problem.	
Normal	Step	Activity		
Sequence	1	The user must enter and log in to the platform.		
	2	The user must write his problem in the search engine.		
	3	The user mus	t click to search your p	oroblem.
Postcondition	1. The platform will show you a catalog with the relatopics directly.		atalog with the related	
		2. The platforelated topics	•	catalog with indirectly
Exemption	Step	Activity		
	1	The platform will notify the user that their search was not successful.		
	2	The platform their problem	•	rethink the wording of
Priority	☐ High/Essential		☐ Medium/Desired	☐ Low/ Optional

Number	RF-004
Name	Catalogue of corresponding topics

Overview	When entering the problem the platform will show you a catalog of topics corresponding to the problem.		
Preconditions	1. Th	ne functional requirement RFN-03 shall be met.	
Normal	Step	Activity	
Sequence	1	The user must enter and log in to the platform.	
	2	The user must go to the search section to write their problem.	
	3	The user must click on search for their problem, the platform will display the corresponding results.	
Postcondition		1. The platform will show the user a catalog with the topics related directly and indirectly.	
	2. The user can review the topics displayed.		
Exemption	Exemption Step Activity		
	1	The platform will notify the user that it did not find results for its worded problem.	
	2	The platform will notify the user to rethink the wording of their problem.	
Priority	☐ High/Essential ☐ Medium/Desired ☐ Low/ Optional		

Number	RF-005
Name	Publication of topics
Overview	The platform must allow the user to publish topics with multimedia.
Preconditions	<ol> <li>The functional requirement RFN-01 shall be met.</li> <li>The user should go to the section of publication of topics.</li> <li>The user must compose and upload the content to the topic performed.</li> </ol>

Normal	Step	Activity		
Sequence	1	The user must enter and log in to the platform.		
	2	The user should go to the section of publication of topics.		
	3	The user must write and upload the multimedia content to the topic done, the user must indicate to the platform to verify if the multimedia content to be published complied with the characteristics.		
Postcondition		<ol> <li>The platform will review the content before it is published.</li> <li>The platform will notify the user about the content to be published.</li> </ol>		
Exemption	Step	Activity		
	1	The platform will notify the user that their publication does not meet the established characteristics.		
	2	The platform will notify the user that their content changes in order to be published.		
Priority	☐ High/E	Essential		

Number	RF-006	RF-006			
Name	Notificati	ion of multimedia content			
Overview	1	The platform will notify the user if the multimedia content meets the characteristics for publication.			
Preconditions	1.Function	1.Functional requirement RFN-05 must be met			
Normal	Step	Step Activity			
Sequence	1	The user must enter and log in to the platform.			
	2	The user should go to the section of publication of topics.			
	The user must write and upload the multimedia c the topic done, the user must indicate to the pla				

		verify the multimedia content to be published, to check if it complies with the characteristics.			
Postcondition		1. The platform will notify the user about the content to be published.			
		2. If the content complies with the characteristics will be published, otherwise the content must be changed, pass the verification again to verify that it complies with the established.			
Exemption	Step	Activity			
	1	The platform be published.	at their content cannot		
	2	The platform will notify the user that it does not hav privileges to make publications.			
Priority	☐ High/E	ssential	☐ Medium/Desired	□Low/ Optional	

Number	RF-007	RF-007		
Name	Topic con	Topic consultation		
Overview	The platfo	The platform will allow the user to consult the topics he has registered.		
Preconditions	1. Functio	1. Functional requirement RFN-01 must be met		
	2. The use	2. The user must have consulted topics previously.		
Normal	Step	Activity		
Sequence	1	The user must enter and log in to the platform.		
	The user must go to his profile.			
	3	The user must go to the registered Topics option.		
Postcondition		1. The user will have access to a catalog of topics that he has previously registered.		
		2. The user will have access to delete the registered topics.		

Exemption	Step	Activity			
	1	The platform will notify the user that it does not have registered topics.			
	2	The platform will notify the user that it does not have privileges to remove the registered topics.			
Priority	☐ High/Essential		☐ Medium/Desired	□Low/ Optional	

Number	RF-008				
Name	Rating cla	Rating classification			
Overview		The platform will show from the highest to the lowest in terms of valuation of topics.			
Preconditions	1. Function	1. Functional requirement RFN-01 must be met			
	2. The user must write a problem to look for.				
	3. The pla	3. The platform will display a catalog of results.			
Normal	Step	Step Activity			
Sequence	1	The user must enter and log in to the platform.			
	2	The user must go to the search engine to write a problem.			
	3	The user will click on search for problems, the platform will display a catalog of results.			
Postcondition  1. The user will be able to buy the r topics.		1. The user will be able to buy the ratings of the chosen topics.			
		2. The user will be able to choose the topic that best suits him in terms of the evaluation received.			
Exemption	Step	Activity			
	1	The platform will notify the user that it was not successful in the search for its problem.			

	2	The platform will notify the user that the topics shown do not have sufficient assessment.		
Priority	☐ High/Essential		☐ Medium/Desired	□Low/ Optional

Number	RF-009			
Name	Data analytics			
Overview	The platform will show the user the data analytics corresponding to the most concurrent topics.			
Preconditions	1. The fun	ctional requirement RFN-01 shall be met.		
	2. The user must log in to their profile.			
	3. The use	r must enter the data analytics option.		
Normal	Step	Activity		
Sequence	1	The user must enter and log in to the platform.		
	2	The user must go to his profile.		
	3	The user must go to the data analytics option, the platform will display the corresponding results.		
Postcondition		1. The platform will show you the data analytics of the most consulted topics.		
		2. The platform will show you the percentage of the graphs shown.		
Exemption	Step	Activity		
	1	The platform will notify the user that it does not have topics to generate the analytics.		
	2	The platform will notify the user that it is not possible to display the analytics at that time.		
Priority	☐ High/E	Essential		

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Number	RF-010				
Name	Analytics Update				
Overview	_	The platform will be constantly updating data analytics for a better appreciation of the most popular topics.			
Preconditions	1. The adr	1. The administrator must enter their settings panel.			
	2. The adr	ninistrator mus	t configure the update	time.	
Normal	Step	Activity			
Sequence	1	The administrator must log in and log in to the platform.			
	2	The administrator should go to the platform settings.  The user will configure the update time of the analytics.			
	3				
Postcondition		1. The platform will notify the administrator that they must accept all changes.			
		2. The platform will notify the changes made successfully.			
Exemption	Step	Activity			
	1	The platform will notify the administrator that changes cannot be saved.			
	2	The platform will notify the administrator that it is not possible to make changes at these times.			
Priority	☐ High/Essential ☐ Medium/Desired ☐ Low/ Optional				

### 5.2 Non-functional requirements

### 5.2.1 Performance

It is intended a large number of users (employees) and for this the database must be very dynamic as well as transactions. The searches for consultation of topics have to be in an approximate period of three seconds, but go optimizing to make it more effective,

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everything depends on the number of users who are connected at the same time in the platform.

### 5.2.2 Design constraints

1. The analysis and design of the application is done under the principles of the web paradigm.

### 5.2.3 System attributes

- The system must be dynamic and have a navigation bar
- Testability to be able to carry out a control of what happens and to be capturing the errors and solving them.

### 5.2.4 Other requirements

- The legal standard with which it will work has to be readable to all users and administrators.
- See what data can be observed by developers and what data cannot.





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### 5.3 Appendage

- The development cost of the system does not depend for now on an economic budget, but on short time periods in which the functional parts of the software can be developed.
- It has to be developed under specific libraries which can provide intuitive user interfaces for the user and that in the same way the time lapses are established to work by modules of the system.