

# SOFTWARE REQUIREMENTS SPECIFICATION



# The File Hub

**Review: X.X** 

# Instituto Tecnologico de Tijuana

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# Requirements engineering document

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# **Document card**

Date	Review	Description	Author
12/05/2021	1	Initial project documentation	Enrique Cisneros



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## 1. Introduction

This document defines the general description, objectives and participants of the project. It is mainly related to the authorization of the start of the project. This document also provides a description of the current situation, the high-level requirements, success criteria, risks and opportunities, all in order to give a better understanding of the process of development and execution of the platform.

## 1.1 Documents purpose

The intention is to offer to the industrial Tijuana market, which is constantly creating information, a knowledge manager that allows creating, searching, commenting and rating informational documents to share with other users through the documents already mentioned and also to get knowledge by reading the documents that are necessary.

## 1.2 Scope

It will allow the creation of posts in which it will have different types of files containing useful information for the company. By using this KMS system, companies will be able to have information available to all company employees that will no longer have to search in different departments of the company or have to create unnecessary information.

## 1.3 Involved personnel

Name	Bernal Arellano Roberto
Role	Developer
Professional category	Informatics Engineering
Responsibilities	System administrator.

Name	Cisneros Acosta Jose Enrique
Role	Project boss
Professional category	Informatics Engineering
Responsibilities	System design administrator.

Name	Pimienta Castillo Kevin Aryam Christopher	
Role	Database administrator.	
Professional category	Informatics Engineering	
Responsibilities	Database and system administrator	

Name	Sandoval Salazar Esmeralda	
Role	Scrum Master	
Professional category	Informatics Engineering	
Responsibilities	Supervise the correct operation of the system	

## 1.4 Definitions, acronyms and abbreviations

### Definition

- KMS: is a tool used by companies to help organize documentation, frequently asked questions and other information into easily accessible formats for both internal and external customers.
- Web: computing a vast network of linked hypertext files, stored on computers throughout the world, that can provide a computer user with information on a huge variety of subjects.



- User: a person who uses or operates something, especially a computer or other machine.
- Administrator: someone whose job is to control the operation of a business, organization, or plan.

#### 1.5 References

Reference	Title	
Standard IEEE 830 - 1998	IEEE	

#### 1.6 Document overview

In this document we provide the information and diagrams that represent the general structure of the platform: The File Hub.

## 2. General description

## 2.1 Product perspective

The File Hub is designed to work in web environments, working properly with the use of the user registry of the company where the system is used. Only employees and users desired by the company can use the system.

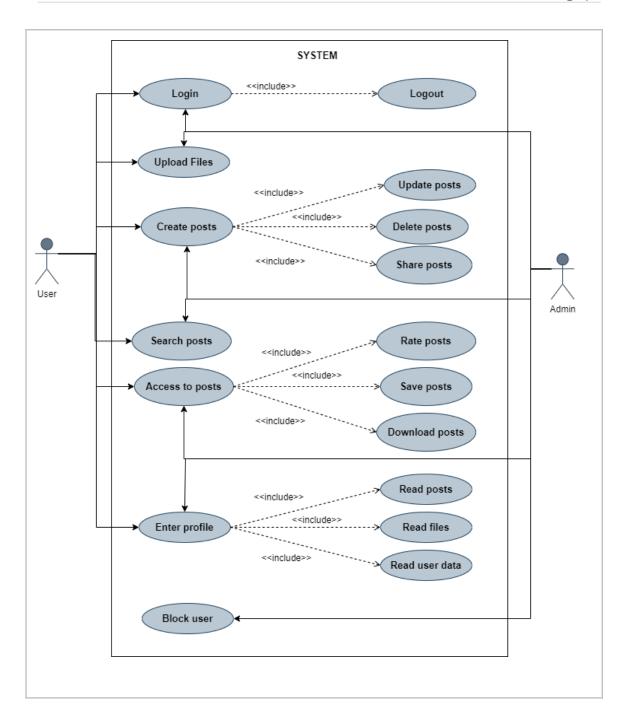
#### 2.2 Product features

The File Hub will allow:

- Users can log into the platform.
- Create posts.
- Attach files to posts.
- Delete posts and delete files.
- Save posts.
- Download files.
- Comment on posts.
- Rate posts.
- Search posts.
- View profile information.







### 2.3 Users characteristics

User type	Employee	
Training	High school completed.	
Activities	Knows how to enter required information.	
	Can search any kind of information on the platform.	

User type	Administrator
Training	Professional at bachelor's level or higher
Activities	Manage user permissions on the platform.

### 2.4 Restrictions

- The time frame for the development of the system is short.
- The only person with control of the system is the administrator.
- Everything that you want to integrate must be agreed with the rest of the development team before being added.
- It will be developed in the React.

## 2.5 Assumptions and dependencies

- If instead of using the company's database, if it is required to use a database integrated with the system, considerations would have to be made.
- The user will have internet access.
- There will only be design changes.

# 3. Specific requirements

## 3.1 List of users requirements

Number	RUS-001	
Name	User control	
Type	✓ Requirement	☐ Restriction



Description	It will be possible to control which user can perform the fundamental actions on the platform.			
Priority	✓ High/Essential	☐ Medium/Needed	☐ Low/ Optional	
Number	RU-002			
Name	Posts control			
Туре	✓ Requirement	☐ Restriction		
Description	Posts from any user can be deleted.			
Priority	✓ High/Essential	☐ Medium/Needed	☐ Low/ Optional	
Number	RU-003			
Name	Block user			
Type	Requirement	☐ Restriction		
Description	Platform users may be b	locked.		
Priority	☐ High/Essential	Medium/Needed	☐ Low/ Optional	
Number	<b>RU</b> -004			
Name	Identificación de usuarios			
Type	Requirement	☐ Restriction		
Description	The user of type "employee" will not be able to change his name in the system.			
Priority	☐ High/Essential	☐ Medium/Needed	✓ Low/ Optional	

# 4. External interface requirements

## 4.1 User interfaces

• The user interface will consist of a set of windows with buttons, lists and text fields.



- This must be built specifically for the proposed system and will be viewed from an internet browser.
- The platform will have a homepage where they can select the "Login" option to enter to their unique principal page.

#### 4.2 Hardware interfaces

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

- Network adapters. (WiFi or Ethernet)
- 1.66GHz processor or higher.
- Minimum memory of 256Mb.
- Mouse.
- Keyboard.

#### 4.3 Software interfaces

- Operative System: Windows 7 or superior.
- Explorer: Mozilla Firefox, Google Chrome, Opera or Microsoft Edge.

### 4.4 Communication interfaces

• Users and administrators will be able to communicate with each other through the application through the action of sharing files, since the previously mentioned users are created with the company's registered data.



# **5. System requirements**

# **5.1 Functional requirements**

Number	RFN-01			
Name	User creation			
Description	The plats	The platform will allow users to register within it through the		
	registered	registered data of the company that works (name, last name, role,		
	departme	department, etc.)		
Precondition	The user i	The user must be on the platform's website from a computer.		
Normal	Step	Action		
sequence	1	The user enters the platform page.		
	2	Click on create user Fill the textbox with the user data		
	3			
	4 Click on create			
Postcondition		The system displays the main page of the platform.		
Exceptions	Step	Action		
	1	The system does not allow the user to create an account.		
	The system asks you to review the user's data.			
Priority	High/	Essential		





Priority

☐ High/Essential

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Number	RFN-02				
Name	Login				
Description	The platform will allow the login by means of an authentication of the				
1	data entered by the user who wants to access the page.				
Precondition	The user i	The user must be on the platform's website from a computer.			
Normal	Step	Action			
sequence	1	The user enters	s the platform page.		
	2	Enter username and password.			
	3	Click on "Logi	Click on "Login".		
Postcondition		The system displays the main page of the platform.			
Exceptions	Step	Action			
	1	The system does not allow the user to log in.			
	2	The system asl	ks you to review the u	ser's data.	
Priority	✓ High/Essential   □ Medium/Needed   □ Low/ Optional		☐ Low/ Optional		
Number	RFN-03				
Name	Main page				
Description	The platform will provide a starting wall displaying the				
	most rece	nt documents.			
Precondition	The functional requirement RFN-02 must be done				
Normal	Step	Action			
sequence	1	The user enters the platform page.			
	2	Enter username and password.			
	3	Click on "Login".			
Postcondition		The system displays the main page of the platform.			
Exceptions	Step	Action			
	1	The system does not allow the user to log in.			

Medium/Needed

☐ Low/ Optional





Número	RFN-04			
Name	Upload files			
Description	The platform will allow users to upload files of different types, such			
	as pdf, pptx, or mp4.			
Precondition	The user i	s in the process of creating a post.		
Normal	Step	Action		
sequence	1	Click on the option "Create publication".		
	2	Select files to attach to the post.		
	3	Create the post.		
Postcondition		Files are displayed in the user's profile		
Exceptions	Step	Action		
	1	Error message is displayed when the load weight is exceeded.		
	2	Files of unsupported format are not loaded.		
Priority	☐ High/Essential ☐ Medium/Needed ☐ Low/ Optional			
Number	RFN-05			
Name	My documents / Unit			
Description	The platform will allow the user to have the files of their publications saved in their account.			
Precondition	The functional requirement RFN-04 must be done.			
Normal	Step	Action		
sequence	1	Click on "My documents".		
Postcondition		Files are displayed in the user's profile		
Exceptions	Step	Action		
	1	System shows an "empty drive" message.		
Priority	│ ✓ High/I	Essential		





Número	RFN-06			
Name	Create posts			
Description	The pla	The platform will provide the user with the option to create posts.		
Precondition	The use	er must be in their user profile.		
Normal	Step	Action		
sequence	1	Click on the "Create publication" option.		
	2	Enter data to the publication.		
	3	Click on the "Create" option.		
Postcondition		The created post is saved and displayed on the main page.		
Exceptions	Step	Action		
	1	The user does not have permissions to create posts.		
Priority	☐ High/Essential ☐ Medium/Needed ☐ Low/ Optional			
Number	RFN-07			
Name	Modify post			
Description	The platform will allow a user to modify their publication if they find			
	it necessary.			
Precondition	The user must have a publication selected.			
Normal	Step	Action		
sequence	1	The user edits the text of the publication or deletes or uploads files to some publication.		
	2	The user saves changes.		
	3	The system displays a pop-up with the message "modification successful"		
Postcondition		The system saves the changes into the platforms database		
Exceptions	Step	Action		
	1	The user has not published anything yet		
	2	Unable to make changes due to loss of internet connection		
Priority	✓ High/I	✓ High/Essential   ☐ Medium/Needed   ☐ Low/ Optional		





Número	RFN-08			
Name	Search post			
Description	The platform will have a search engine to be able to find a publication			
	that contains a specific topic.			
Precondition	The user must be on the main page.			
Normal	Step	Action		
sequence	1	Enter data to the search engine.		
	2	Click on "Search".		
	3	Posts related to the search are displayed.		
Postcondition		Posts related to the search are displayed.		
Exceptions	Step	Action		
	1	No posts related to the search found.		
	2	The user does not enter data.		
Priority	✓ High/Essential   □ Medium/Needed   □ Low/ Optional			
Number	RFN-09			
Name	Search filter			
Description	The platform's search engine will provide a filter to be able to perform a search specific to the user.			
Precondition	The user r	The user must be on the main page.		
Normal	Step	Action		
sequence	1	Enter data to the search engine.		
	2	Click on "Search".		
	3	The user select filter options for a post		
Postcondition		The system saves the changes into the platforms database		
Exceptions	Step	Action		
	1	The user has not published anything yet		
	2	The platform will display a message saying "There is no related post to search".		
Priority	☐ High/E	☐ High/Essential		





Número	RFN-10			
Name	Recommended posts			
Description	The platform recommended posts that contain topics related to the searches made by the user or related to the post created by the user.			
Precondition	The user r	nust access a post.		
Normal	Step Action			
sequence	1	The user must be on a post.		
Postcondition		The platform will show recommendations related to the		
	topic of the publication open.			
Exceptions	Step	Action		
	1	The platform will not show recommendations since it does		
		not have posts related to the publication.		
Priority	☐ High/Essential ☐ Medium/Needed ☑ Low/ Optional			
Number	RFN-11			
Name	Rate post			
Description	The platform will allow the user to rate posts.			
Precondition	The user must access a post.			
Normal	Step	Action		
sequence	1	The user must be on a post.		
	2	The user rates the post by means of stars.		
Postcondition		The assigned grade will be saved on the platform.		
Exceptions	Step	Action		
	1	The user does not have permission to rate posts.		
	2	Post has no option to rate		
Priority	☐ High/E	☐ High/Essential		



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Número	RFN-12			
Name	Comment post			
Description	The platform will allow the user to give feedback to the post.			
Precondition	The user is	s in a post.		
Normal	Step	Action		
sequence	1	Enter text	in the comment section	l.
	2	Clicks "send".		
Postcondition	Comment is saved on the post.			
Exceptions	Step	Action		
	1	Unable to comment on the post.		
Priority	☐ High/Essential ☐ Medium/Needed			
Number	RFN-13			
Name	Download files			
Description	The platform will allow the user to download a file within their local device.			
Precondition	The user is in his user profile.			
Normal	Step Action			
sequence	1	The user has files in his profile.		
	2	Clicks on	download.	
Postcondition		The system allows downloading.		
Exceptions	Step	Action		
	1	The user has	no posts.	
Priority	☐ High/E	☐ High/Essential ✓ Medium/Needed ☐ Low/ Optional		





Número	RFN-14			
Name	Share post			
Description	The platform will allow users to share posts with other users who are			
	part of it.			
Precondition	The user must access a post.			
Normal	Step	Action		
sequence	1	The user must be on a post.		
	2	The user clicks on share the publication.		
Postcondition		The post is shared successfully.		
Exceptions	Step	Action		
	1	The platform does not show sharing links.		
Priority	☐ High/Essential ✓ Medium/Needed ☐ Low/ Optional			
Number	RFN-15			
Name	Save post			
Description	The platform will allow users to save posts to avoid searching for posts again.			
Precondition	The user must access a post.			
Normal	Step	Action		
sequence	1	The user must be on a post.		
	2	The user clicks on "Save Post".		
Postcondition		The post is saved successfully.		
Exceptions Step Action		Action		
	1	The post doesn't have a save option.		
Priority	☐ High/E	☐ High/Essential		

## 5.2 No functional requirements

#### 5.2.1 Performance

The platform, when the user searches for a file, will show the posts of other users based on the rating of the posts, that is, in descending order with respect to said individual ratings of each publication.

#### 5.2.2 Design restrictions

- The platform will have a minimalist design with blue and white colors.
- Similarly, the platform will have an intuitive design so that the user can search for the necessary sections as quickly and easily as possible.

## 5.2.3 System attributes

- The platform will allow there to be a capacity limit when uploading files.
- The platform will be available to any user 24 hours a day.
- The platform will provide data security to users.

### 5.2.4 Other requirements

Any user who uses the platform The File Hub must have prior knowledge in the use of similar platforms (platforms such as springer or social networks can serve as a reference to understand how it works).

#### 5.2 Annex

- The platform will have login screens, main page, profile, search engine, post in general, etc.
- The platform will display posts in the main page.
- The interface will be dynamic and easy to understand for users.