Software Requirements Specification

Version 1.0

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Website For Sharing Projects

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1.0 Introduction:

1.1 Purpose:

The purpose of this document is to present a detailed description of the Website we are working on .

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 stakeholders and the developers of the system .

1.2 Scope of Project

This software system will be a Website For Sharing Projects . this system will be designed for the purpose of letting people work with each other in a organized way and let people upload their projects and work as a team and giving permission to other people to interact with the project (like leaving comments and notes etc.) and download others projects .

More specifically, this system is designed to allow a team to create their own project on the website , work together , share progress with others , interact with projects , let teams to manage their projects and download other teams projects .

The software will facilitate communication between authors, reviewers, and the editor via E-Mail .The system also contains a relational database containing a list of Teams, Users, and Projects.

1.3 Glossary

Term	Definition
Database	Collection of all the information monitored by this system
Team	Set of users working in a particular project
Historical Society Database	A member of the Historical Society listed in the HS database.
user	Anyone who can visit the website and be part of a team and share opinions about projects and share the effort to build a project with a team or alone
Stakeholder	Any person with an interest in the project who is not a developer
project	It's a task that one or more users work with each other to develop it
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
Reviewer	A person who can see the project and leave a comments or interact with the project
Developer	A person who want to give suggestion about the project to the team
Team leader	The person who create the project and add the team members

1.4 References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998
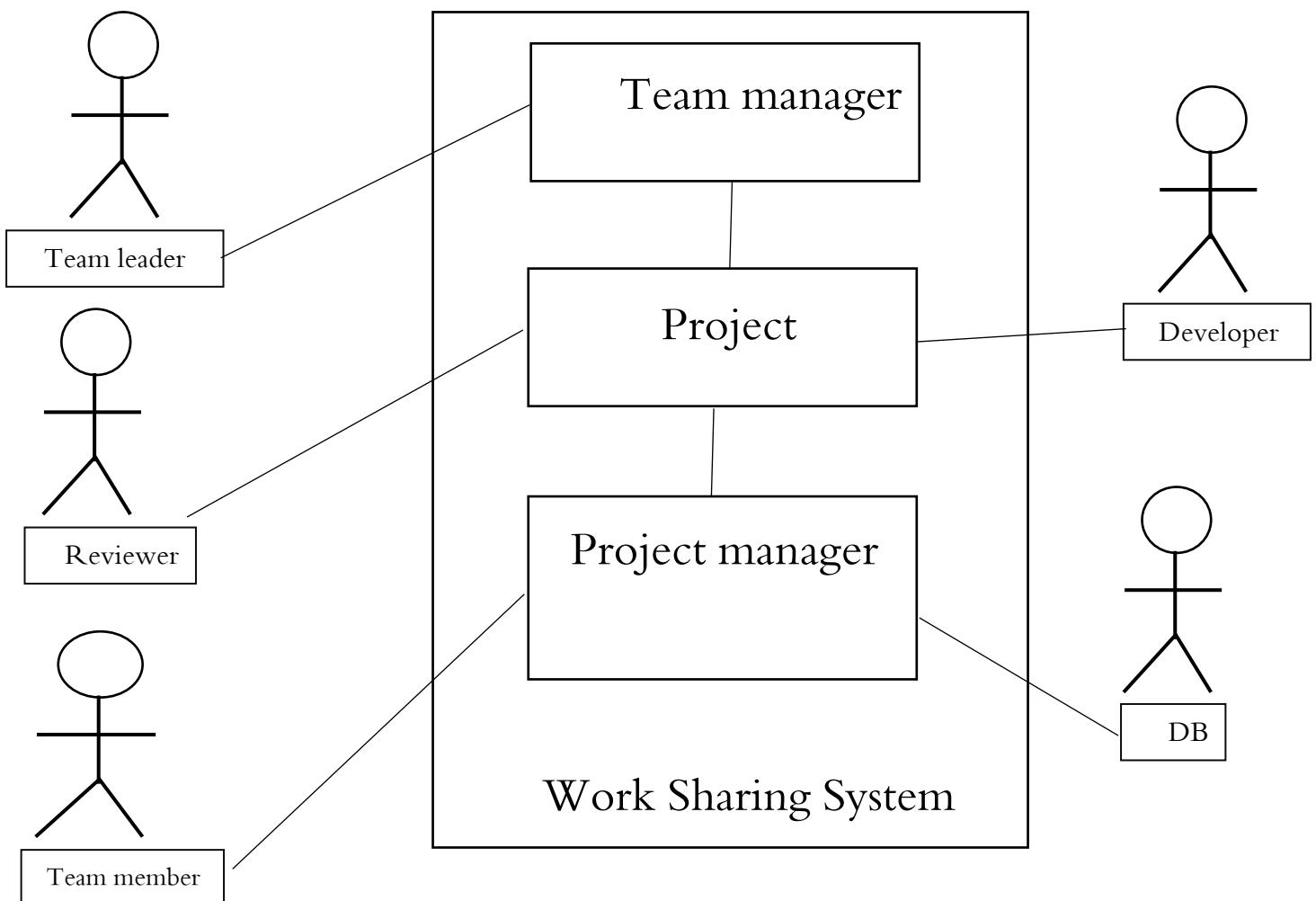
1.5 Overview of Document

The next chapter, the Overall Description section, of this document gives an

overview of the functionality of the product. It describes the informal requirements and is

used to establish a context for the technical requirements specification in the next chapter .

The third chapter, Requirements Specification section, of this document is written

primarily for the developers and describes in technical terms the details of the

functionality of the product.

Both sections of the document describe the same software product in its entirety,

but are intended for different audiences and thus use different language.

2.0 Overall Description:

2.1 System Environment:

Figure 1 – System Environment

The Web Sharing System has four active actors and one cooperating system. The Team member and Reviewer accesses the Project through the Internet. Any one of team member or Reviewer communication with the system through site interfaces. The developer can communicate with the Team to give his suggestion through the Email .The Team leader accesses the entire system directly. There is a link to the editable database .

<<the cooperating system is divided to three component "Team manager ","Project " and "Project manager" .>>
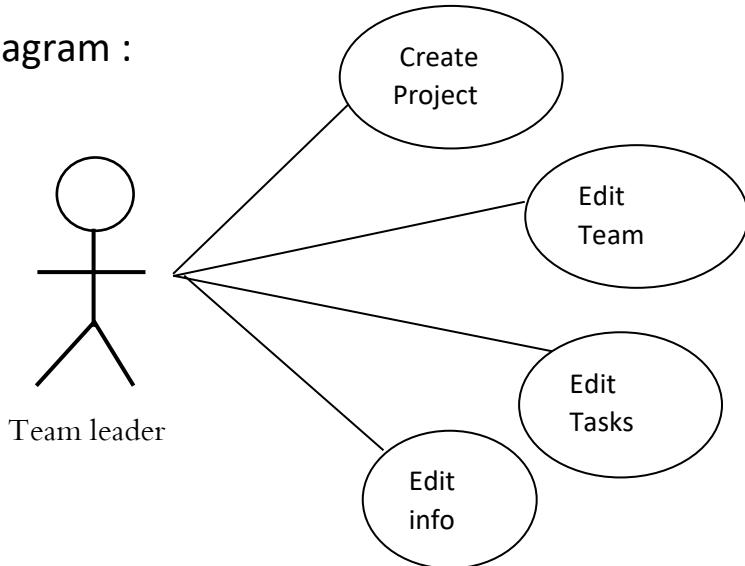
2.2 Functional Requirements Specification:

This section outlines the use cases for each of the active readers separately.

2.2.1 Team leader Use Cases
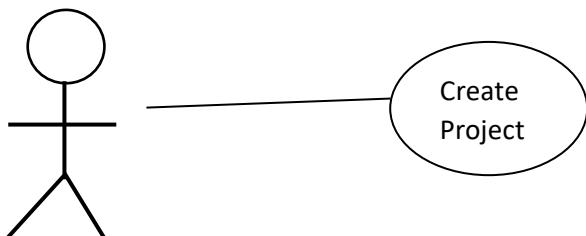
The Team leader has the following sets of use cases:

Diagram :

Use Case : Create a project

Diagram :

Brief Description :

The Team leader access the team manager create a new project .

Initial Step-By-Step Description :

   1- The team leader choose the name of the project and subject .
   2- The team leader add the team members .
   3- The team leader give tasks to the team members .

4- The team leader add a time line to the project .
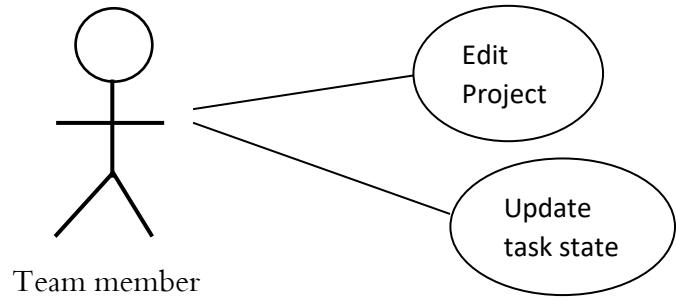
5- The system add the project to the database .

XRef: Section 3.2.1

2.2.2 Team member Use Cases
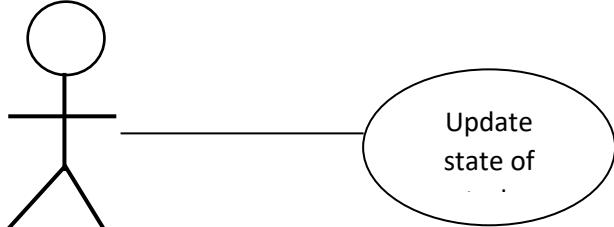
The Team member has the following sets of use cases:

Diagram :

Team member

Use Case : Edit a project

Diagram :

Team member

Brief Description :

The Team member access the project manager to Update state of task.

Initial Step-By-Step Description :
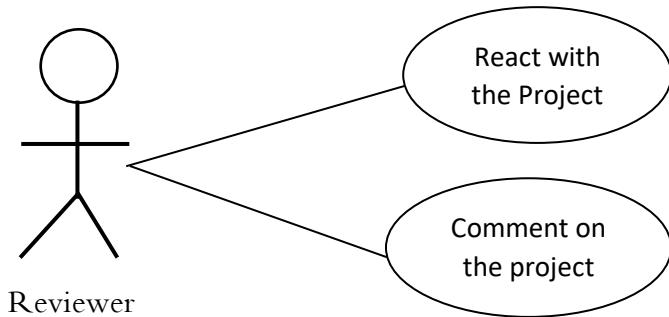
1- The team member choose the state of task he want to update .

2- The team member update the state of task .

3- The system update the progress of a project .

XRef: Section 3.2.2

2.2.3 Reviewer Use Cases
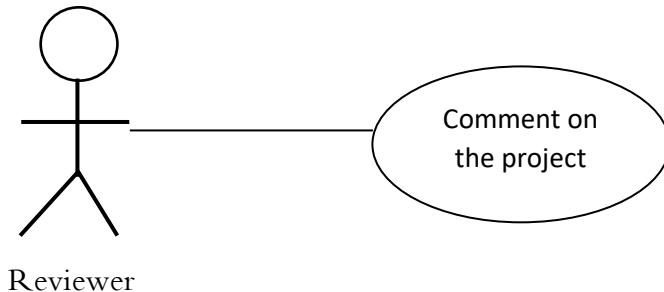
The Reviewer has the following sets of use cases:

Diagram :

Use Case : Comment on the project

Diagram :

Brief Description :

The Reviewer access the project to add a comment .
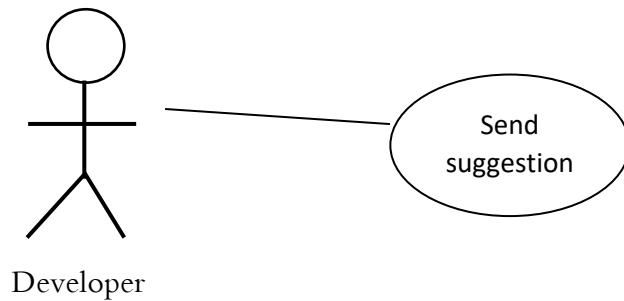
Initial Step-By-Step Description :

1- The reviewer choose the project .
2- The reviewer choose to add a comment on the project .
3- The reviewer confirm the comment and send it .
4- The system add the comment to the comments list.

XRef: Section 3.2.3

2.2.4 Developer Use Case:

Use Case : send suggestion :

Diagram :

Developer

Brief Description :

  The Developer access the project to add a comment .

Initial Step-By-Step Description :

1- The Developer chooses the Email contact button.

 2-The System uses the send to HTML tag to bring up the user's email system.

 3- The Developer fills in the Subject line and write his suggestion and emails it.

4-The System generates and sends an email acknowledgement.

   XRef: Section 3.2.4

2.3 User Characteristics :

   The team members ,reviewer and developer is expected to be Internet literate .

The main screen of the website contains list of active projects and a section for comments list .

 The Developer and Team members are expected to be able to use email with attachments.

2.4 Non-Functional Requirements

The work sharing site will be on a server with high speed Internet capability. The software developed here assumes the use of a web development language such as PHP for connection between the Web pages and the database.

The speed of the Reviewer, team members and developer's connection will depend on the hardware used rather than characteristics of this system.

The Project Manager will run on the team member's PC and will contain an Access database. Access is already installed on this computer and is any operating system

3.0. Requirements Specification

3.1 External Interface Requirement

The Website For Sharing Projects is linked with Database, Which Includes the Projects and all kind of users (Team leader, Team members, Developers, Reviewers, etc..)

By User Interface everyone can interact with the system,

Team leader can create projects if he do all requirement , add members to the team ,giving tasks ,add timeline….

Also team members can interact by edit on task state and edit on project

Developers can give suggestions to improve some points of the other projects

At end the Reviewers can interact by adding comments to reviewed project

3.2. Functional Requirements

3.2.1 Create Project

Use Case Name	Create Project
XRef	Section 2.2.1
Trigger	The Team leader create new project
Precondition	The Team leader accessed to Team manager
Basic Path	1- The team leader choose the name of the project and subject . 2- The team leader add the team members . 3- The team leader give tasks to the team members . 4- The team leader add a time line to the project .
Alternative Paths	In step 3,4 if the Team leader didn't give tasks to team members and add time line, he will not prompted The Team leader will be able to edit on project later and add all that out
Postconditions	The system add the project to the database .
Exception paths	Team leader able to abandon the operation of creating any time
Other	none

3.2.2 Edit Project

Use Case Name	Edit Project
XRef	Section 2.2.2
Trigger	The Team leader/Team members able to edit on project
Precondition	Team members accessed to project manager
Basic Path	1- The team member choose the state of task he want to update . 2- The team member update the state of task .
Alternative Paths	none
Postconditions	The system update the progress of a project .
Exception paths	Team members able to abandon the operation of creating any time
Other	The Team leader ONLY the one who able to add members or remove also ONLY the one who able to add new tasks or remove tasks (both of them can edit on project and state of tasks)

3.2.3 Comment on the project

| Use Case Name	Comment on the project
XRef	Section 2.2.3
Trigger	The Reviewer add comments
Precondition	Reviewers accessed the projects
Basic Path	1- The reviewer choose the project . 2- The reviewer choose to add a comment on the project . 3- The reviewer confirm the comment and send it .
Alternative Paths	In step 2 if there is no entry in comment, so the Reviewer reprompted to add entry then his comment will be added
Postconditions	The system add the comment to the comments list.
Exception paths	Reviewer can abandon the operation of adding his comment any time
Other	none
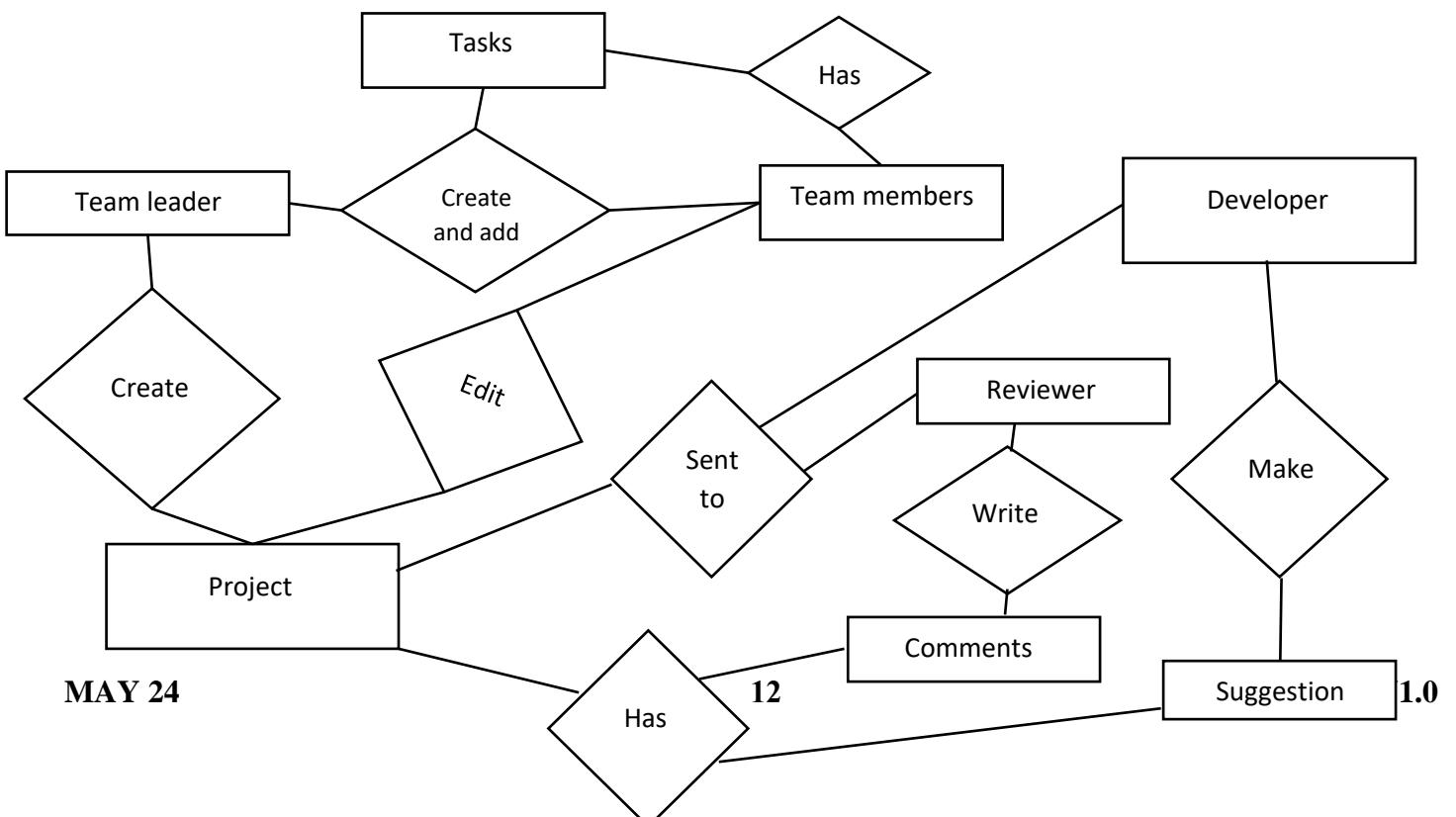
3.2.4 send suggestion

Use Case Name	send suggestion
XRef	Section 2.2.4
Trigger	The Developers add suggestions
Precondition	The Developers accessed the projects
Basic Path	1- The Developer chooses the Email contact button. 2- The System uses the send to HTML tag to bring up the user's email system. 3- The Developer fills in the Subject line and write his suggestion and emails it.
Alternative Paths	In step 3 if there no entry of suggestion the Developer cant email it and he will prompted to fill it
Postconditions	The System generates and sends an email acknowledgement.
Exception paths	The Developers can abandon the operation any time
Other	none

3.3 Detailed Non-Functional Requirements

3.3.1 Logical Structure of the Data:

The logical structure of the data to be stored in the work sharing system is given below.

1.0

The data descriptions of each of these data entities is as follows:

Figure 2 - Logical Structure of the web sharing system

Team Leader Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of principle team leader	
Email Address	Text	Internet address	
Project	Pointer	Project Entity	May be several

Reviewer Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of principle team leader	
Email Address	Text	Internet address	
Project	Pointer	Project Entity	May be several
Num Comments	integer	Comment Entity	May be several
History	Text	Comments	

Comments Data Entity

Data Item	Type	Description	Comment
Project	Pointer	Project entity	
Reviewer	Pointer	Reviewer entity	Single reviewer
Contents	Text	Text Of Review	

Project Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of Project	
Team leader	Pointer	Team leader entity	Name of team leader
Team members	Pointer	Members of the team	
Developer	Pointer	developer entity	Name of developer
Other Authors	Text	Other authors is any; else null	Not a pointer to an Author entity

Reviewer	Pointer	Reviewer entity	Will be several
comments	Pointer	Comments entity	
Contents	Text	Body of project	
Category	Text	Area of content	May be several
Copyright	Boolean	Copyright form has been returned	Not relevant unless Accepted is True.

Tasks Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of the task	
Team Leader	Pointer	team leader *Entity*	
Team members	Pointer	team members *Entity*	
Content	Text	The main purpose of the task	

Developer Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of Developer	
Project	Pointer	Project that he is developing	
Suggestion	Pointer	Suggestion Entity	
Email Address	Text	Internet address	
ID	Integer	Unique number refers to the Developer	

Team Members Data Entity

Data Item	Type	Description	Comment
Tasks	Pointer	Tasks Entity	
Project	Pointer	Pointer entity	
Team Leader	Pointer	Team Leader Entity	
Name	Text	Name of team members	
ID	Integer	Unique number refers to all of the team members	

The Logical Structure of the data to be stored in our website database on the server is as follows :

Published Project Entity

Data Item	Type	Description	Comment
Name	Text	Name of Project	
ID	Integer	Unique number refers to	

		the project	
Team Leader	Pointer	Team Leader Entity	
Developer	Pointer	Developer Entity	May be several
Team members	Pointer	Team Members entity	

3.3.2 Security:

The server on which the work sharing website will have its own security to prevent unauthorized write/delete access .The team manager will able to see what the other members of the team have finished or what they are working on.

The system will provide the team members with write/read access only to the project which they are working on .

The use of email by an developer is on the client systems and thus is external to the system. The PC on which the project manager or team manager resides will have its own security. The system will provide the reviewer with read write access(only react and add comment) to a project.