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Software Requirements Specifications 2014

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Software Requirements Specifications

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Document Purpose and Audience

This document aims to explain the SR (System Requirements) of FCI Research project, its functions and its behaviors.

It explains how the program will be from a user's point of view; what will happen if he does what.

So we can say this document presents the guide, and provides a detailed overview of our software product, its parameters and goals

The audience for this document is the project owner who wants to create this program, the stakeholders and the developers of the system.

Introduction

Software Purpose

The Purpose is to make a web application for FCI researchers. It allows doctors, teacher assistants and students -who are interested in research- to easily connect with each other. It also allows them to share their researches and knowledge.

Software Scope

FCI Research is a web application that boosts the productivity and make things easier for FCI researchers. A researcher can pick some interests so that he becomes connected to other researchers who share the same interest with him. He can share his work with others and he can also post and answer questions.

Moreover, the system lets users create groups. These groups are very beneficial if a researcher wants to work with a specific group of people.

Definitions, acronyms, and abbreviations

Researcher: This is the kind of user who uses our application; a person interested in some specific topics and makes researches on them. He/she then may share and post them on our application.

Tag: Certain identification added to each user, to questions, or to researches to categorize them, and to make the users able to identify each of these entities easily.



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Share: Publish a research with a specific topic to make users with the same interests read it or even download it.

Research Group: Collection of people with same interests.

Notifications: Kind of alert which is shown to a user to let him know if any update has happened.

Requirements

Functional Requirements

1.Signup:User will enter his FCI mail address, name, password and the topics he is interested in. This function will make him sign up in the website with the information he entered.

2.Login:user will have to write his FCI mail address and his password so he would be able to enter the website.

3.Logout:the user will press the logout button so he would logout of the site, and he will have to login the next time he enters the website.

4.Edit profile: user will use this function for adding his photo, job description, affiliations, an overview about himself, and description for his research interests. He can also use it to add a new topic of interest

5.Post Question: user can use this function to ask a question, and he has 2 options.

- 1.choose the question to be shown to researchers with a certain topics of interest , and then he will have to tag these topics he wants.
- 2.choose the question to be shown to anyone "all the researchers".

6.Add tag: Allows user to pick a tag before posting a question and while adding a new research , to specify its field.

7.Share research: allows user to post his research, add a description and a URL to download.

8.Send request to download research: If a user wants to get a research, it allows him to request permission to obtain it from the research's owner.

9.Accept/Reject request: Allows user to choose either to accept or reject a permission request sent from another user.

10.will send mail: Allows user to reply later to a sent permission request.

11.Create research group: this function gets a name, description from user to create a new group.



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12.Add Members: This function allows group owner, or any group member to add members to the group.

13.Delete group: Only the group owner can delete it, or delete a description.

14.Edit group description/name: Any member can edit the group's description and name

15.Remove members: Any group member can remove another member from group.

16.Send Request to join group: Non members of any group can send a request to group owner

17.Reply a join request: Only group owner can reply to the notification or send an action called "will send mail", and accept or reject the request later (after knowing information about this user by mail)

18.Show groups: This function allows users to open a new page/tab showing the current groups he is a member of, or any other suggested groups according to his interests and some information about these groups (name, description, members), so he can choose which group he would like to join.

Non Functional Requirements

Performance:

1. Web Application has to fast in load time (3 seconds)
2. Fast response time to any function (2 seconds)

Interface:

3. The application's interface has to be user friendly (easy to use)

Platform:

4. Web application can work correctly on Firefox, Google chrome and Opera.

Reliability:

5. The web application can allow up to 10,000 users using it at the same time
6. Application functions must be crash safe almost 95% of the time.



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Security:

7. Application must be secure enough, so it is hard to hack it and gets the users information.

All system data must be backed up every 48 hours

All external communications between the system's data server and clients must be encrypted

Privacy:

8. Things user publish can't be seen by others unless he agrees of that.

Only Admin has access permissions to system data.

Private information of the user can't be seen by others users (e.g password, private researches, download link of a research, information in group can't be seen by non-members).

User's data can't be accessed by any member.

Maintenance:

9. Different kinds of problems could occur. A problem should be quickly detected and fixed by developers,

The system should be designed to be easily maintained later in in case of any bugs, fixes, or new functionalities.

Usability:

10. A guide should be provided to help researchers use the web application easily.

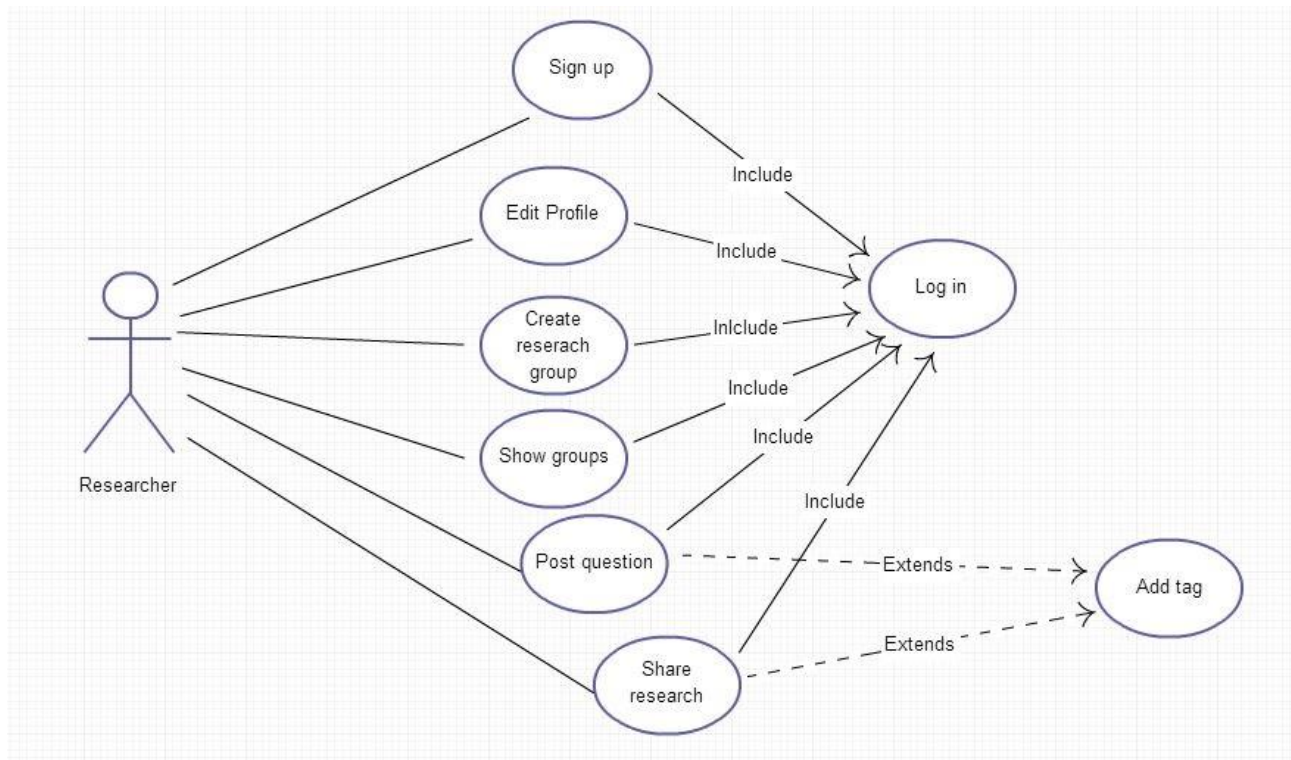


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System Models

Use Case Model





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Software Requirements Specifications

Use Case Tables

Use Case ID:	1	
Use Case Name:	Signup	
Actor:	User	
Pre-conditions:	The user should have an FCI-Email	
Post-conditions:	The user can use the application	
Flow of events:	User Action	System Action
	1- User Enter his name , FCI-email , password , topic of interest	
		2- System creates an account for him
Exceptions:	If user enters non FCI email ... Error message appears	
Includes:		
Notes and Issues:		



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Software Requirements Specifications

Use Case ID:	2	
Use Case Name:	Login	
Actor:	User	
Pre-conditions:	The actor has signed up and made an account on the site	
Post-conditions:	The actor can use the application	
Flow of events:	User Action	System Action
	1- User EntersFCI-Email as a username and Password.	
		2- System Verify user data
Exceptions:	If user enters wrong email or password ... Error message appears	
Includes:		
Notes and Issues:		



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Software Requirements Specifications

Use Case ID:	3	
Use Case Name:	logout	
Actor:	User	
Pre-conditions:	The actor has logged in	
Post-conditions:	The user can no longer use the application until he logs in again	
Flow of events:	User Action	System Action
	1- User press the log out button.	
		2- System logs out the user of the application
Exceptions:		
Includes:		
Notes and Issues:		



Software Requirements Specifications

Use Case ID:	4	
Use Case Name:	Edit profile	
Actor:	User	
Pre-conditions:	The actor has logged in	
Post-conditions:	The actor can change info in his profile	
Flow of events:	User Action	System Action
	1- User opens his profile	
		2- System shows his profile
	3- User Select "Edit"	
		4- System makes the info editable
	5- User changes the things he want then press "Done"	
		6- System changes the info.
Exceptions:		
Includes:		
Notes and Issues:		



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Use Case ID:	5	
Use Case Name:	post Question	
Actor:	Researcher	
Pre-conditions:	User must be already logged in	
Post-conditions:	Posting a questions and receiving answers	
Flow of events:	User Action	System Action
	1- User press the “Post a question button”	
		2- System gives him a text field to write his question in
	3- User writes his question and choose the tag of the question or chooses the Q. to be public ,and press “Done”	
		4- if Q. is tagged: Publish to members who have similar interest as the specified tags in the question if Public: Publish to all members
Exceptions:		
Includes:	"add tag"	
Notes and Issues:		



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Use Case ID:	6	
Use Case Name:	add tag	
Actors:	user	
Pre-conditions:	Post a question/research	
Post-conditions:	Selected tags get added to the question	
Flow of events:	User Action	System Action
	1- User presses the "add tag" button.	
		2- System shows a list of available tags.
	3- User selects the wanted tags	
		4- System adds the selected tags to the question/research
Exceptions:		
Includes:		
Notes and Issues:		

Use Case ID:	7	
Use Case Name:	Share research	
Actors:	user	
Pre-conditions:	Login	
Post-conditions:	Research gets shared to specified audience	
Flow of events:	User Action	System Action
	1- User presses the "Share Research" button.	
		2- System provides him with text fields to write about the research, an upload button to upload his files and the "add tag" button.
	3- User writes name, description and upload research files.(Upload is optional)	
	4-User uses the "add tag" button and then presses the "share" button.	
		5- System shares the research on his research tab.
Exceptions:		
Includes:	"add tag"	
Notes and Issues:		



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Use Case ID:	8	
Use Case Name:	send request to get the research if not available for direct download	
Actors:	User	
Pre-conditions:	1-Pick an existing research to send request to its owner	2-Research's download url is not provided with the research.
Post-conditions:	A notification has to be sent to the research owner by the system.	
Flow of events:	User Action	System Action
	1- User presses the "request download" button.	
		2- System sends a notification to the research owner about the request.
Exceptions:		
Includes:		
Notes and Issues:		

Use Case ID:	9	
Use Case Name:	Accept/Reject request	
Actors:	User (Research owner)	
Pre-conditions:	The research owner should have already received a request to download his research.	
Post-conditions:	System has to reply to the request sender.	
Flow of events:	User Action	System Action
	1- User chooses to press accept or reject.	
		2- System sends a notification to the request sender telling him that his request was accepted/rejected.
Exceptions:		
Includes:		
Notes and Issues:		

Use Case ID:	10	
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Software Requirements Specifications

Use Case Name:	will send mail	
Actors:	User (Research owner)	
Pre-conditions:	The research owner should have already received a request to download his research.	
Post-conditions:	Researcher has to be reminded to send mail by the system.	
Flow of events:	User Action	System Action
	1- User presses the "will send mail" button.	
		2- System clears the download request notification and creates a reminder that reminds researcher to reply by mail. The user should then reply the requester with download information if he accepted
Exceptions:		
Includes:		
Notes and Issues:		



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Use Case ID:	11	
Use Case Name:	Create research group	
Actors:	User	
Pre-conditions:	The user has an account and have logged in	
Post-conditions:	The user owns a new group with customized name and description	
Flow of events:	User Action	System Action
	1- User Clicks on create group button	
		2- System shows the 'Create group' page allowing the user to edit a group name and description
	3- User Select the name he/she wants and write the group's description	
		4- System gets the information and create a group
Exceptions:	In step 4 -Group name may have already existed: 1-system should show a message to user telling him that the name already exists 2-let him choose another name 3- return to step 4	
Includes:	Edit group description/name	
Notes and Issues:		



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Use Case ID:	12	
Use Case Name:	Add member, Remove member	
Actors:	User	
Pre-conditions:	The user has an account, have logged in The user must also be a member in this group, or its owner	
Post-conditions:	The selected user is added/removed from group	
Flow of events:	User Action	System Action
	1- User selects the group, and click the add/ remove button	
	2- User selects the name of member he wants to add or remove	
		3- System Verify the information of selected user
		4- System executes the function
Exceptions:	In step 3 – The selected user may already be a member of the group in the add member case: - system should show a message notifying the user that the selected user is already a member and close this case.	
Includes:	NA	
Notes and Issues:		



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Software Requirements Specifications

Use Case ID:	13	
Use Case Name:	delete group	
Actors:	User (Group admin)	
Pre-conditions:	1-The group should already exist.	2-The actor should be the group's admin.
Post-conditions:	The group and all its content has to be completely deleted.	
Flow of events:	User Action	System Action
	1- User presses the "delete group" button.	
		2- System deletes the group.
Exceptions:		
Includes:		
Notes and Issues:		



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Software Requirements Specifications

Use Case ID:	16	
Use Case Name:	Send request to join group	
Actors:	1-User who requests to join 2-Group owner	
Pre-conditions:	Both users are members and logged in to the system	
Post-conditions:	The request is either accepted or rejected	
Flow of events:	User Action	System Action
	1- User selects a group	
	2- User sends a request to join this group	
		3- System notify the group owner with this request
	4- Group owner gets the notification and decide whether to accept or reject (in case of reject he can choose will send mail action)	
		5- System gets the information and notify the user if he is added or rejected
Exceptions:	If the group member chooses "Reply by mail" action, the acceptance of the requested is postponed.	
Includes:	Reply a join request	
Notes and Issues:		



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Use Case ID:	18	
Use Case Name:	Show groups	
Actor:	User	
Pre-conditions:	The actor has already logged in to the site	
Post-conditions:	The actor can see the current groups and their description and can try to join one of them	
Flow of events:	User Action	System Action
	1- User press the “Show groups” button	
		2- the system opens a separate page showing groups with number of members and the group name beside each group
Exceptions:		
Includes:		
Notes and Issues:		



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Ownership Report

Item	Owners
Document Purpose and Audience	<i>Sarah Hany</i>
Software Purpose	<i>Heba Khazbak</i>
Software Scope	<i>Ziad Mohamed</i>
Definitions, acronyms, and abbreviations	<i>Heba,Sarah,Ziad</i>
Functional Requirements	<i>All of the Team</i>
Non Functional Requirements	<i>Each one get minimum 2</i>
Use Case Model	<i>Heba Khazbak</i>
Use Case Tables	<i>Sarah,Yasmin,Ziad (Divided equally)</i>