



Report 06: Final Report

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A. Introduction

1. Overview

In this accelerating of technologies and economics, Project Management is growing extremely importance to organizations because it deals effectively with the management of change. Modern economics and business environment are complicated than ever, organizations are beginning to realize that the traditional forms of management cannot adapt efficiently to the dynamics and its resulting chaos.

In the future, software industries could very well depend on how quickly the procedures and systems of project management are adopted. Therefore, Project Manager will play a very important role within organizations. Our mission is to provide an online system that actively assists those managers in managing their project. The approaches and techniques that are used in the project management process are of interest to all those who wish to be more certain about achieving predetermined targets.

2. Scope

This project aims to create an online Software Project Management System. With friendly interface, powerful tools, OOPMS provides powerful and efficient customized service for numerous kinds of managers from small to medium projects. Besides, OOPMS can deploy on J2EE portal servers (JSR168, JSR268).

3. Project Title

Project Full name: Online Project Management Suite on Portal Framework

Project code: OOPMS

Software name: OOPMS

4. Project start date/finish date

From May-07-2012 to Aug-18-2012

5. Team member (Role and Responsibility)

Name	Roles	Responsibilities
Lê Ngọc Thạch	Project Manager	Supervisor, Assistant, Director
Ngô Đức Duy	Team Leader	Control, Audit, Support, Engineer, Training, Customer Support
Mạnh Hoàng Trương	Team Member	Engineer, Training, Customer Support
Phạm Nguyễn Trường Giang	Team Member	Engineer, Training, Customer Support
Tô Công Thanh Hải	Team Member	Engineer, Training, Customer Support

6. Current System (Limit)

Many current systems provide project management services. Still, project managers find it extremely problematic to apply those systems into their real projects. There are numerous reasons making these systems very difficult to use efficiently:

1. Unfriendly Interface
2. Complicated Process
3. Large cost
4. Not open source
5. Not modularization

7. Solution

From above issues of current project management systems, we introduce a new system with powerful features for small and medium projects:

- Provide friendly user interface.
- Add more visual items to help user easy to use, reduce ambiguous logic, improve performance.
- Provide useful report function.
- Develop Open-source Software Project Management, portlet-based that can be comfortably divided into modules.
- Integrate in mobile phone to support tracking and making decision for managers anytime.

8. Product

Include functions:

1. **Dashboard:** show present status of projects that created in OOPMS. Project managers and others senior manager can easily track and monitor status of their project.
2. **Planner:**
 - a. Allow users import Microsoft Project file (*.mpp) into OOPMS and in the future, users also can edit and export *.mpp files at OOPMS;
 - b. Create task and assign task to team members.
3. **Report:** support creating report of project weekly and allow Team leader of project add more comments to the report.
4. **Project Eye:** manage detail information about a specific project.
5. **Time Tracking:** manage working time of team members.
6. **DMS:** manage defects of projects.
7. **Requirement:** include list of requirements (function, non-function). Allow users to keep track status of those requirements
8. **Admin:** Allow admin to manage users and manage system data.
9. **Android:** Allow team member to track projects' status via Android Application.

Benefits of product

OOPMS is a system that supports Project managers efficiently.

OOPMS provides as an android application for project managers to monitor general information about project.

At the website, Project manager can setup and manage any software project easily via Dashboard system and Report system that update continuously day by day.

A special benefit of OOPMS system is portability and compatible with J2EE Portal server (JSR168, JSR268). With an android mobile, you can check your project status at any time anywhere.

10. Main Acceptable Criteria

The system is 24/7 system.

Accuracy: 90%

Critical bugs:

- + Loss of all data: no
- + Unable to use part of the system's functionality: not any

Performance:

Response time for a search:

Average: 2 second / search

Maximum: 3 second/ search

Item	In progress		After release
	Self-Review	Peer Review	
Document	2 bug/page (min)	1bug/page (min)	2bug/10page(max)
Source Code	20Wdef/1KLOC(min)	8Wdef/1KLOC(min)	3Wdef/1KLOC(max)

*Note:

Wdef: Weighted defect	
Type	Weight
<i>Bug layout and coding convention</i>	1
<i>Bug logic of code</i>	3
<i>Bug fatal error</i>	5

10. License

OOPMS licensed under the Apache License, Version 2.0 as approved by the Open Source Initiative (OSI), an OSI-certified ("open") and Gnu/FSF-recognized ("free") license.

11. References

- Wikipedia.org
- FMS System

B. Software Project Management Plan

I. Problem Definition

1. Name of this Capstone Project

The official and formal project name is “Online Project Management Suite on Portal Framework”.

2. Problem Abstract

In the future, software industries could very well depend on how quickly the procedures and systems of project management are adopted. Therefore, Project Manager will play a very important role within organizations. Our mission is to provide an online system that actively assists those managers in managing their project.

With the increasing number of managers and users, OOPMS must be capable to work well with thousands of users. OOPMS processes a large amount of information, so the system needs to have good performance and accuracy. Any mistakes may lead to a big failure in projects’ statistic and performance.

3. Project Overview

3.1 The Current System

There are many current systems, which provide project management services. Still, project managers find it extremely problematic to apply those systems into their real projects. There are numerous reasons making these systems very difficult to use efficiently:

- Unfriendly Interface
- Complicated Process
- Large cost
- Not open source
- Not modularization

3.2 The Proposed System

- As Solution (section 1.7)

3.3 Boundaries of the System

The system under development of this Capstone Project will include:

- A complete website version and an Android version.
- All the process documents involved.

3.4 Development Environment

Below is the list of hardware and software requirements needed for development environment:

Hardware requirements:

- Personal computers for developing with the minimum configuration: 2 Gb of RAM, 20Gb of hard disk, Core 2 Duo 2.0 GHz

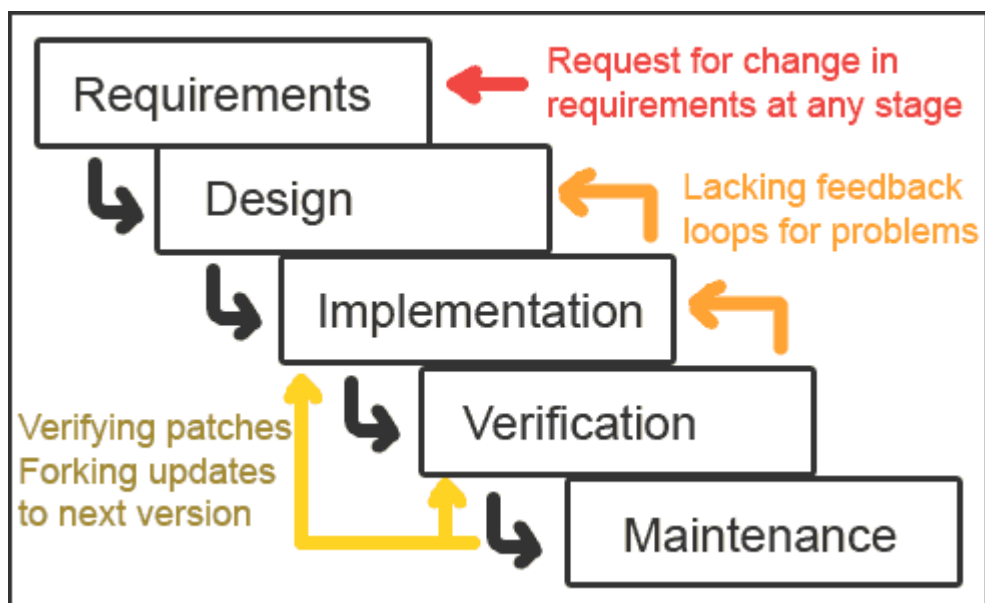
Software requirements:

- Operating system: Windows 7/Windows XP
- IDE: Eclipse
- Dreamweaver
- Microsoft Office
- Microsoft Visio
- Microsoft Project
- DBMS: Oracle 10g Express Edition
- Source Control: SVN

II. Project Organization

1. Software Process Model

The process model used for developing this project is waterfall model.



2. Roles and Responsibilities

No	Full name	Role in Group	Responsibilities
1	Ngô Đức Duy	Team Leader, Developer,	Managing process Designing database

		Tester, QA, CM	Requirement development Requirement analysis Architectural design Project planning and scheduling Task assignment and tracking Training Coding Testing Task conducting Reporting Customer interaction
2	Phạm Nguyễn Trường Giang	Developer, Tester, QA, BA	Managing documents Creating system test cases Designing database Requirement development Requirement analysis Architectural design Project planning and scheduling Coding Testing Task conducting Reporting
3	Tô Công Thanh Hải	Developer, Tester, QA	Managing documents Creating system test cases Designing database Requirement development Requirement analysis Architectural design Project planning and scheduling Coding Testing Task conducting Reporting
4	Mạnh Hoàng Trương	Developer, Tester, QA	Managing documents Creating system test cases Designing database Requirement development Requirement analysis Architectural design Project planning and scheduling Coding Testing Task conducting

			Reporting
5	Lê Ngọc Thạch	Project Manager	Managing process Architectural design Project planning and scheduling Task assignment and tracking Training Testing Customer interaction

3. Tools and Techniques

- Front-end technologies: Java, Portal(JSF168,268), jQuery, AJAX, Javascript, CSS.
- Back-end technologies: Hibernate.
- Tools: Eclipse, JBoss, Oracle 10g, Microsoft Visio 2010, Microsoft Office 2010, Microsoft Project 2010, Source Version Control, Chrome. Architecture and design patterns: Three Tiers Architecture, Repository.

III. Project Management Plan

1. Tasks

1.1 Develop Task List

Description

Develop task, milestone and assign task for team members.

Output

Task list

Deliverables

Deliver task list, project plan document 24/05/2012

Resources Needed

A person for 2 days

Dependencies and Constraints

None

Risks

None

1.2 Create Software Project Plan

Description

Create software project plan

Output

Software project management plan (SPM) document

Deliverables

Deliver SPM document 24/05/2012

Resources Needed

One person for 2 days

Dependencies and Constraints

None

Risks

None

1.3 Create Software Requirements Specification

Description

Create software requirements specification

Output

Software Requirement Specification (SRS) document

Deliverables

Deliver SRS document 03/06/2012

Resources Needed

Four people for 7 days

Dependencies and Constraints

None

Risks

Missing requirement.
Changing requirement.
Scope of this project.

1.4 Design Database

Description

Create conceptual, logical, physical database design

Output

Database Design and Database script

Deliverables

Deliver with Software Design Description 10/06/2012

Resources Needed

Four people for 7 days

Dependencies and Constraints

Depends on the completion of SRS

Risks

SRS may not be detailed enough to capture the business rules, causing the database design to be inappropriate or will be changed much in the future.

1.5 Create Software Design Description

Description

Design the system in an OOP manner.

Output

Architecture design, detailed design, diagrams and design specification

Deliverables

SDD 22/06/2012

Resources Needed

Four people for 12 days

Dependencies and Constraints

Depends on the completion of SRS

Risks

Misunderstanding SRS and not review carefully will make risk occur.

1.6 Coding

Description

Implement the system to reflect software design document.

Output

Source code of the project, unit test reports using CheckStyle, FindBug.

Deliverables

Executable programs and source code 27/07/2012

Resources Needed

Four people for 35 days

Dependencies and Constraints

Depends on the completion of SRS, SDD, Database design, Coding framework

Risks

- Unit test may not be performed thoroughly causing spending many efforts in system test phase.
- The team don't have a common place, so it is hard to perform collaboration and CM
- Team members may not easily get used to new technologies.
- Team members are not expert in developing layout and css. This can cause more time for improve layout.

1.7 System Test

Description

Perform system test for the system

Output

System test report

Deliverables

Software Test Documentation before 12/08/2012

Resources Needed

Four people for 15 days

Dependencies and Constraints

Coding is finished

Risks

- Lack of professional testers in team
- Developers are also responsible for system testing, this may lead to compromise

1.8 Deployment

Description

Deploy the system, create user manual

Output

Running website with domain and hosting, user manual

Deliverables

Delivery user manual before 18/08/2012

Resources Needed

Four people for 6 days

Dependencies and Constraints

Coding and system test are finished, initial data is inputted

Risks

- Composing document can cause by integrate from many team members' document.
- Training staff may take more time.

2. Task Sheet: Assignments and Timetable

Refer to OOPMS_TaskList.mpp

OOPMS	76.85d	Mon 5/7/12		Tue 8/21/12		70%	
Initiation	2d	Mon 5/7/12		Tue 5/8/12		100%	All team members
Kick-off meeting	1d	Mon 5/7/12		Mon 5/7/12		100%	
Introduce overview about Eclipse plug-in development	4h	Tue 5/8/12		Tue 5/8/12	3	100%	
Introduce overview about Android development	4h	Tue 5/8/12		Tue 5/8/12	4	100%	
Planning	5d	Wed 5/9/12		Tue 5/15/12	2	100%	
Develop scope statement	3d	Wed 5/9/12		Fri 5/11/12		100%	All team members
Create WBS	2d	Wed 5/9/12		Thu 5/10/12		100%	DuyND
Develop and refine other plans	2d	Mon 5/14/12		Tue 5/15/12	7	100%	All team members
Solution	28d	Wed 5/16/12		Fri 6/22/12		92%	
Report 1	4d	Wed 5/16/12		Mon 5/21/12	6	100%	All team members
Study Requirements + Report 2	4d	Tue 5/22/12		Fri 5/25/12	11	100%	All team members
Develop functional specifications	5d	Mon 5/28/12		Fri 6/1/12		90%	
Create SRS	5d	Mon 5/28/12		Fri 6/1/12	12	90%	All team members
Develop prototype based on	13d	Mon 6/4/12		Wed 6/20/12	14	87%	

functional specifications							
Database Design	5d	Mon 6/4/12		Fri 6/8/12		85%	All team members
ScreenDesign	2d	Mon 6/11/12		Tue 6/12/12	16	85%	All team members
Activity Diagram	2d	Wed 6/13/12		Thu 6/14/12	17	90%	All team members
Sequence Diagram	2d	Fri 6/15/12		Mon 6/18/12	18	90%	All team members
DDD	2d	Tue 6/19/12		Wed 6/20/12	19	85%	All team members
Review functional specifications (Offline)	1d	Thu 6/21/12		Thu 6/21/12	20	100%	All team members
Assess Understand the requirement	1d	Fri 6/22/12		Fri 6/22/12	21	100%	All team members
Construction	36.85d	Mon 6/25/12		Tue 8/14/12	10	58%	
Development	25.5d	Mon 6/25/12		Mon 7/30/12		52%	
Create coding plan	4h	Mon 6/25/12		Mon 6/25/12		100%	
Development	16d	Mon 6/25/12		Tue 7/17/12	25	49%	
Screen design	5d	Mon 6/25/12		Mon 7/2/12		0%	
"Pages (Requirement, Portal)"	3d	Mon 6/25/12		Thu 6/28/12		0%	DuyND
"Pages (DMS, Timesheet)"	3d	Mon 6/25/12		Thu 6/28/12		0%	TruongMH
"Pages (Project Eyes, Admin, Product)"	3d	Mon 6/25/12		Thu 6/28/12		0%	HaiTCT
"Pages (Report, Dashboard, Planner)"	3d	Mon 6/25/12		Thu 6/28/12		0%	GiangPNT
Review Pages	2d	Thu 6/28/12		Mon 7/2/12	31	0%	All team members
"Database Design, Pages review, mapping"	2d	Mon 7/2/12		Wed 7/4/12	32	100%	All team members

Functions code	9d	Wed 7/4/12		Tue 7/17/12	33	67%	
Function 1 Requirement	3d	Wed 7/4/12		Mon 7/9/12		100%	DuyND
Function 2 DMS	3d	Wed 7/4/12		Mon 7/9/12		30%	TruongMH
Function 3 Admin	3d	Wed 7/4/12		Mon 7/9/12		0%	HaiTCT
Function 4 Dashboard	3d	Wed 7/4/12		Mon 7/9/12		25%	GiangPNT
Function 5 Portal	4d	Mon 7/9/12		Fri 7/13/12	35	90%	DuyND
Function 6 Timesheet	4d	Mon 7/9/12		Fri 7/13/12	36	100%	TruongMH
"Function 7 Admin, Product"	4d	Mon 7/9/12		Fri 7/13/12	37	80%	HaiTCT
Function 8 Planner	4d	Mon 7/9/12		Fri 7/13/12	38	95%	GiangPNT
Function 9 Project Eye	2d	Fri 7/13/12		Tue 7/17/12	39	90%	All team members
Function 10 Receipt	2d	Fri 7/13/12		Tue 7/17/12	39	25%	All team members
Review code offline	1d	Tue 7/17/12		Wed 7/18/12	44	0%	All team members
Review to update/fix bug for final documents	1d	Wed 7/18/12		Thu 7/19/12	45	60%	
Modify if needed	1d	Thu 7/19/12		Fri 7/20/12	46	60%	All team members
Integration	2d	Fri 7/20/12		Tue 7/24/12	47	80%	All team members
Study and develop Android Version	4d	Tue 7/24/12		Mon 7/30/12	48	70%	All team members
Testing	12.35d	Fri 7/27/12		Tue 8/14/12	49	90%	All team members
Create Testing plan + Document	4h	Fri 7/27/12		Mon 7/30/12		80%	
Unit Testing	5.5d	Mon 7/30/12		Tue 8/7/12		100%	
Create Test case	1d	Mon 7/30/12		Tue 7/31/12	51	100%	
Review test case online	1d	Tue 7/31/12		Wed 8/1/12	53	100%	
Create Test	1d	Wed		Thu	54	100%	

code		8/1/12		8/2/12			
Review Test code and Unit Test Statistical Report	4h	Thu 8/2/12		Fri 8/3/12	55	100%	
"Modify code (fix bug, if any)"	1d	Fri 8/3/12		Mon 8/6/12	56	100%	
Re-test modified code	4h	Mon 8/6/12		Mon 8/6/12	57	100%	
"Assess Unit Testing (Write Test Case, Test Code, Test Report)"	4h	Mon 8/6/12		Tue 8/7/12	58	100%	
Integration Testing	5.5d	Tue 8/7/12		Tue 8/14/12		80%	
Create Test case	1d	Tue 8/7/12		Wed 8/8/12	"48,59"	100%	
Review test case online	1d	Wed 8/8/12		Thu 8/9/12	61	100%	
Create Test code	1d	Thu 8/9/12		Fri 8/10/12	62	100%	
Review Test code and Unit Test Statistical Report	4h	Fri 8/10/12		Fri 8/10/12	63	100%	
"Modify code (fix bug, if any)"	1d	Fri 8/10/12		Mon 8/13/12	64	90%	
Re-test modified code	4h	Mon 8/13/12		Tue 8/14/12	65	0%	
"Assess Unit Testing (Write Test Case, Test Code, Test Report)"	4h	Tue 8/14/12		Tue 8/14/12	66	0%	
Monitoring and Controlling	63d	Wed 5/16/12		Fri 8/10/12	6	75%	DuyND
Termination	5d	Tue 8/14/12		Tue 8/21/12	23	0%	All team members
Milestone assessment	2d	Tue 8/14/12		Thu 8/16/12		0%	All team members
Deployment	3d	Thu		Tue	70	0%	

		8/16/12		8/21/12			
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IV. Coding Conventions

Refer to

http://code.google.com/p/oopms/wiki/Standard_Java_Coding_Convention

C. Software Requirement Specifications

I. User Requirement Specification

Overview OOPMS User requirement

This section of the document describes all the functions that the PMS application shall provide accordingly to user requirements.

1. Dashboard

This function provides brief information about all projects in the system:

- Provide overall information about projects' status including name, health, cost, progress, quality, efficiency, date, effort.
- Allow user to filter projects by status, category, date, cost, progress, efficiency.
- Allow user to sort projects by name, date, project manager.
- Provide link to project detail information and export feature.

2. Planner

This function allow user to keep track of tasks, progress of project:

- Allow project manager to manage tasks: add new task, update, delete, assign, monitor progress, completeness rate, and date.
- Feature filter projects by status, assigned to.
- Allow user to sort status, date, assigned to.
- Import feature using Microsoft Project and export report.
- Team members can update tasks' progress.

3. Report

This function provides report features:

- Project information
- Planner
- DMS

- Timesheet

4. Project Eye

This function allows Admin and Project Manager to create new project, edit a project's information. The function also provides Admin with search function to help them quickly find a project.

4.1 Manage User

This function provides Admin with the ability manage users of the OOPMS system. This function includes search users, create user, and edit user's information and status.

4.2 Manage Project Team

This function provides Admin and Project Manager the ability to manage a project's team. This function includes search users to add to project's team, change team member's role, and remove member from project's team.

4.3 Manage Project Module

This function provides Admin and Project Manager the ability to manage a project's modules usage. This function will help admin and project manager to choose what modules they want to use in a project.

Here is the list of modules:

- Time Sheet
- Project Planner
- Defect Management
- Report
- Requirement Management
- Risk, Issue Management
- Change Request Management
- Cost Management

4.4 Change User's Information

This function provides users of PMS system the ability to change their user's information. This also includes changing password function.

Reset Password

This function will help users of PMS system when they forget their password.

Users provide their username and this function will reset and send their password to their Email in user's information.

4.5 Manage Cost

This function provides Project Managers the ability to control a project's finance. This function will help them manage budget and tracking expense daily. It also alarms them

when their project will be over budget at the time they planning the project's expense. Project Managers can defy their project's buffer, the Manage Cost module will notice them the status of the current buffer.

4.6 Manage Product

This function provides Project Manager and Team Member the ability to control a project's products. Project Manager and Team Member can add, modify and delete products.

4.7 Manage Work Order

This function provides Project Manager the ability to control a project's stage and deliverables' schedule. Project Managers can set how many stages a project has and their duration. They can also set when and which product to deliver in each stage.

4.8 Manage Risk, Issue, Change Request

This function provides Project Manager and Team Member the ability to control a project's risk, issue and change request. They can add, modify and delete risk, issue and change request.

5. Timesheet

This function allows manager to keep track of time and effort:

- Allow project manager to monitor timework and effort of team member.
- Feature filter projects by date, status, project.
- Team members can log timesheet as their works daily or weekly.

6. DMS

This function allows manager to keep track of defects:

- Allow project manager to monitor defect and fix bug effort of team.
- Feature filter projects by date, status, and project, creator, assigned to.
- Team members can update defect status.

7. Admin - uPortal

7.1 Admin

- Manage Project
- Manage User
- Manage Project Team
- Manage Project Module

7.2 User

- Change User's Information
- Reset Password
- Manage Project
- Manage Project Team
- Manage Project Module
- Manage Cost
- Manage Product
- Manage Work Order
- Manage Risk, Issue, Change Request

8. Requirements

- Managing feature enables user to store and manage their requirement documents.
- Including: Add, update, remove
- User interface allows user to sort requirement by type, date, priority.
- Display completeness rate updated by user.

II. System Requirement Specification (Specific Requirements)

2.1 Introduction

Refer to A.1

2.1.1 Purpose

This Software Requirements Specification provides a complete description of all the functional requirements, non-functional requirements, constraints and other requirement specification of the "Project Management System".

2.1.2 Scope

This project aims to create an online Software Project Management System. With friendly interface, powerful tools, OOPMS provides powerful and efficient customized service for numerous kinds of managers from small to medium projects. Besides, OOPMS can deploy on J2EE portal servers (JSR168, JSR268).

2.1.3 Definitions, Acronyms, and Abbreviations

Table 1 Abbreviations

No.	Key word	Meaning
1	PM	Project Manager
2	PMS	Project Management System
3	ISO	International Standard Organization

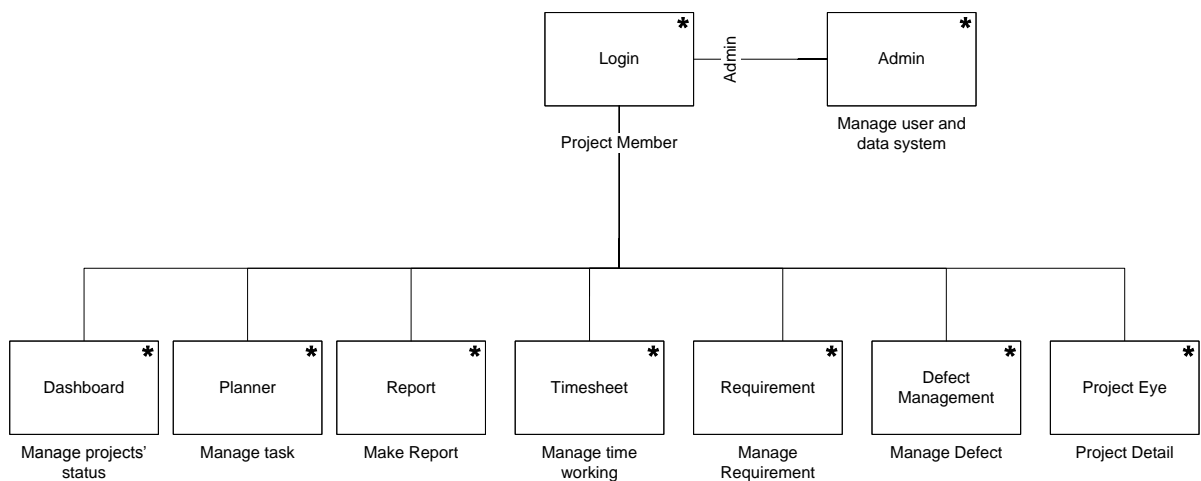
Table: Abbreviations

2.1.4 References

FSOFT FMS System Public Version 2009.

2.2 Overall Description

This chapter describes an overview description of this document by listing all the functions, characteristics, constraints of the application.



2.2.1 Product perspective:

The OOPMS develop to manage requirements, tasks, defects, time tracking and report in software projects.

2.2.2 Product functions:

The PMS provides functions as below:

1. Dashboard
2. Planner
3. Report
4. Project Eye
5. Time Tracking

6. DMS
7. Requirement
8. Admin

2.2.3 User characteristics:

The PMS is designed for human operators who are assumed to have the following characteristics:

- + Fully understand the process of Software project management and how it is crucial to business.
- + No special knowledge or skills.

2.2.4 Constraints:

The PMS is a real time system that is responsible for managing project information. It must operate correctly, accurately and in time.

2.2.5 Assumptions and dependencies:

None

2.3 FUNCTIONAL Requirements

This chapter of the document describes all the functions that the OOPMS application shall provide, and how the system operating these functions using natural language and model, chart.

2.3.1 Dashboard

This function provides brief information about all projects in the system:

- Provide overall information about projects 'status including name, health, cost, progress, quality, efficiency, date, effort.
- Allow user to filter projects by status, category, date, cost, progress, efficiency.
- Allow user to sort projects by name, date, project manager.
- Provide link to project detail information and export feature.

2.3.2 Planner

This function allow user to keep track of tasks, progress of project:

- Allow project manager to manage tasks: add new task, update, delete, assign, monitor progress, completeness rate, and date.
- Feature filter projects by status, assigned to.
- Allow user to sort status, date, assigned to.
- Import feature using Microsoft Project and export report.
- Team member can update task's progress.

2.3.3 Report

This function provides report features:

- Project information
- Planner
- DMS
- Timesheet

2.3.4 Project Eye

This function allows Admin and Project Manager to create new project, edit a project's information. The function also provides Admin with search function to help them quickly find a project.

2.3.4.1 Manage User

This function provides Admin with the ability manage users of the OOPMS system. This function includes search users, create user, and edit user's information and status. This is the feature of uPortal.

2.3.4.2 Manage Project Team

This function provides Admin and Project Manager the ability to manage a project's team. This function includes search users to add to project's team, change team member's role, and remove member from project's team.

2.3.4.3 Manage Project Module

This function provides Admin and Project Manager the ability to manage a project's modules usage. This function will help admin and project manager to choose what modules they want to use in a project.

Here is the list of modules:

- Time Sheet
- Project Planner
- Defect Management
- Report
- Requirement Management
- Risk, Issue Management
- Change Request Management
- Cost Management

2.3.4.4 Change User's Information

This function provides users of PMS system the ability to change their user's information. This also includes changing password function. This is the feature of uPortal.

Reset Password

This function will help users of PMS system when they forget their password. Users provide their username and this function will reset and send their password to their Email in user's information.

2.3.4.5 Manage Cost

This function provides Project Managers the ability to control a project's finance. This function will help them manage budget and tracking expense daily. It also alarms them when their project will be over budget at the time they planning the project's expense. Project Managers can defy their project's buffer, the Manage Cost module will notice them the status of the current buffer.

2.3.4.6 Manage Product

This function provides Project Manager and Team Member the ability to control a project's products. Project Manager and Team Member can add, modify and delete products.

2.3.4.7 Manage Work Order

This function provides Project Manager the ability to control a project's stage and deliverables' schedule. Project Managers can set how many stages a project has and their duration. They can also set when and which product to deliver in each stage.

2.3.4.8 Manage Risk, Issue, Change Request

This function provides Project Manager and Team Member the ability to control a project's risk, issue and change request. They can add, modify and delete risk, issue and change request.

2.3.5 *Timesheet*

This function allows manager to keep track of time and effort:

- Allow project manager to monitor timework and effort of team member.
- Feature filter projects by date, status, project.
- Team members can log timesheet as their works daily or weekly.

2.3.6 *DMS*

This function allows manager to keep track of defects:

- Allow project manager to monitor defect and fix bug effort of team.
- Feature filter projects by date, status, and project, creator, assigned to.
- Team members can update defect status.

2.3.7 Admin

2.4.7.1 Admin

- Manage Project
- Manage User
- Manage Project Team
- Manage Project Module

2.3.7.2 User

- Change User's Information
- Reset Password
- Manage Project
- Manage Project Team
- Manage Project Module
- Manage Cost
- Manage Product
- Manage Work Order
- Manage Risk, Issue, Change Request

2.3.8 Requirements

- Managing feature enables user to store and manage their requirement documents.
- Including: Add, update, remove
- User interface allows user to sort requirement by type, date, priority.
- Display completeness rate updated by user.

2.4 Use case model

This chapter describes PMS's features and functions using abstract Use Cases and detail scenarios.

A use case is a description of a sequence of actions (including its variations) that the system carries out to create an observable result for an actor.

A scenario is a temporal sequence of interaction events among agent instances.

Main Use Case Diagrams of the PMS

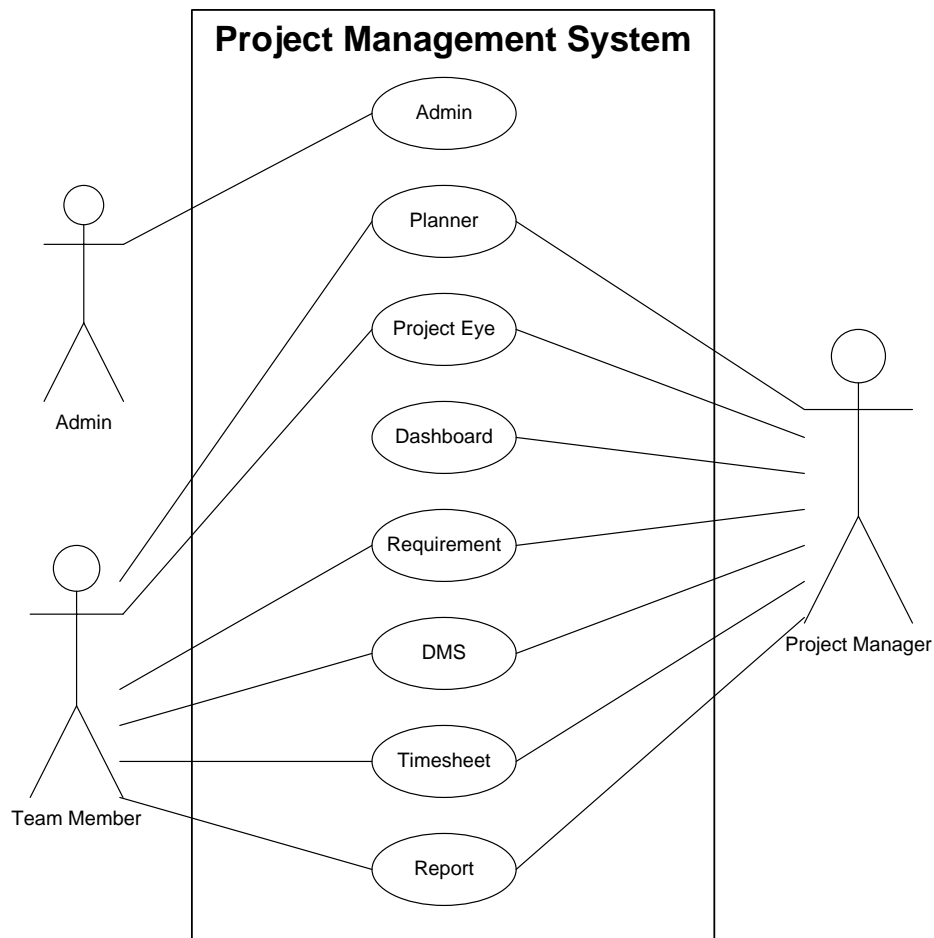


Figure 1 Overall Use Case

This main Use Case Diagrams of the OOPMS show all main functions placing inside the system boundary and all actors that associate with those functions.

2.4.1 General

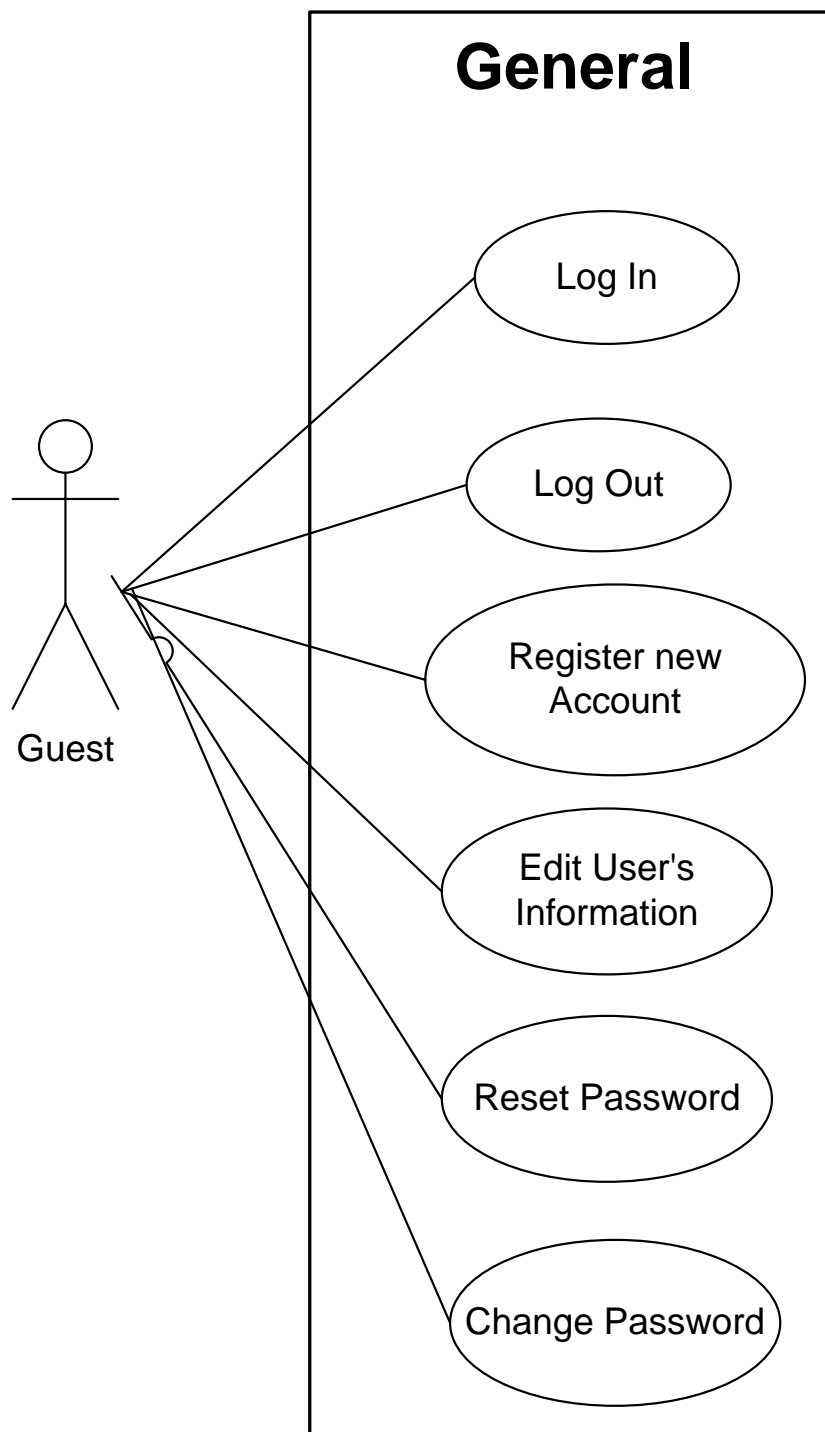
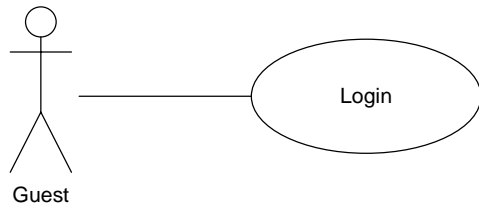


Figure 2 General - Guest

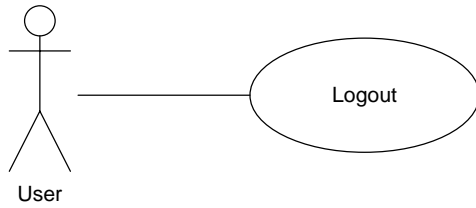
2.4.1.1 Log-in



Use Case scenario (This is the feature of uPortal):

User Case ID	General_UC01	
Name	Log-in Use Case	
Goal	Authenticate guests then authorize them.	
Actors	Guest	
Pre-conditions	User of uPortal.	
Post-conditions	None	
Main Flow	<div>1. User goes into PMS Homepage.</div> <div>2. Display Home Screen and request user to log in.</div> <div>3. Users enter user's information: Username, Password and hit "Log-in" button.</div> <div>4. Validate user's information.</div> <div>5. Display monitor screen to corresponding user.</div>	
Exception	If username or password is not correct, the OOPMS will show error message and ask user to log in again.	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

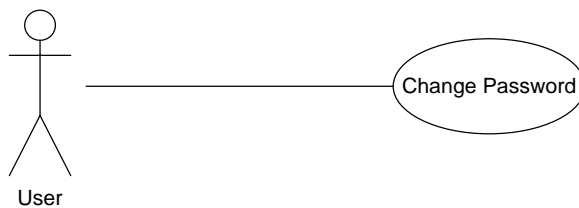
2.4.1.2 Log-out



Use Case scenario (This is the feature of uPortal):

User Case ID	General_UC02	
Name	Log-out Use Case	
Goal	Provide Log-out function for User to check out	
Actors	User(include member, admin, project manager)	
Pre-conditions	Logged user	
Post-conditions	None	
Main Flow	1. Users are using PMS and click "Log-Out" button.	2. Log user out and display Home Screen.
Exception	None	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.1.3 *Change Password*

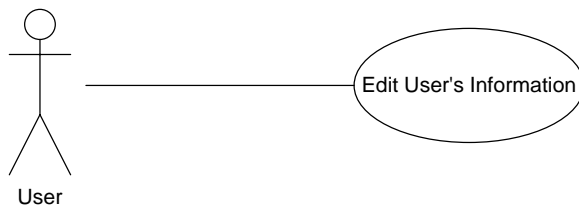


Use Case scenario:

User Case ID	General _UC03	
Name	Change Password Use Case	
Goal	This function allows user to change password	
Actors	User	

Pre-conditions	None	
Post-conditions	None	
Main Flow	1. Select link “Change Your Information”	2. Fill in “Old Password”, “New Password”, “Retype New Password” and then select button “Reset Password”
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.1.4 Edit User’s Information

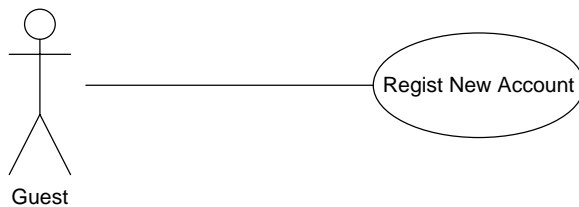


Use Case scenario (This is the feature of uPortal):

User Case ID	General_UC04	
Name	Edit User Use Case	
Goal	This function allows users to edit their profile	
Actors	User	
Pre-conditions	Logged user	
Post-conditions	None	
Main Flow	1. Select link “Change your Information”	2. Change User’s information then select button “Save Change”

Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.1.5 Register New Account

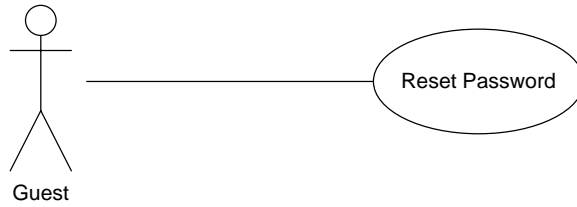


Use Case scenario (This is the feature of uPortal):

User Case ID	General_UC05	
Name	Register New Account Use Case	
Goal	This function allows guest to register a new account	
Actors	Guest	
Pre-conditions	None	
Post-conditions	None	
Main Flow	1. User goes into PMS Homepage	2. Select link "Register New Account"
	3. Fill in User's information then select button "Submit"	
Open Issues	N/A	
Relationship	N/A	

Business Rule	N/A
Priority	N/A

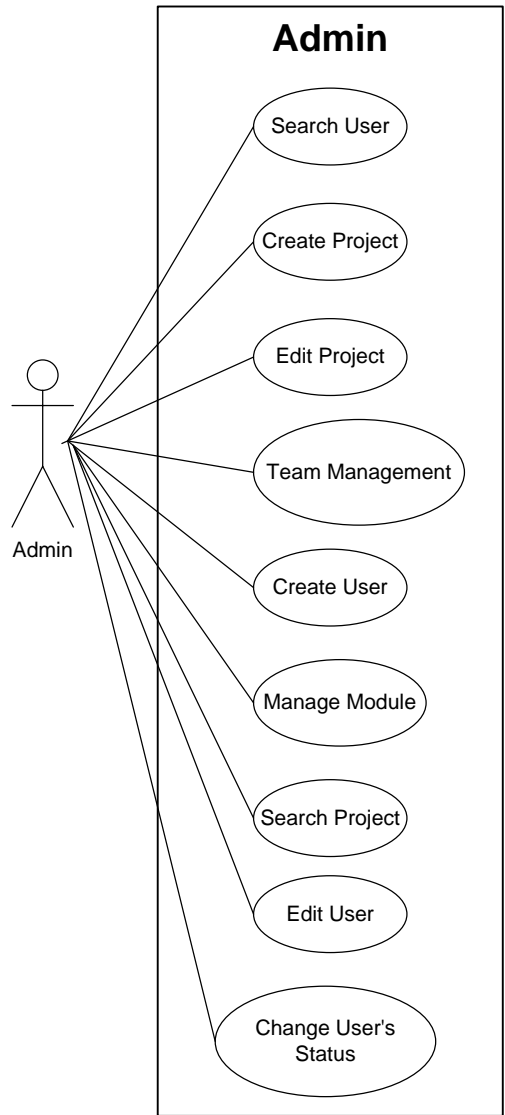
2.4.1.6 Reset Password



Use Case scenario (This is the feature of uPortal):

User Case ID	General _UC06	
Name	Reset Password Use Case	
Goal	This function allows user to reset password when they forget password	
Actors	Guest	
Pre-conditions	None	
Post-conditions	None	
Main Flow	<div>1. User goes into PMS Homepage</div> <div>2. Select link “Forget Your Password”</div> <div>3. Fill in Username and select button “Reset Password”</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2 Admin



2.4.2.1 Admin Create New Project



Use Case scenario:

User Case ID	Admin_UC01
Name	Admin Create new Project Use Case

Goal	This function allows admin to create a new project.	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab Project Management	2. Select link “Create New Project”
	3. Fill in Project’s information then select button “Submit”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2.2 Admin Search Project



Use Case scenario:

User Case ID	ADMIN_UC02
Name	Admin Search Project Use Case
Goal	This function allows admin to search project
Actors	Admin
Pre-conditions	Logged user with admin role
Post-conditions	None

Main Flow	1. Choose tab Project Management	2. Select search condition
	3. Click button “Search”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2.3 Admin Edit Project



Use Case scenario:

User Case ID	ADMIN_UC03	
Name	Admin Edit Project Use Case	
Goal	This function allows admin to edit information of a project	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab Project Management	2. Select search condition
	3. Click button “Search”	4. Choose the project want to edit
	5. Select link “Change Project Info”	6. Change Project’s information

		then select button “Save Change”
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2.4 Admin Manage Module

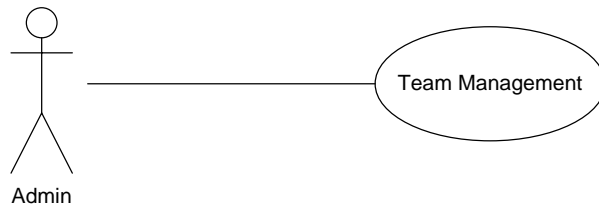


Use Case scenario:

User Case ID	ADMIN_UC04	
Name	Admin Mange Module Use Case	
Goal	This function allows admin to manage a project’s modules usage	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab Project Management	2. Select search condition
	3. Click button “Search”	4. Choose the project want to edit
	5. Select link “Modules Management”	6. Choose modules and then select button “OK”

Open Issues	N/A
Relationship	N/A
Business Rule	N/A
Priority	N/A

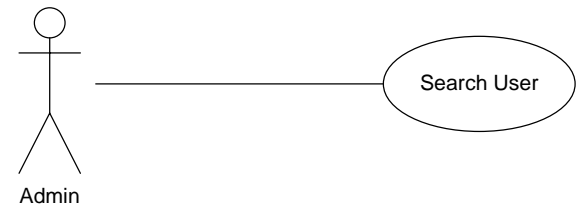
2.4.2.5 Admin Team Management



Use Case scenario:

User Case ID	ADMIN_UC05	
Name	Admin Team Management Use Case	
Goal	This function allows admin to manage a project's team members	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	<div>1. Choose tab Project Management</div> <div>2. Select search condition</div> <div>3. Click button "Search"</div> <div>4. Choose the project want to edit</div> <div>5. Select link "Team Management"</div> <div>6. Edit Project's team member then select button "Save Change"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

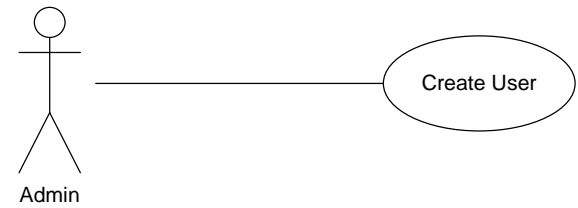
2.4.2.6 Admin Search User



Use Case scenario:

User Case ID	ADMIN_UC06	
Name	Admin Search User Use Case	
Goal	This function allows admin to search user	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab User Management	2. Select search condition
	3. Click button “Search”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

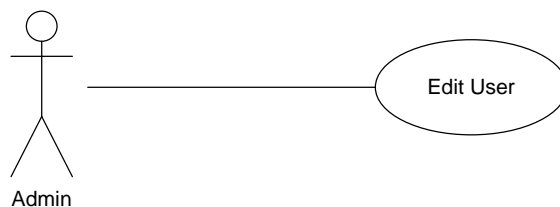
2.4.2.7 Admin Create User



Use Case scenario:

User Case ID	ADMIN_UC07	
Name	Admin Create User Use Case	
Goal	This function allows admin to create new user	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab User Management	2. Select link “Create New User”
	3. Fill in User’s information then select button “Submit”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2.8 Admin Edit User

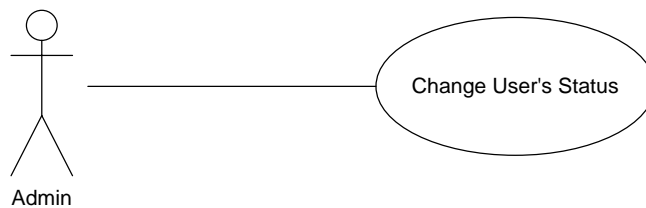


Use Case scenario:

User Case ID	ADMIN_UC08	
Name	Admin Edit User Use Case	
Goal	This function allows admin to edit information of an user	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	

Main Flow	1. Choose tab User Management	2. Select search condition
	3. Click button “Search”	4. Choose the user want to edit
	5. Change User’s information then select button “Save Change”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.2.9 Admin Change User’s Status

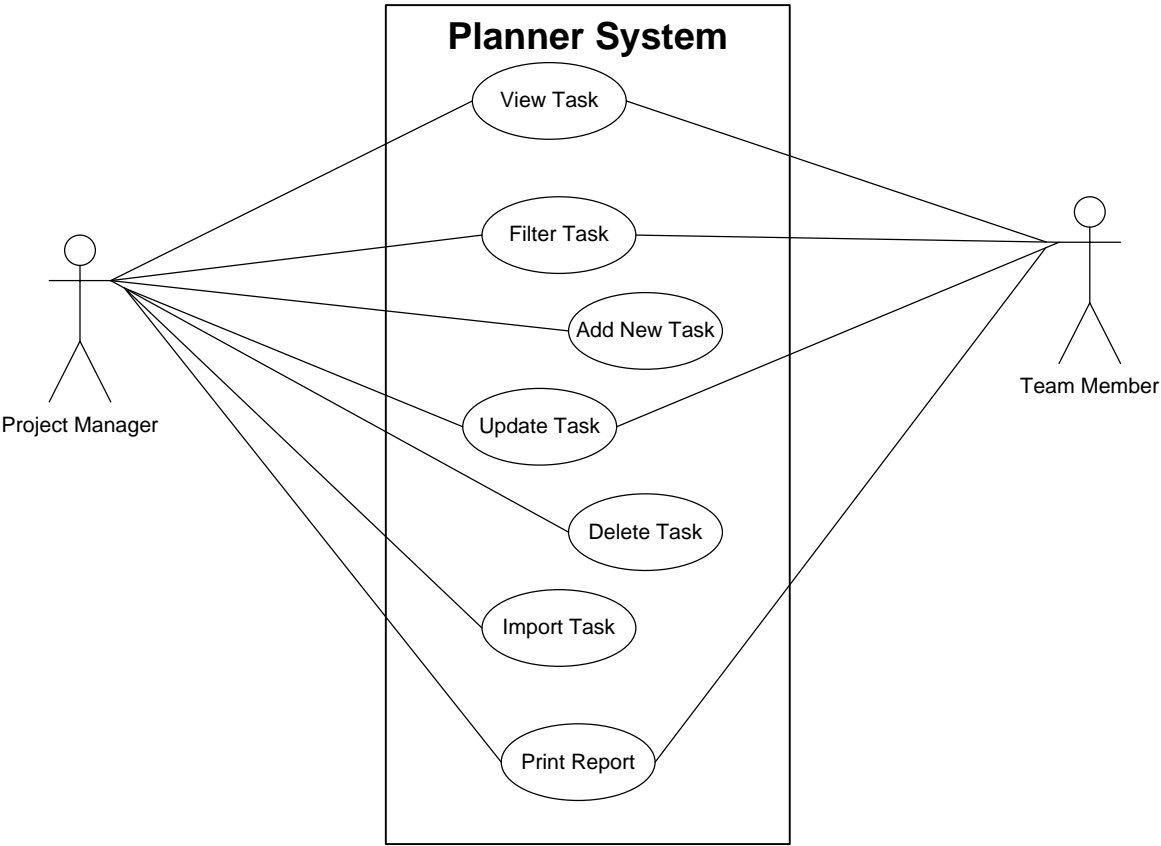


Use Case scenario:

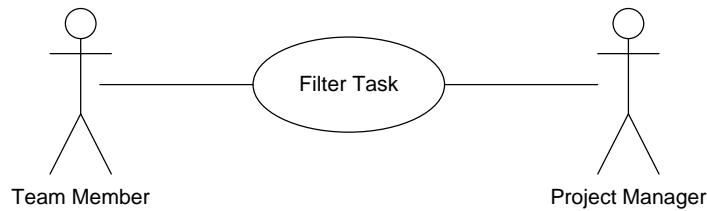
User Case ID	ADMIN_UC09	
Name	Admin Change User’s Status Use Case	
Goal	This function allows admin to active, inactive or delete an user	
Actors	Admin	
Pre-conditions	Logged user with admin role	
Post-conditions	None	
Main Flow	1. Choose tab User Management	2. Select search condition
	3. Click button “Search”	4. Select button “Active”, ”Inactive” or “Delete”

Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.3 Planner



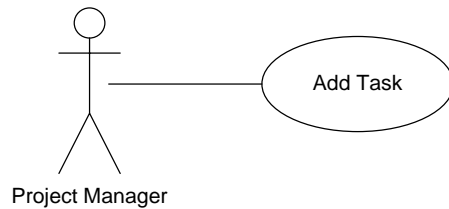
2.4.3.1 Filter Task



Use Case scenario:

User Case ID	Planner_UC01	
Name	Filter Task	
Goal	This function allows Project Manager and Team Member to filter tasks that are displayed on screen.	
Actors	Project Manager; Team Member	
Pre-conditions	Users must log in with role “Project Manager” or “Team Member”; Users must go to Planner page	
Post-conditions	N/A	
Main Flow	1. Select conditions to filter and click “Search” button.	2. Show task list after filtering.
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	Normal	

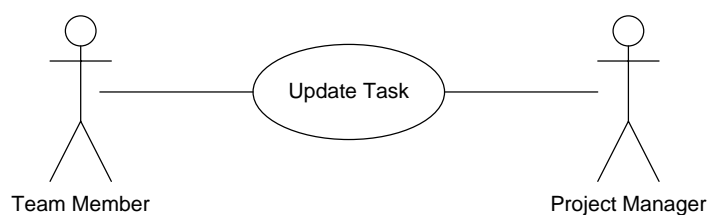
2.4.3.2 Add Task



Use Case scenario:

User Case ID	Planner_UC02	
Name	Add Task	
Goal	This function allows Project Manager to plan and add specific tasks to his/her project.	
Actors	Project Manager	
Pre-conditions	Users must log in with role “Project Manager”; Users must go to Planner page	
Post-conditions	N/A	
Main Flow	1. Click “Add New Task” button	2. Redirect to Task Adding Page.
	3. Fill up task’s information.	3. Validate task’s information.
	6. Click “Save” button.	5. Display “Complete!” message.
Exception	3A: if task information is not correct, show error message and ask to input again.	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	High	

2.4.3.3 Update Task

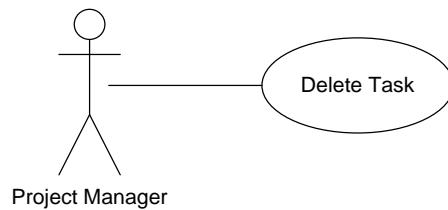


Use Case scenario:

User Case ID	Planner_UC03	
Name	Update Task	
Goal	This function allows Project Manager and Team Members to update status of tasks or change information of tasks. (modifying scope depend on authority of user)	
Actors	Project Manager; Team Member	
Pre-conditions	Users must log in with role “Project Manager” or “Team Member”;	

	Users must go to Planner page	
Post-conditions	N/A	
Main Flow	1. Filer Planner (optional). 2. Click on a task tile. 4. Update task's information. 6. Click "Save" button.	3.Redirect to Task Updating Page. 5. Validate task's information.
Exception	5A: if task information is not correct, show error message and ask to input again.	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	High	

2.4.3.4 Delete Task

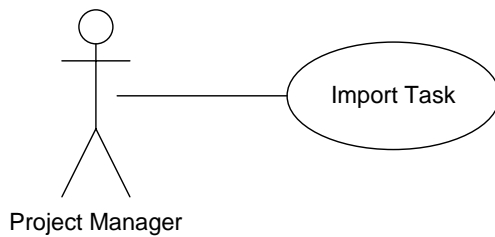


Use Case scenario:

User Case ID	Planner_UC04
Name	Delete Task
Goal	This function allows Project Manager delete task on Planner page.
Actors	Project Manager
Pre-conditions	Users must log in with role "Project Manager"; Users must go to Planner page
Post-conditions	

Main Flow	1. Select a task, which he/she want to delete. 2. Click “Delete” button. 3. Display “Delete Successfully” message.
Exception	N/A
Open Issues	N/A
Relationship	N/A
Business rule	N/A
Priority	High

2.4.3.5 Import Task

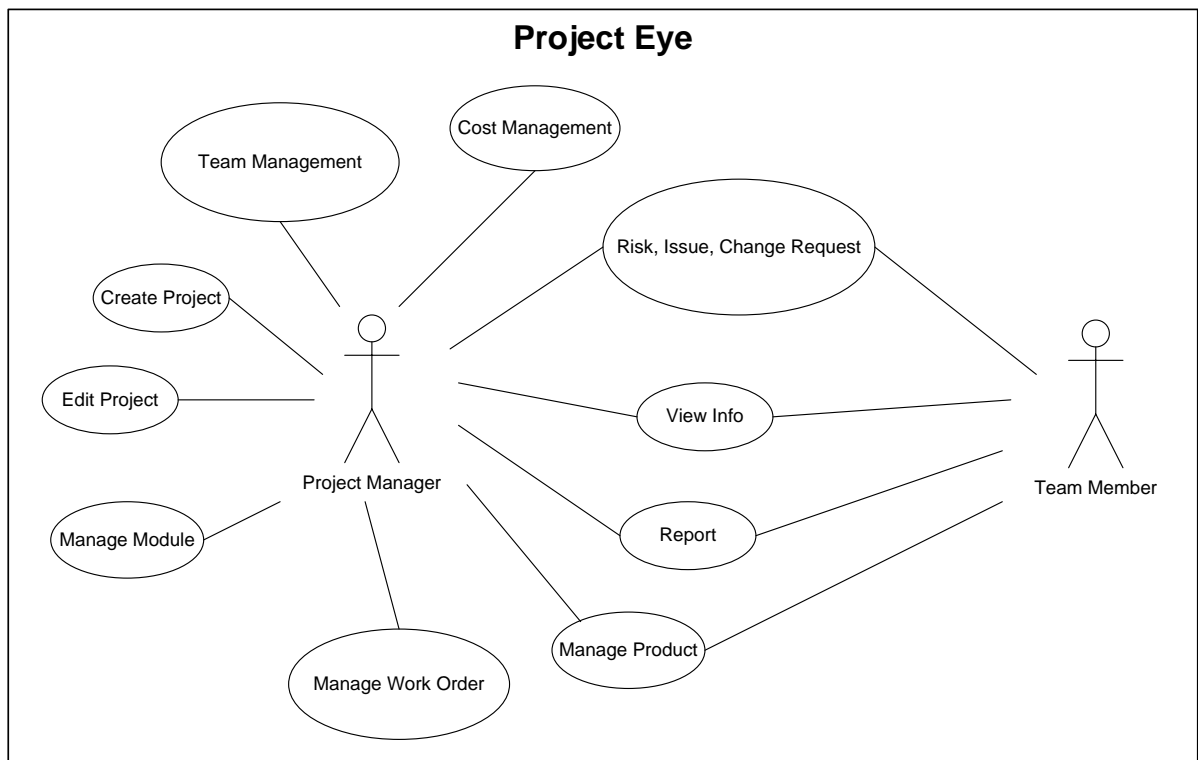


Use Case scenario:

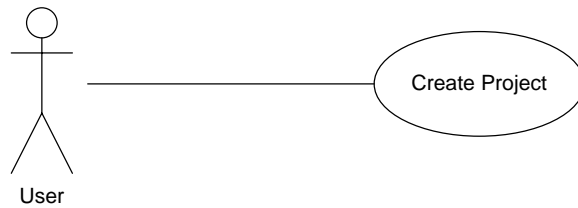
User Case ID	Planner_UC05
Name	Import Task
Goal	This function allows Project Manager to import task from Microsoft Project file.
Actors	Project Manager
Pre-conditions	Users must log in with role “Project Manager”; Users must go to Planner page
Post-conditions	N/A

Main Flow	<p>1. User clicks “Import” button.</p> <p>2. Display window to user select *.mpp file.</p> <p>3. User selects a *.mpp file from PC and clicks “OK” button.</p> <p>4. Import tasks in the file to Planner.</p>
Exception	3A: if the file is not correct, show error message and ask to input again.
Open Issues	N/A
Relationship	N/A
Business rule	N/A
Priority	Low

2.4.4 Project Eye



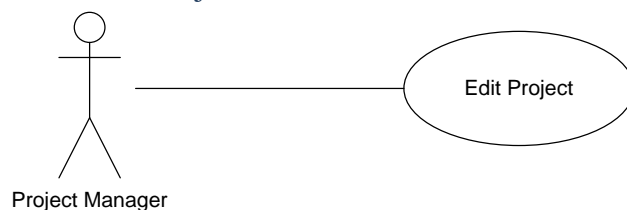
2.4.4.1 Create Project



Use Case scenario:

User Case ID	Project Eye_UC01	
Name	Create new Project Use Case	
Goal	This function allows user to create a new project.	
Actors	User	
Pre-conditions	Logged user	
Post-conditions	None	
Main Flow	1. Select link “Create New Project”	2. Fill in Project’s information then select button “Submit”
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

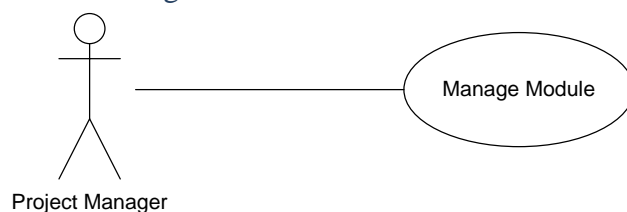
2.4.4.2 Edit Project



Use Case scenario:

User Case ID	Project Eye_UC02	
Name	Edit Project Use Case	
Goal	This function allows project managers to edit information of their project	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Dash Board"</div> <div>2. Choose the project want to edit</div> <div>3. Select link "Change Project Info"</div> <div>4. Change Project's information then select button "Save Change"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.4.3 Manage Module

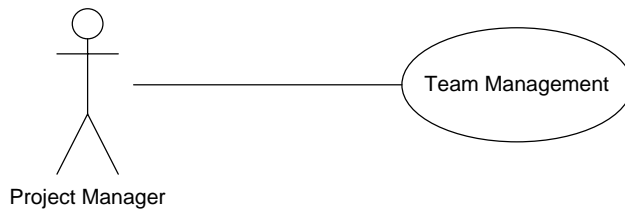


Use Case scenario:

User Case ID	Project Eye_UC03	
Name	Manage Module Use Case	
Goal	This function allows project manager to manage a project's modules usage	

Actors	Project Manager
Pre-conditions	Logged user that is a project manager
Post-conditions	None
Main Flow	<div>1. Choose tab “Dash Board”</div> <div>2. Choose the project want to edit</div> <div>3. Select link “Modules Management”</div> <div>4. Choose modules and then select button “OK”</div>
Open Issues	N/A
Relationship	N/A
Business Rule	N/A
Priority	N/A

2.4.4.5 Team Management

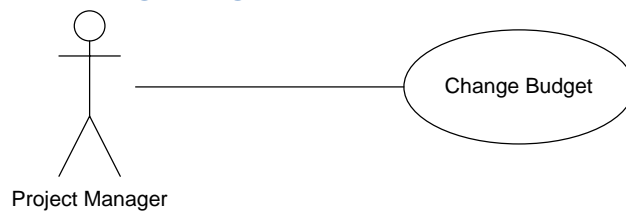


Use Case scenario:

User Case ID	Project Eye_UC04
Name	Team Management Use Case
Goal	This function allows project manager to manage a project's team members
Actors	Project Manager
Pre-conditions	Logged user that is a project manager
Post-conditions	None

Main Flow	1. Choose tab “Dash Board”	2. Choose the project want to edit
	3. Select link “Team Management”	4. Edit Project’s team member then select button “Save Change”
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.5 Change Budget

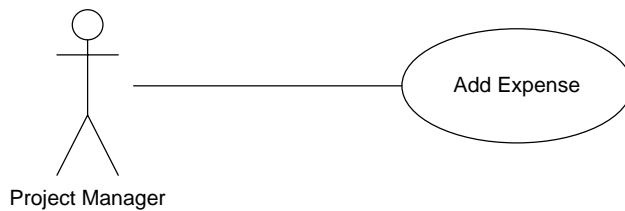


Use Case scenario:

User Case ID	Project Eye_UC05	
Name	Change Budget Use Case	
Goal	This function allows project manager to manage a project’s budget	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	1. Choose tab “Cost”	2. Fill the budget value then select button “Change Budget”
	3. Select button “OK” on the commit window.	

Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.6 Add Expense

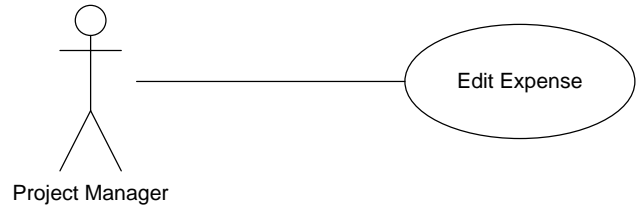


Use Case scenario:

User Case ID	Project Eye_UC06	
Name	Add Expense Use Case	
Goal	This function allows project manager to add a project's expense	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	1. Choose tab "Cost"	2. Select "Add new Expense"
	3. Fill in the expense's information then select button "Submit"	
Open Issues	N/A	
Relationship	N/A	

Business Rule	N/A
Priority	N/A

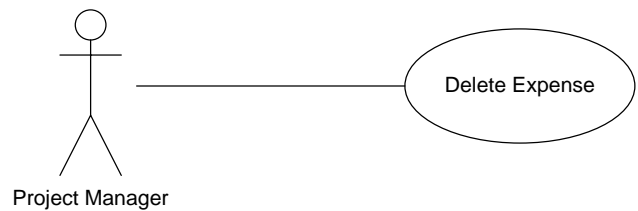
2.4.7 Edit Expense



Use Case scenario:

User Case ID	Project Eye_UC07	
Name	Edit Expense Use Case	
Goal	This function allows project manager to edit a project's expense	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Cost"</div> <div>2. Select the expense want to edit</div> <div>3. Fill in the expense's information then select button "Save Change"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

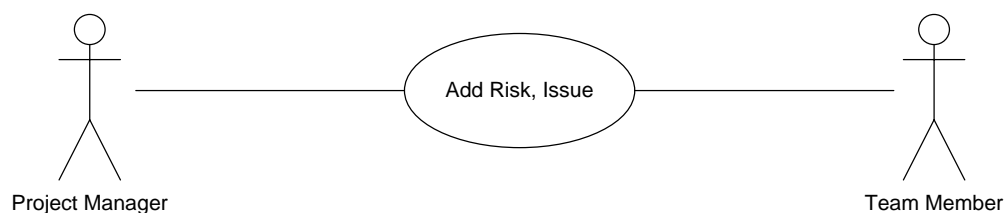
2.4.8 Delete Expense



Use Case scenario:

User Case ID	Project Eye_UC08	
Name	Delete Expense Use Case	
Goal	This function allows project manager to delete a project's expense	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	<div> <div>1. Choose tab "Cost"</div> <div>2. Select the checkbox at the begin of the expenses' row you want to delete</div> <div>3. Select button "Delete"</div> </div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.9 Add Risk, Issue

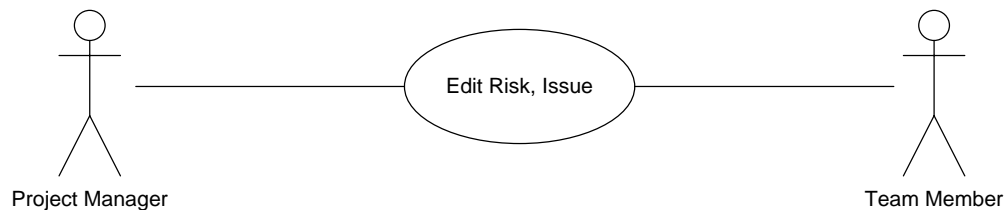


Use Case scenario:

User Case ID	Project Eye_UC09	
Name	Add Risk, Issue Use Case	
Goal	This function allows project manager and team member to add a project's risk or issue	
Actors	Project Manager, Team Member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	

Main Flow	1. Choose tab “Risk, Issue”	2. Select link “Add new Risk” or “Add new Issue”
	3. Fill in the information then select button “Submit”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.10 Edit Risk, Issue

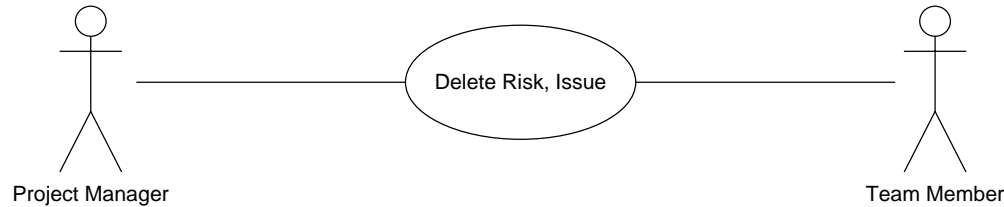


Use Case scenario:

User Case ID	Project Eye_UC10	
Name	Edit Risk, Issue Use Case	
Goal	This function allows project manager and team member to edit a project's risk, issue	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	1. Choose tab “Risk, Issue”	2. Select the risk or issue want to edit
	3. Fill in the information then select button “Save Change”	

Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.11 Delete Risk, Issue

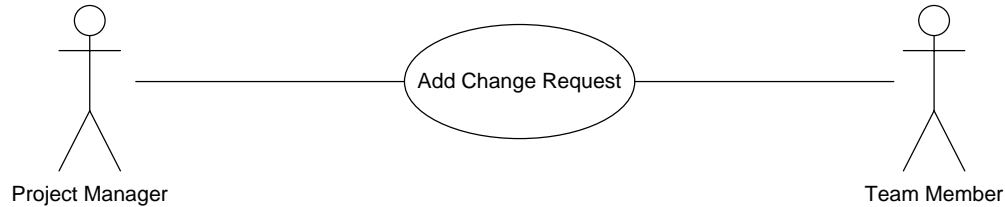


Use Case scenario:

User Case ID	Project Eye_UC11	
Name	Delete Risk, Issue Use Case	
Goal	This function allows project manager and team member to delete a project's risk, issue	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	1. Choose tab "Risk, Issue"	2. Select the checkbox at the begin of the row you want to delete
	3. Select button "Delete"	
Open Issues	N/A	

Relationship	N/A
Business Rule	N/A
Priority	N/A

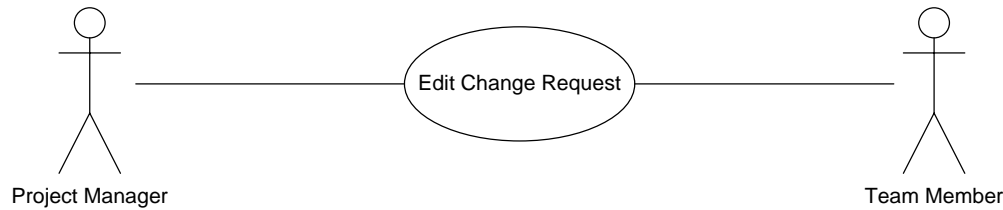
2.4.12 Add Change Request



Use Case scenario:

User Case ID	Project Eye_UC12	
Name	Add Change Request Use Case	
Goal	This function allows project manager and team member to add a project's change request	
Actors	Project Manager, Team Member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Change Request"</div> <div>2. Select link "Add new Change Request"</div> <div>3. Fill in the request's information then select button "Submit"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

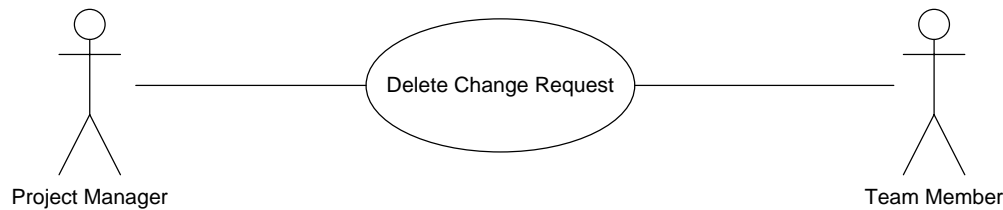
2.4.13 Edit Change Request



Use Case scenario:

User Case ID	Project Eye_UC13	
Name	Edit Change Request Use Case	
Goal	This function allows project manager and team member to edit a project's change request	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Change Request"</div> <div>2. Select the request want to edit</div> <div>3. Fill in the request's information then select button "Save Change"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

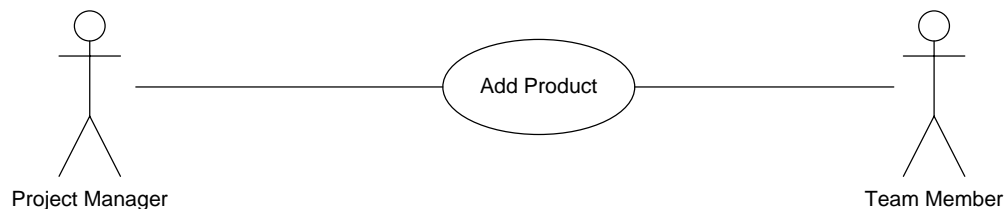
2.4.14 Delete Change Request



Use Case scenario:

User Case ID	Project Eye_UC14	
Name	Delete Change Request Use Case	
Goal	This function allows project manager and team member to delete a project's change request	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	1. Choose tab "Change Request"	2. Select the checkbox at the begin of the row you want to delete
	3. Select button "Delete"	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.15 Add Product

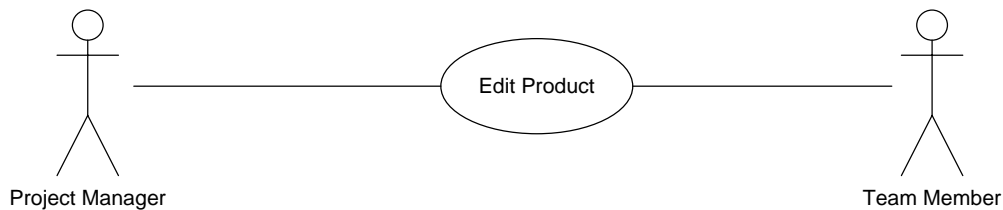


Use Case scenario:

User Case ID	Project Eye_UC15	
Name	Add Product Use Case	
Goal	This function allows project manager and team member to add a project's product	
Actors	Project Manager, Team Member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	

Main Flow	1. Choose tab “Product”	2. Select link “Add new Product”
	3. Fill in the product’s information then select button “Submit”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.16 Edit Product

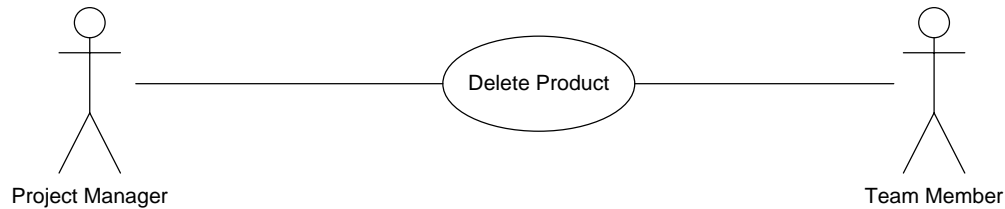


Use Case scenario:

User Case ID	Project Eye_UC16	
Name	Edit Product Use Case	
Goal	This function allows project manager and team member to edit a project’s product	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	1. Choose tab “Product”	2. Select the product want to edit
	3. Fill in the product’s information then select button “Save Change”	

Open Issues	N/A
Relationship	N/A
Business Rule	N/A
Priority	N/A

2.4.17 Delete Product



Use Case scenario:

User Case ID	Project Eye_UC17	
Name	Delete Product Use Case	
Goal	This function allows project manager and team member to delete a project's product	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Product"</div> <div>2. Select the checkbox at the begin of the row you want to delete</div> <div>3. Select button "Delete"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.18 Add Stage



Use Case scenario:

User Case ID	Project Eye_UC18	
Name	Add Stage Use Case	
Goal	This function allows project manager to add a project's stage	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	<div>1. Choose tab “Work Order”</div> <div>2. Select “Add new Stage”</div> <div>3. Fill in the stage’s information then select button “Submit”</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.19 Edit Stage



Use Case scenario:

User Case ID	Project Eye_UC19	
Name	Edit Stage Use Case	
Goal	This function allows project manager to edit a project's stage	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	1. Choose tab "Work Order"	2. Select the Stage want to edit
	3. Fill in the stage's information then select button "Save Change"	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.20 Delete Stage



Use Case scenario:

User Case ID	Project Eye_UC20	
Name	Delete Stage Use Case	
Goal	This function allows project manager to delete a project's stage	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	

Main Flow	1. Choose tab “Work Order”	2. Select the checkbox at the begin of the stages’ row you want to delete
	3. Select button “Delete”	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.21 Add Deliverable



Use Case scenario:

User Case ID	Project Eye_UC21	
Name	Add Deliverable Use Case	
Goal	This function allows project manager to add a project’s deliverable	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	1. Choose tab “Work Order”	2. Select “Add new Deliverable”
	3. Fill in the deliverable’s information then select button “Submit”	

Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.22 Edit Deliverable



Use Case scenario:

User Case ID	Project Eye_UC22	
Name	Edit Deliverable Use Case	
Goal	This function allows project manager to edit a project's deliverable	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	1. Choose tab "Work Order"	2. Select the Deliverable want to edit
	3. Fill in the deliverable's information then select button "Save Change"	
Open Issues	N/A	

Relationship	N/A
Business Rule	N/A
Priority	N/A

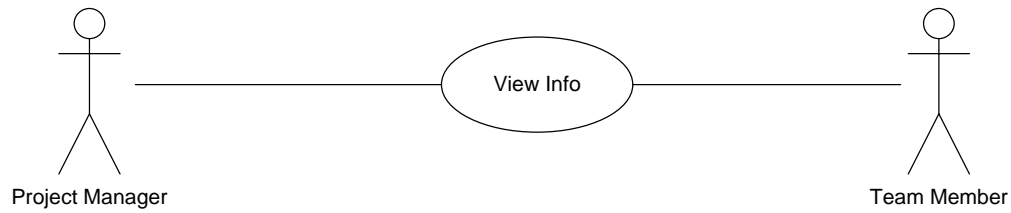
2.4.23 Delete Deliverable



Use Case scenario:

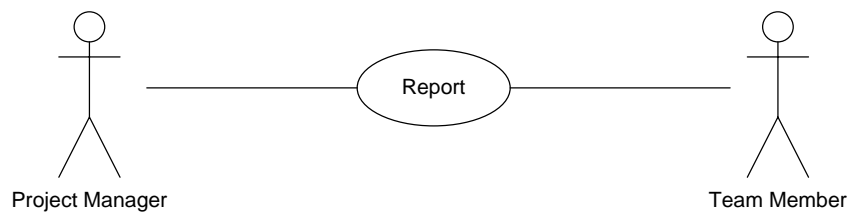
User Case ID	Project Eye_UC23	
Name	Delete Deliverable Use Case	
Goal	This function allows project manager to delete a project's deliverable	
Actors	Project Manager	
Pre-conditions	Logged user that is a project manager	
Post-conditions	None	
Main Flow	<div>1. Choose tab "Work Order"</div> <div>2. Select the checkbox at the begin of the deliverables' row you want to delete</div> <div>3. Select button "Delete"</div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.24 View Info



Use Case scenario:

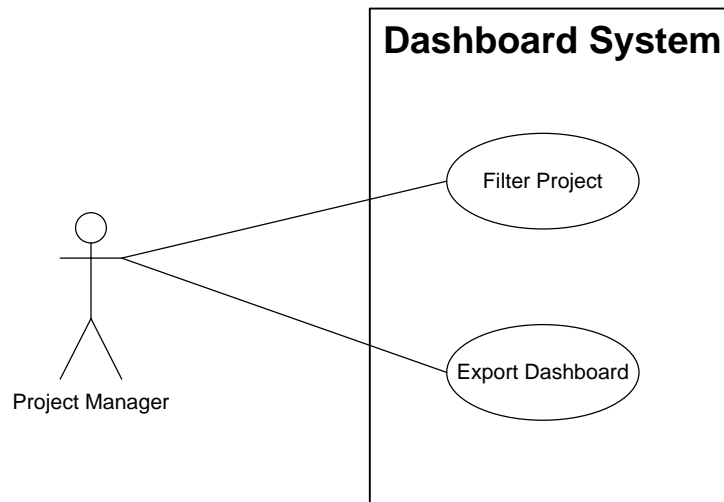
User Case ID	Project Eye_UC24	
Name	View Info Use Case	
Goal	This function allows project manager and team member to view a project's information	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	1. Choose tab "Dash Board"	2. Select a project's name
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.25 Report

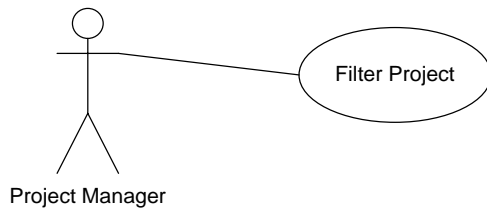
Use Case scenario:

User Case ID	Project Eye_UC25	
Name	Report Use Case	
Goal	This function allows project manager and team member to view a project's report	
Actors	Project Manager, Team member	
Pre-conditions	Logged user that is a project manager or team member	
Post-conditions	None	
Main Flow	<div> <div>1. Choose tab "Dash Board"</div> <div>2. Select a project's name</div> <div>3. Choose tab "Report"</div> </div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

7.5 Dashboard



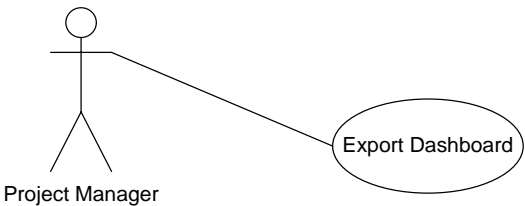
7.5.1 Filter Project



Use Case scenario:

User Case ID	Dashboard _UC01	
Name	Filter Project	
Goal	This function allows user to filter projects, which appear on Dashboard. Project on system can be filtered by status or category.	
Actors	Project Manager	
Pre-conditions	Users must log in with role “Project Manager”; Users must go to Dashboard page.	
Post-conditions	N/A	
Main Flow	1. Select conditions to filter and Click “Search” button.	2. Display filtered project list.
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	Normal	

7.5.2 Export Dashboard

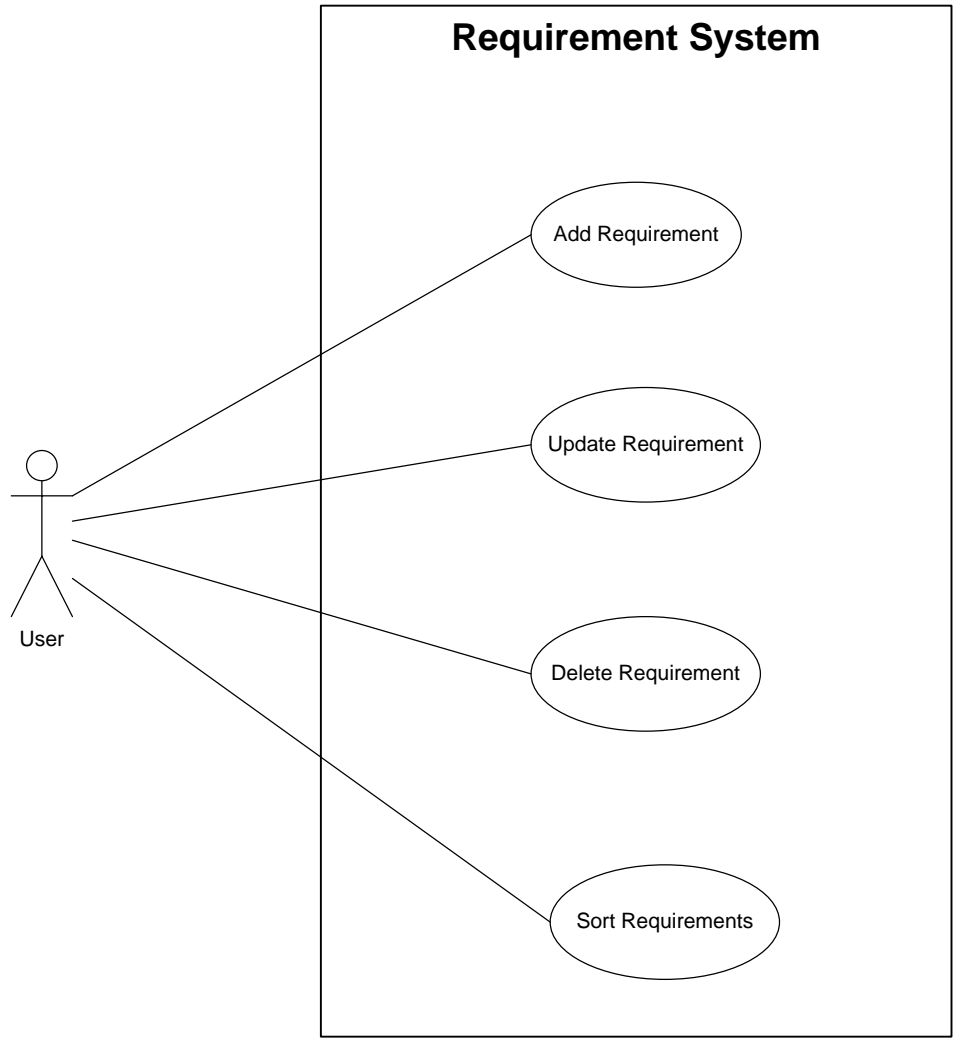


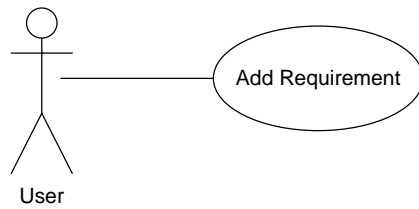
Use Case scenario:

User Case ID	Dashboard _UC02
Name	Export Dashboard
Goal	This function allows Project Manager to export Dashboard to Microsoft Excel file.
Actors	Project Manager
Pre-conditions	Users must log in with role “Project Manager”; Users must go to Dashboard page.
Post-conditions	N/A

Main Flow	1. Filter project list (optional). 2. User Click on “Export” button. 3. Export file.
Exception	N/A
Open Issues	N/A
Relationship	N/A
Business rule	N/A
Priority	Normal

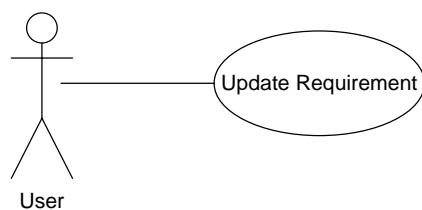
7.6 Requirement



2.4.26 Add Requirement

Use Case scenario:

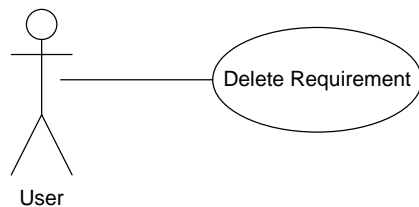
User Case ID	Requirement_UC01	
Name	Add Requirement Use Case	
Goal	This function allows user add new requirement or CR (Change Request).	
Actors	Project Manager	
Pre-conditions	Users must log in with role "Project Manager";	
Post-conditions	N/A	
Main Flow	1. Go to Requirement page. Click "Add" button. 3. Fill needed information and click "summit" button.	2. Display page with required fieldfor user to fill information. 4. Save requirement information.
Exception	N/A	
Open Issues	How to save requirement documents. (Link or database)	
Relationship	N/A	
Business rule	N/A	
Priority	5	

2.4.27 Update Requirement

Use Case scenario:

User Case ID	Requirement _UC02	
Name	Update Requirement Use Case	
Goal	This function allows user to updatedocument, status.	
Actors	Project Manager, member	
Pre-conditions	N/A	
Post-conditions	N/A	
Main Flow	1. Go to Requirement page. Choose requirement, Click “Update” button. 3. Fill needed information and click “Save” button.	2. Display page with information for user to modify. 4. Save updated information.
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	5	

2.4.28 Delete Requirement

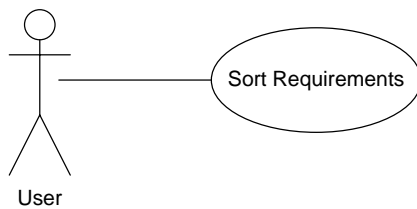


Use Case scenario:

User Case ID	Requirement _UC03	
Name	Add Requirement Use Case	
Goal	This function allows user to delete requirement.	
Actors	Project Manager	
Pre-conditions	Users must log in with role “Project Manager”;	
Post-conditions	N/A	

Main Flow	1. Go to Requirement page. Choose requirement, Click “Delete” button.	2. Display confirm box.
	3. Click “Yes” button.	4. Delete Requirement.
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	5	

2.4.29 Sort Requirements

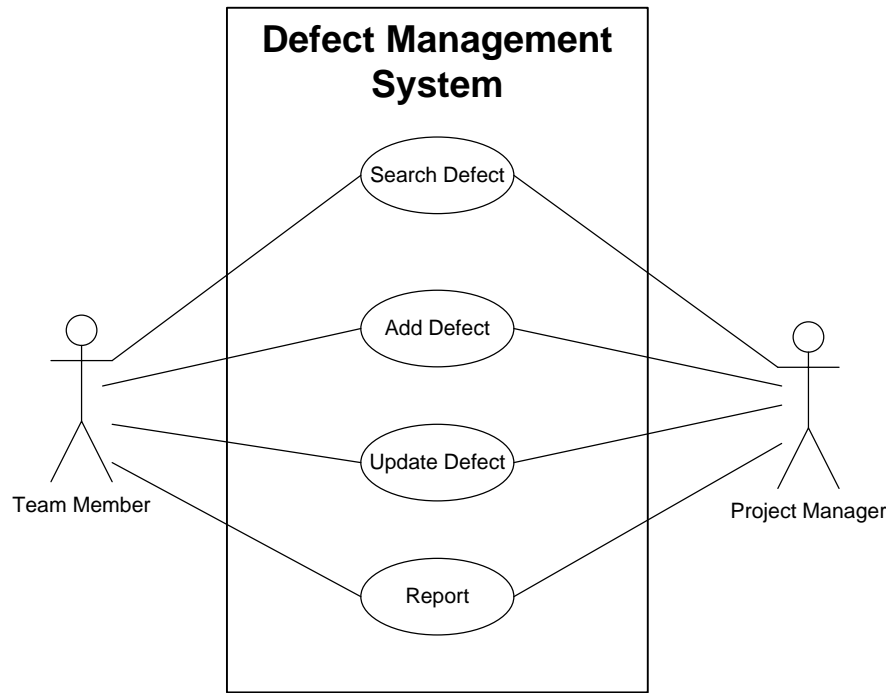


Use Case scenario:

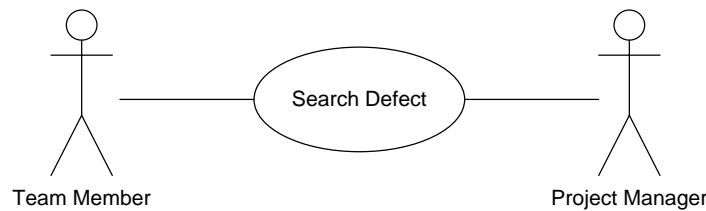
User Case ID	Requirement _UC04	
Name	Sort Requirements Use Case	
Goal	This function allows user to sort, filter requirement by Size, Priority or Date.	
Actors	Project Manager, member	
Pre-conditions	N/A	
Post-conditions	N/A	
Main Flow	1. Go to Requirement page. Choose kind of filter (type, date, priority).	2. Sort and Display new list.
Exception	N/A	
Open Issues	Sort by user and last modified?	
Relationship	N/A	

Business rule	N/A
Priority	5

7.7 Defect Management System



2.4.30 Search defect



Use Case scenario:

User Case ID	DMS_UC01
Name	Search defect Use Case
Goal	This function allows users can search defect. Defect has 3 kinds : open defect, closed defect, leakage
Actors	Member
Pre-conditions	Logged user

Post-conditions	None	
Main Flow	1. Users login into DMS system	3. Select search condition
	2. Click button search	
Exception	None	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.31 Add defect

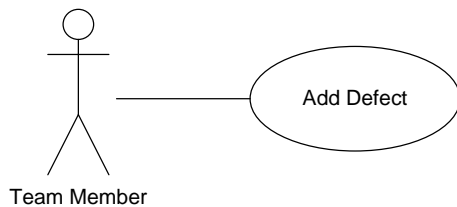


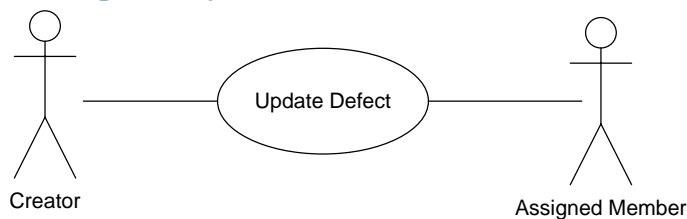
Figure 3 Search defect Use Case model

Use Case scenario:

User Case ID	DMS_UC02	
Name	Add defect Use Case	
Goal	This function allows users can add defect. When defect was added, member become creator, defect change status to opened	
Actors	Member	
Pre-conditions	Logged user	
Post-conditions	None	
Main Flow	1Users login into DMS system	2. Click button add new

Exception	None	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.32 Update defect

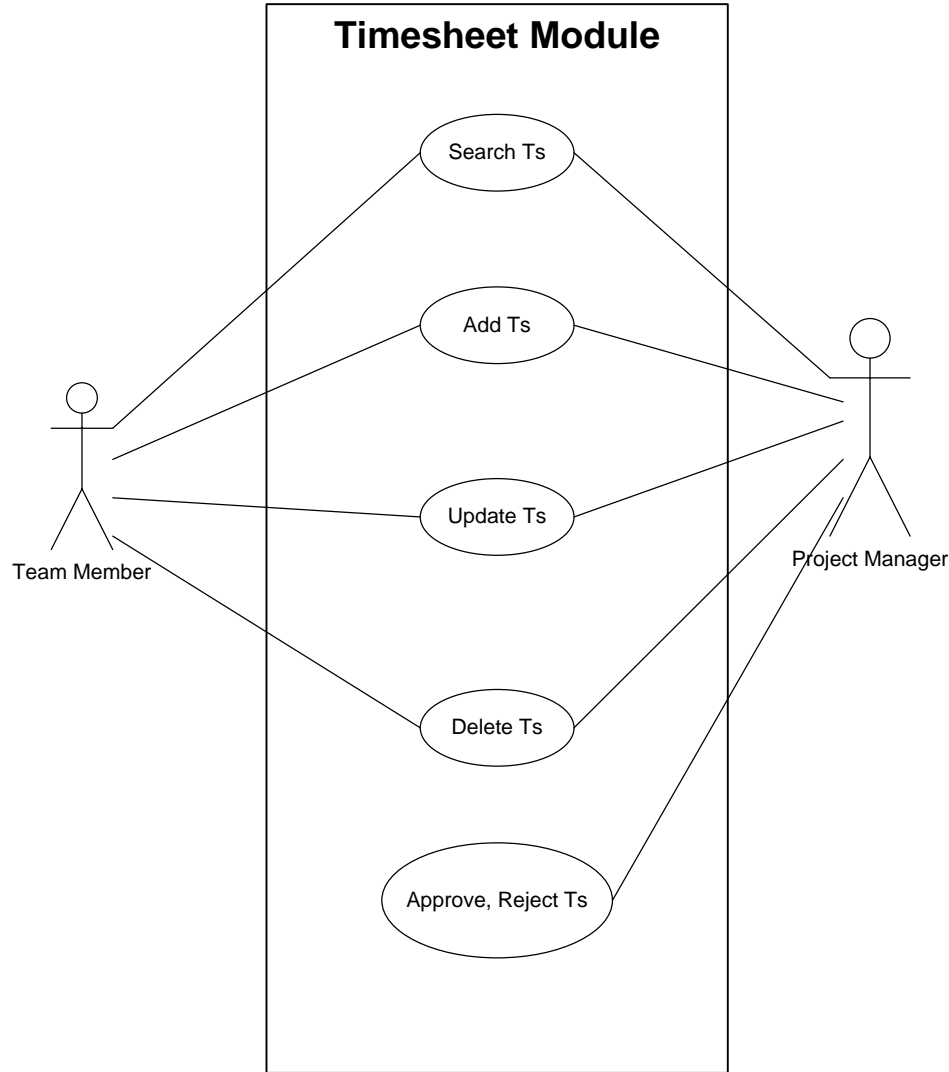


Use Case scenario:

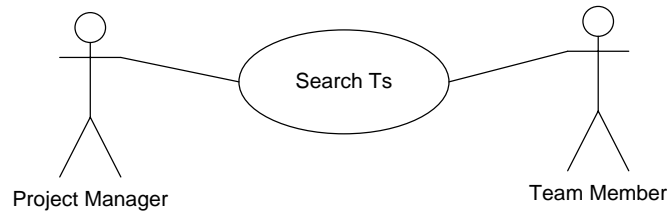
User Case ID	DMS_UC03	
Name	Update defect Use Case	
Goal	<p>This function allows users can update defect.</p> <p>Creator can change status of defect from opened to cancelled or corrected.</p> <p>Assigned member can change status of defect to opened, canceled or closed.</p>	
Actors	Member	
Pre-conditions	Logged user	
Post-conditions	None	
Main Flow	1Users login into DMS system	3. Select defect
	3..Click button update	
Exception	None	
Open Issues	N/A	

Relationship	N/A
Business Rule	N/A
Priority	N/A

2.4.33 *Timesheet Module*



2.4.33.1 Search Timesheet

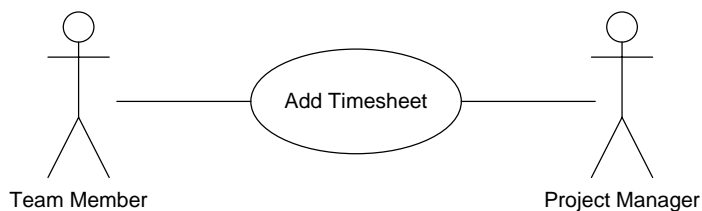


Use Case scenario:

User Case ID	Timesheet_UC01
--------------	----------------

Name	Search Timesheet Use Case	
Goal	This function allows users can search timesheet.	
Actors	Add Timesheet	
Pre-conditions	User logins must be member of project	
Post-conditions	None	
Main Flow	<div> <div>1. Users logins to Timesheet system.</div> <div>2. Select search condition.</div> <div>3. Click button Search</div> </div>	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.33.2 Add timesheet

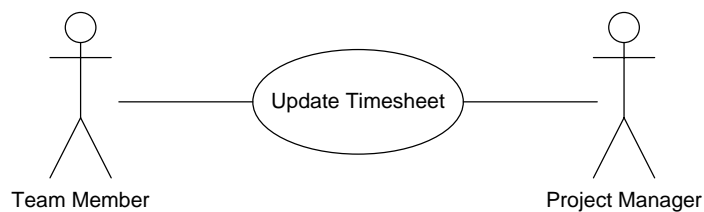


Use Case scenario:

User Case ID	Timesheet_UC02
Name	Add Timesheett Use Case
Goal	This function allows users can add a new timesheet record
Actors	Add Timesheet
Pre-conditions	User logins must be member of project
Post-conditions	None

Main Flow	1. Users logins to Timesheet system.	2. Click button add new.
Exception	None	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

2.4.33.3 Update timesheet

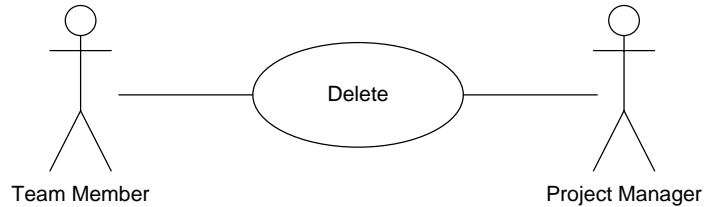


Use Case scenario:

User Case ID	Timesheet_UC03	
Name	Update timesheet Use Case	
Goal	This function allows users can update timesheet records.	
Actors	Member , Project Manager	
Pre-conditions	User logins must be member of project	
Post-conditions	None	
Main Flow	1. User logins to Timesheet system.	2. Select timesheet record to update
	3. Click button update	
Exception	None	
Open Issues	N/A	

Relationship	N/A
Business Rule	N/A
Priority	N/A

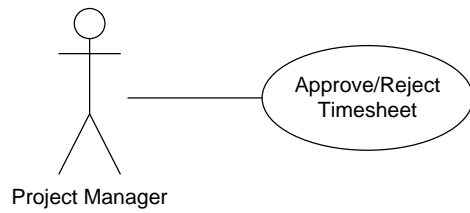
2.4.33.4 Delete timesheet



Use Case scenario:

User Case ID	Timesheet_UC04	
Name	Delete timesheet Use Case	
Goal	This function allows users can delete timesheet records.	
Actors	Member , Project Manager	
Pre-conditions	User logins must be member of project	
Post-conditions	None	
Main Flow	1. User logins to Timesheet system.	2. Select timesheet record to delete
	3. Click button delete	
Exception	None	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

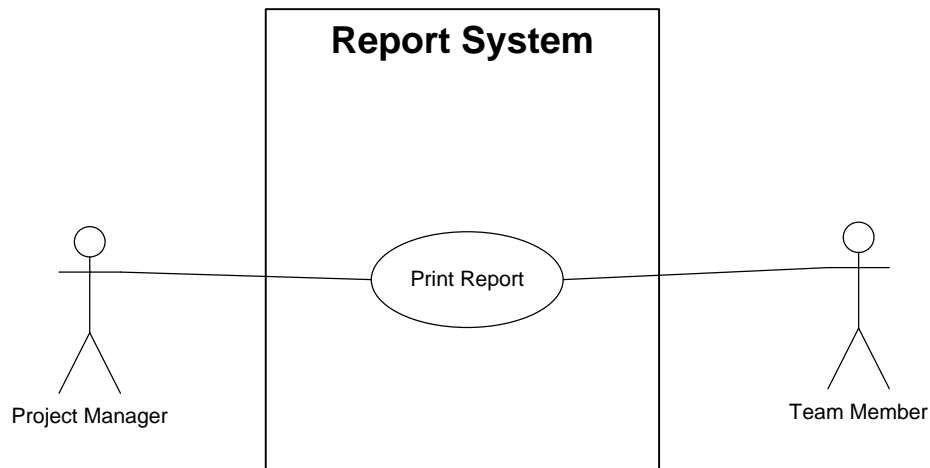
2.4.33.5 Approve/ Reject timesheet



Use Case scenario:

User Case ID	Timesheet_UC05	
Name	Approve/ Reject timesheet Use Case	
Goal	Allow project manager to approves or reject members' timesheet records	
Actors	Project manager	
Pre-conditions	Logged users as role project manager	
Post-conditions	None	
Main Flow	<div>1. User logins to Timesheet system</div> <div>as role project manager</div> <div>2. Select Timesheet to approve or reject</div> <div>3. Click button approve or reject</div>	
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business Rule	N/A	
Priority	N/A	

7.9 Report



7.9.1 Print Report

Use Case scenario:

User Case ID	Report_UC01	
Name	Print Report	
Goal	This function allows Project Manager and Team Member to view and print report about planner, timesheet, DMS or overall of the project.	
Actors	Project Manager; Team Member	
Pre-conditions	Users must log in with role “Project Manager” or “Team Member” ; Users must go to Report page	
Post-conditions	N/A	
Main Flow	<div> <div>1. Select report by clicking on name of report (planner, timesheet, DMS...).</div> <div>2. Display Report</div> <div>3. User clicks “Print” button.</div> <div>4. Export Report.</div> </div>	
Exception	N/A	
Open Issues	N/A	
Relationship	N/A	
Business rule	N/A	
Priority	High	

2.5 NON-FUNCTIONAL Requirements

This chapter of the document describes all the non-functions requirement of the OOPMS.

The PMS's usability, availability, performance are very important factors to ensure that the system operate effectively and keep hundred miners safe.

2.5.1 Usability

The OOPMS usability is the key factor to ensure that the system run exactly as well as the operators can control the system efficiently.

The OOPMS application shall provide clear, friendly and easy interface to operate so that system users have to spend no more than one hour learning to use the system.

2.5.1.1 Background knowledge

OOPMS users assume to have very basic knowledge at using computer systems.

2.5.1.2 Training

Operators' training time requirement: 60 minutes.

2.5.2 Reliability

2.5.2.1 Availability

Whenever the system is during operation time no matter how many people working inside, the OOPMS has to be ON.

2.5.2.2 Mean Time between Failures (MTBF)

Mean Time between Failures (MTBF): more than 6 months.

2.5.2.3 Mean Time to Repair (MTTR)

Mean Time To Repair (MTTR): less than 48 hours.

2.5.2.4 Accuracy

Accuracy: 100%

2.5.2.5 Maximum Bugs and Defect Rate

Maximum Bugs and Defect Rate: 0.3 bugs per thousand lines of code (0.3 bugs/KLOC).

2.5.2.6 Critical Bugs

Critical bugs:

- + Loss of Log: No
- + Unable to operate any function: No

2.5.3 Performance

2.5.3.1 Response Time

Response time for a respond:

Average: 50 milliseconds

Maximum: 80 milliseconds

2.5.3.2 Capacity

Only one operator at the same time.

2.5.3.3 Resource utilization

Memory:

+ 512MB of RAM

Operating System:

+ Microsoft Windows XP or newer version

+ Mac OS X 10.0 or newer version

+ Linux 3.5 or newer version

2.5.4 Supportability

2.5.4.1 Coding standards

According to “Standard Java Coding Convention”

– 09be-HD/PM/HDCV/FSOFT - Version 1/1.

2.5.4.2 Maintenance Utilities

Support working hour’s phone call technical support: 8:00 to 16:00 from Monday to Friday.

2.5.5 Design Constraints

Coding standard:

+ This application developed in Java programming language, version J2EE 6.

Software process requirements:

+ The software process shall confront to the CMMI 5 standard.

Developmental tools:

+ This application developed using Eclipse from Sun Microsystems.

2.5.5.1 Software Languages

GUI, Help documents, all other support documents are in English.

2.5.5.2 Software Process Requirement

The software process has to meet the CMMI 5 standard.

2.5.5.3 Development Tools

The OOPMS developed using Eclipse 3.6, SQA activity using FSOFT template and j-unit.

2.5.6 On-line User Documentation and Help System Requirements

The deployment of the application shall be provided by a technical agent include full help document for user.

2.5.7 Purchased Components

None

2.5.8 Interfaces

2.5.8.1 User Interfaces

Refer to Detail Design.

2.5.8.2 Hardware Interfaces

N/A

2.5.9 Licensing Requirements

The OOPMS is only applicable for Project Management Department, which legally buy this product. No other use is legal.

2.5.10 Legal, Copyright, and Other Notices

OOPMS licenses under the [Apache License, Version 2.0](#) as approved by the Open Source Initiative (OSI), an [OSI-certified](#) ("open") and [Gnu/FSF-recognized](#) ("free") license.

2.5.11 Applicable Standards

The system shall confront to the ISO 90003:2001 standard.

D. Software Design Description

1. Introduction

1.1 Purpose

This document contains the detailed design for to be developed application on target platform. It defines, technically, how applications will operate. Developers will base on this document and corresponding SRS to conduct development plan, task assignment and implementation of the new application.

1.2 Scope

This document is prepared for the application OOPMS in scope of the capstone project of FU K4B.

1.3 Intended Audiences and Document Organization

This document is intended for:

- ❖ Development team: Developers and Testers
- ❖ Rollout Technical Team: Responsible for deploying applications to UAT and Production environments.
- ❖ Customer Representatives: Responsible to review & approve the document.

Below are main sections of the document:

- ❖ **Introduction** : This section describes the general introduction of this document

- ❖ **Architecture Design :** This section describes the high-level technical assessments and decisions for the application.
- ❖ **Technical Solutions :** This section describes mechanism used in the project.
- ❖ **Database Design:** This section describes in detail how data is structured and manipulated in this application.
- ❖ **CRC Card Model:** This is to describe modules' responsibilities and its cooperators.
- ❖ **Application Security:** This section describes security matrix in detail
- ❖ **Detail Function Design:** This section describe in detail how features are developed and work.
- ❖ **Interface Design:** This section describes in detail how UI is designed in general (layout , theme).
- ❖ **Configuration:** This section describes all configuration needed for the application to function properly.
- ❖ **Packaging and Deployment:** This section describes how applications could be packaged and deployed.
- ❖ **NOTE:** Please refer section 1.4 for all acronyms and abbreviations you may encounter within this document.

1.4 Acronyms and Abbreviations

#	Item	Description
1	ASP	ActiveX Server Page
2	JVM	Java Virtual Machine
3	HTTP	Hypertext-Transfer Protocol
4	MVC	Model – View – Control
5	DAO	Data Access Object, this object is responsible for attaching to a system, extracting some information, based on specific requirements, and creating a value object.
6	OOPMS	Open-One Project Management System

1.5 References

#	Title	Version	File Name / Link	Description
1	<i>SRS Document</i>	1.0		
2	<i>User Requirement</i>	1.0		

Table D.1: List of References

2. Architecture design

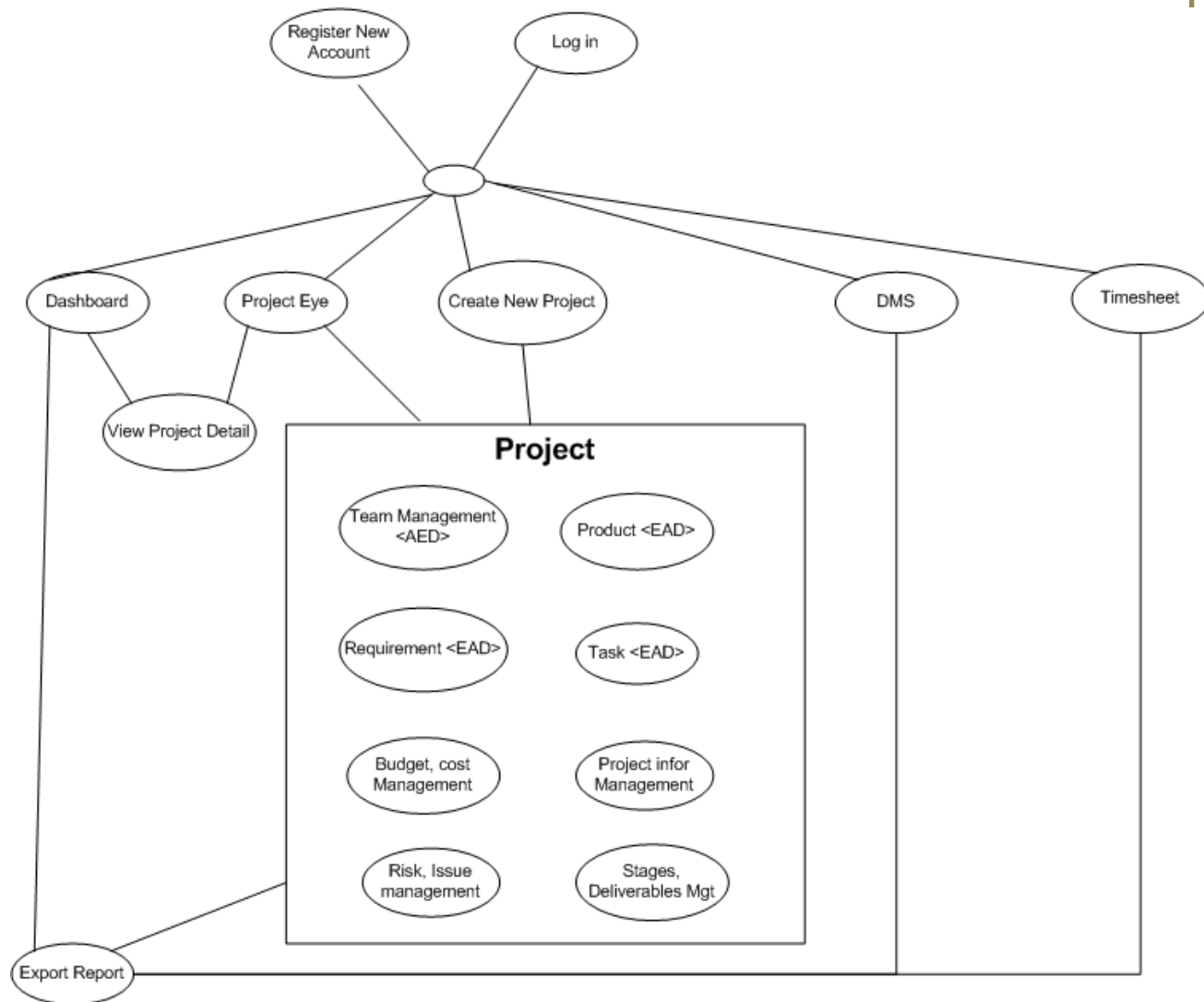
2.1 User case view

Table of Use Case

Number	UsecaseID	Fullname
1	General_UC01	Log-in Use Case
2	General_UC02	Log-out Use Case
3	General_UC03	Change Password Use Case
4	General_UC04	Edit User Use Case
5	General_UC05	Register New Account Use Case
6	General_UC06	Reset Password Use Case
7	Admin_UC01	Admin Create new Project Use Case
8	Admin_UC02	Admin Search Project Use Case
9	Admin_UC03	Admin Edit Project Use Case
10	Admin_UC04	Admin Mange Module Use Case
11	Admin_UC05	Admin Team Management Use Case
12	Admin_UC06	Admin Search User Use Case
13	Admin_UC07	Admin Create User Use Case
14	Admin_UC08	Admin Edit User Use Case
15	Admin_UC09	Admin Change User's Status Use Case
16	Project Eye_UC01	Create new Project Use Case
17	Project Eye_UC02	Edit Project Use Case
18	Project Eye_UC03	Manage Module Use Case
19	Project Eye_UC04	Team Management Use Case
20	Project Eye_UC05	Change Budget Use Case
21	Project Eye_UC06	Add Expense Use Case
22	Project Eye_UC07	Edit Expense Use Case
23	Project Eye_UC08	Delete Expense Use Case
24	Project Eye_UC09	Add Risk, Issue Use Case
25	Project Eye_UC10	Edit Risk, Issue Use Case
26	Project Eye_UC11	Delete Risk, Issue Use Case
27	Project Eye_UC12	Add Change Request Use Case
28	Project Eye_UC13	Edit Change Request Use Case
29	Project Eye_UC14	Delete Change Request Use Case
30	Project Eye_UC15	Add Product Use Case
31	Project Eye_UC16	Edit Product Use Case
32	Project Eye_UC17	Delete Product Use Case
33	Project Eye_UC18	Add Stage Use Case
34	Project Eye_UC19	Edit Stage Use Case
35	Project Eye_UC20	Delete Stage Use Case
36	Project Eye_UC21	Add Deliverable Use Case
37	Project Eye_UC22	Edit Deliverable Use Case
38	Project Eye_UC23	Delete Deliverable Use Case
39	Project Eye_UC24	View Info Use Case
40	Project Eye_UC25	Report Use Case
41	Requirement _UC01	Add Requirement Use Case
42	Requirement _UC02	Update Requirement Use Case
43	Requirement _UC03	Add Requirement Use Case
44	Requirement _UC04	Sort Requirements Use Case
45	DMS_UC01	Search defect Use Case
46	DMS_UC02	Add defect Use Case
47	DMS_UC03	Update defect Use Case
48	Timesheet_UC01	Search Timesheet Use Case
49	Timesheet_UC02	Add Timesheet Use Case
50	Timesheet_UC03	Update timesheet Use Case
51	Timesheet_UC04	Delete timesheet Use Case
52	Timesheet_UC05	Approve/ Reject timesheet Use Case
53	Planner_UC01	Filter Task Use Case

Overview

Main flow of Use Case



2.2 Architectural Representation

The following diagram shows the primary tiers in the proposed n-tier architecture. This diagram shows the main layers in this architecture and the vision of how they fit together.

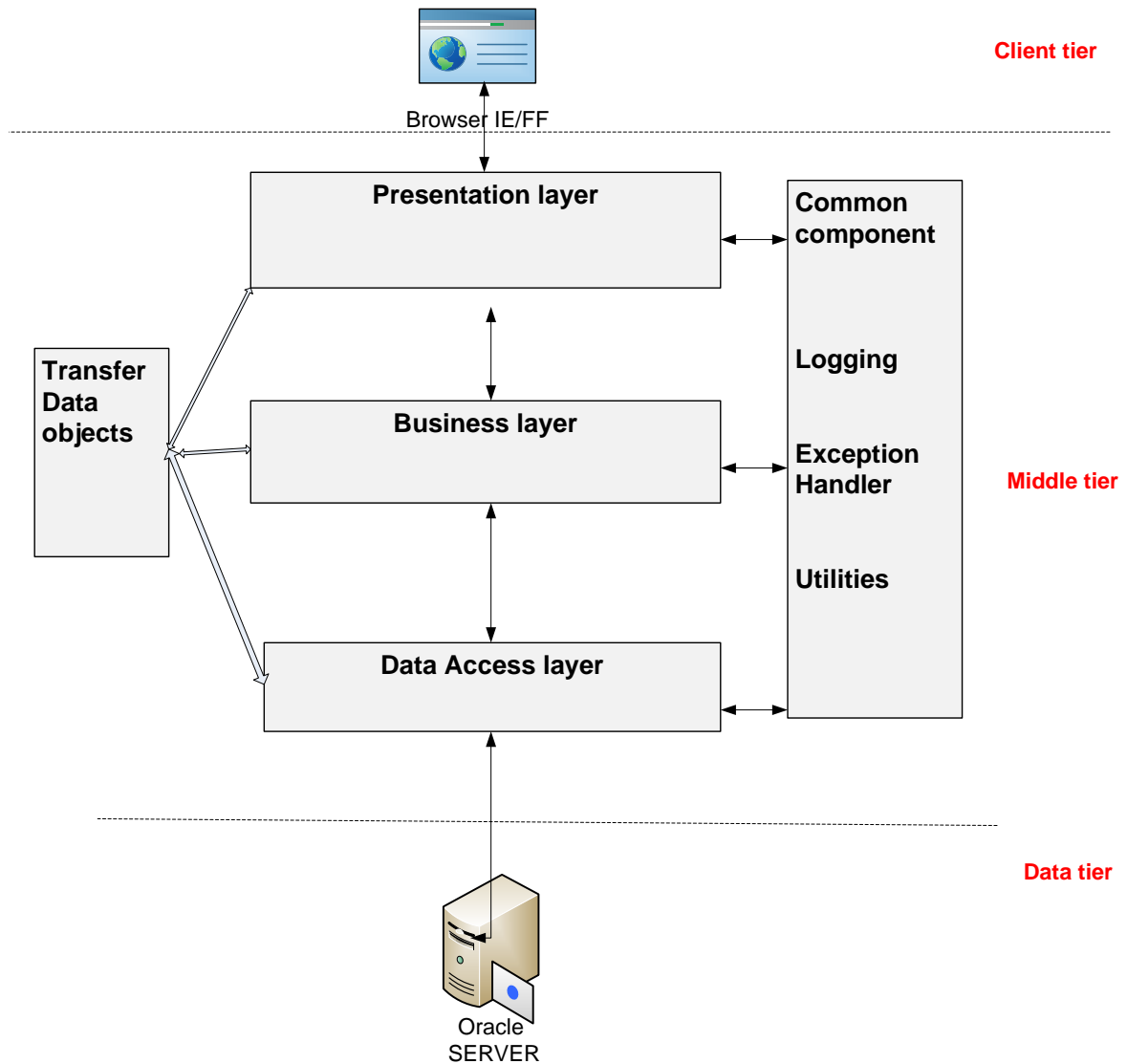


Figure 4 – N-tier architecture of SD System

2.2.1 Presentation Layer

This layer controls the display to the end user. For the presentation layer of OOPMS, the development framework is based on MVC Model architecture. The framework is responsible for:

- Managing requests/responses from/to the clients.
- Controlling display to the end user.
- Assembling a model that can be presented in a view.
- Performing UI validation.
- Providing a controller to delegate calls to business logic and other upstream processes.
- Handling exceptions from other layers.

2.2.2 Business Layer

This layer manages the business processing rules and logic.

- Handling application business logic and business validation.

- Managing transactions.

- Allowing interfaces for interaction with other layers.

- Managing dependencies between business level objects.

- Adding flexibility between the presentation and the persistence layer so they do not directly communicate with each other.

- Exposing a context to the business layer from the presentation layer to obtain business services.

- Managing implementations from the business logic to the persistence layer.

2.2.3 Data Access Layer

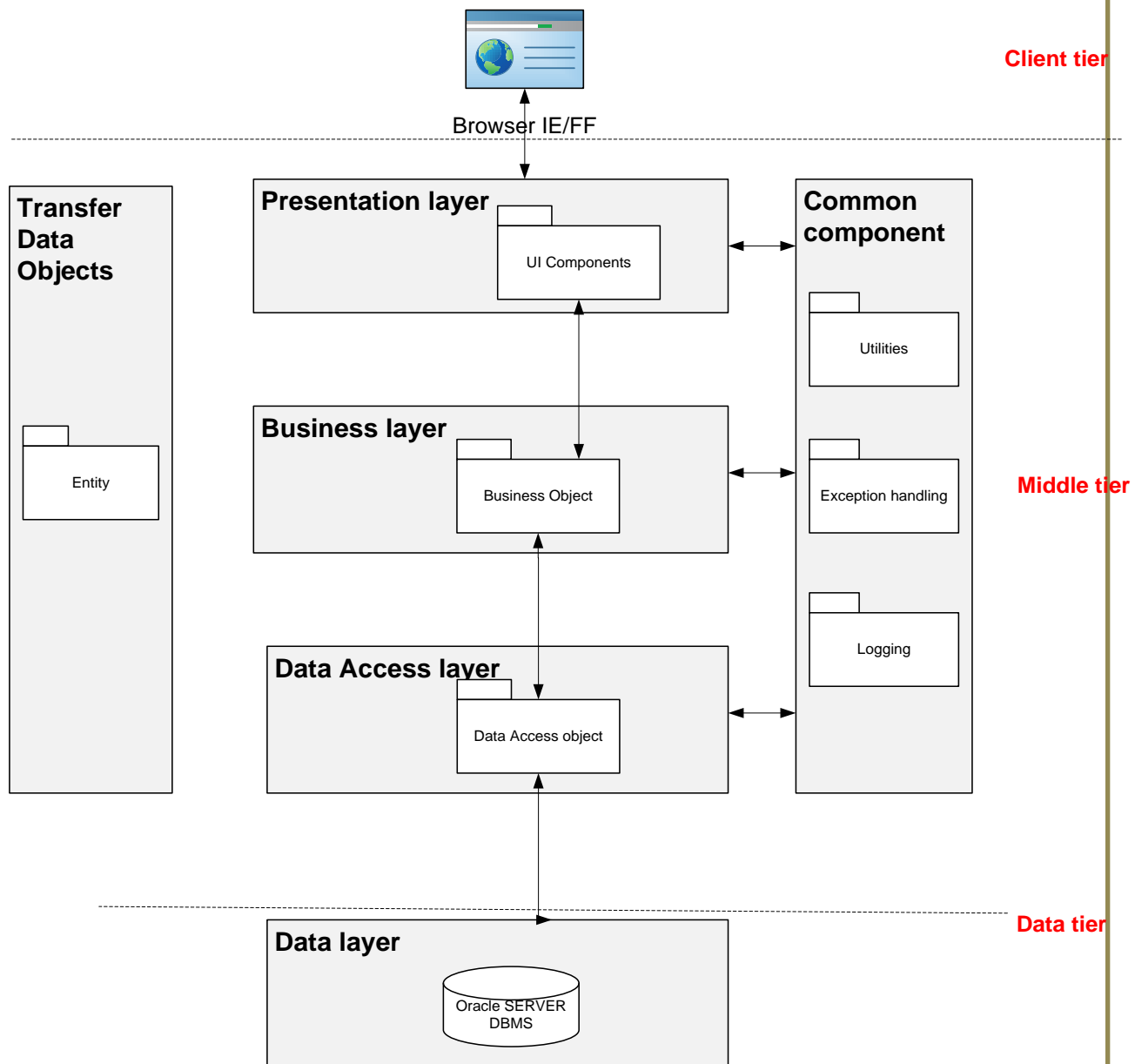
This layer manages access to persistent storage. The primary reason to separate data access from the rest of the application is that it is easier to switch data sources and share Data Access Objects (DAOs) between applications.

- This layer manages reading, writing, updating, and deleting stored data.

2.2.4 Data Layer

In OOPMS, the storage is managed by a relational database. Oracle 10g Express is used for this layer to provide the management of stored data.

2.3 Packages/Components view



2.3.1 UI Components

This package includes the implementation for the JSP, MVC architecture proposed to be used in the Presentation Layer to handle the display to the end user.

Validation: All validation of incoming requests parameters to the server should be validated using JavaScript Validation or JSP client side control .

2.3.2 Business Object

This package includes the implementation of business objects. **Business Object** (BO) layer is used to perform the business operations. ***The Business Object layer will access the DAO to access database. Transactions should be managed within this business layer.***

2.3.4 Transfer Data Objects (Entity)

Transfer Data Objects is java class, contains lightweight structures for related business information. These are sometimes referred to as data transfer objects. A value object (VO) is a lightweight, serializable object that structures groups of data items into a single logical construct. .In addition, VOs are useful in communication among all layers of the application.

2.3.5 Data Access Object

This package includes the implementation of Data Access Object. Using Oracle CLient object here to make the application more flexible to access database. Oracle Client object includes basic functions to work with database: *select, insert, update, delete*.

2.3.6 Exceptions

This package will include all general exceptions that will typically used by more than one package. The try-catch clauses should be kept to a minimum.

2.3.7 Utils

This package includes all utilities will be wisely used in the modules.

2.3.8 Logging

This package includes implemented logging classes.

3. Technical Solutions

3.1 Exception handling mechanism

The try-catch clauses should be kept to a minimum.

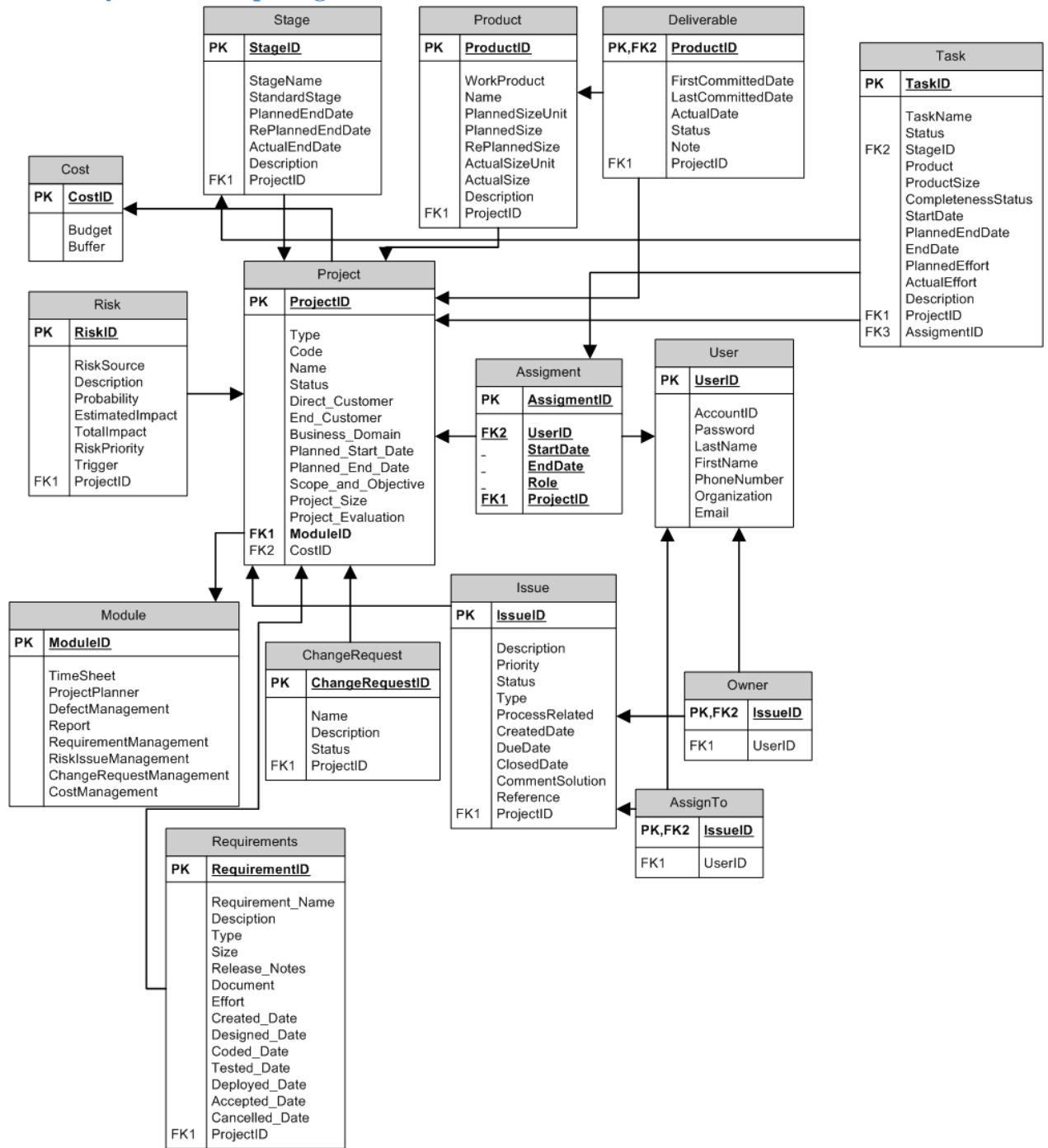
Whenever an exception raise , system will log exception detail to Windows event and redirect user to Error page to display standard error message!

3.2 Logging mechanism

Logging is an important and pretty useful mechanism for every application. It can help developers to debug and improve their code or test it's functionality. In OOPMS, logging component is developed based on log4j logging API.

4. Database design

4.1 Entity Relationship Diagram



4.2 Schema

Overview

#	Name	Description
---	------	-------------

1	Project	Project with its information: name, type, code..
2	Stage	Stage of software development process
3	Product	Product from development process
4	Deliverable	Product to be summited to customers
5	Task	Task assign to team members
6	Cost	Cost management
7	Risk	Risk management
8	Assignment	Assignment to user
9	User	User
10	Module	Module of project
11	ChangeRequest	Change Request management
12	Issue	Issue Management
13	Owner	Owner of issue
14	AssignTo	Assigned member of issue
15	Requirement	Requirement Management

5. CRC Card Model

Basic User Scenario

1. Project Manager create new project.
2. PM manages team; add Products, Tasks, and Requirements...
3. Project Management includes schedule, progress, cost, risk, issue...
4. PM, member use DMS, Timesheet system.
5. Control, monitor, and update Project Status.

Notes: These are not fully documented user stories. More is needed, but these should give you an idea.

Dashboard Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Provide overall information about projects 'status including name, health, cost, progress, quality, efficiency, date, effort. 2. Allow user to filter projects by status, category, date, cost, progress, efficiency. 3. Allow user to sort projects by name, date, project manager. 4. Provide link to project detail information and export feature. 	Project Class Planner Class Cost Class DMS Class Timesheet Class

Planner Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Allow project manager to manage tasks: add new task, update, delete, assign, monitor progress, completeness rate, and date. 2. Feature filter projects by status, assigned to. 3. Allow user to sort status, date, assigned to. 4. Import feature using Microsoft Project and export report. 5. Team members can update tasks' progress. 	Project Class User Class Stage Class Product Class

Project Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Team Management 2. Project Module Management 3. Cost 4. Product 5. Schedule 6. Progress 7. Risk, Issue, Change Request 	Stage Class Product Class User Class Risk Class Issue Class Requirement Class Deliverable Class

Report Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Project information 2. Planner 	Project Class

3. DMS	Planner Class
4. Timesheet	DMS Class
	Timesheet Class

Timesheet Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Allow project manager to monitor timework and effort of team member. 2. Feature filter projects by date, status, project. 3. Team members can log timesheet as their works daily or weekly. 	Project Class User Class Product Class Stage Class

DMS Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Allow project manager to monitor defect and fix bug effort of team. 2. Feature filter projects by date, status, and project, creator, assigned to. 3. Team members can update defect status. 	Project Class User Class

Requirement Controller Class	
Responsibilities	Collaborators
<ol style="list-style-type: none"> 1. Managing feature enables user to store and manage their requirement documents. 2. Including: Add, update, remove, sort 3. User interface allows user to sort requirement by type, date, priority. 	Project Class Product Class

4. Display completeness rate updated by user.	
---	--

User Admin Controller Class	
Responsibilities	Collaborators
1. Manage Project 2. Manage User 3. Manage Project Team 4. Manage Project Module 5. Change User's Information 6. Reset Password 7. Manage Project 8. Manage Project Team 9. Manage Project Module 10. Manage Cost 11. Manage Product 12. Manage Work Order 13. Manage Risk, Issue, Change Request	User Class Project Class

Dashboard Class	
Responsibilities	Collaborators
Represent information of projects on system.	

Planner Class	
Responsibilities	Collaborators
Representation information of project's tasks	

Project Class	
Responsibilities	Collaborators

Representation information of project	
---------------------------------------	--

Report Class	
Responsibilities	Collaborators
Representation information of project's reports	

Timesheet Class	
Responsibilities	Collaborators
Representation information of project's timesheet	

DMS Class	
Responsibilities	Collaborators
Representation information of project's DMS	

Requirement Class	
Responsibilities	Collaborators
Representation information of project's requirements	

User Class	
Responsibilities	Collaborators
Representation information of user on system	

Product Class	
Responsibilities	Collaborators
Representation information of products of project	

Stage Class	
Responsibilities	Collaborators
Representation information of stages of project	

Risk Class	
Responsibilities	Collaborators
Representation information of risks of project	

Issue Class	
Responsibilities	Collaborators
Representation information of issues of project	Project Class

Deliverable Class	
Responsibilities	Collaborators
Representation state of products of project	

6 Application Security

6.1 User Permission

Name	Permission
System Admin	New, Read , Edit Users, Project
User	Read, Edit
Project Full Control	New, Read, Edit,Delete
No Acess	N/A

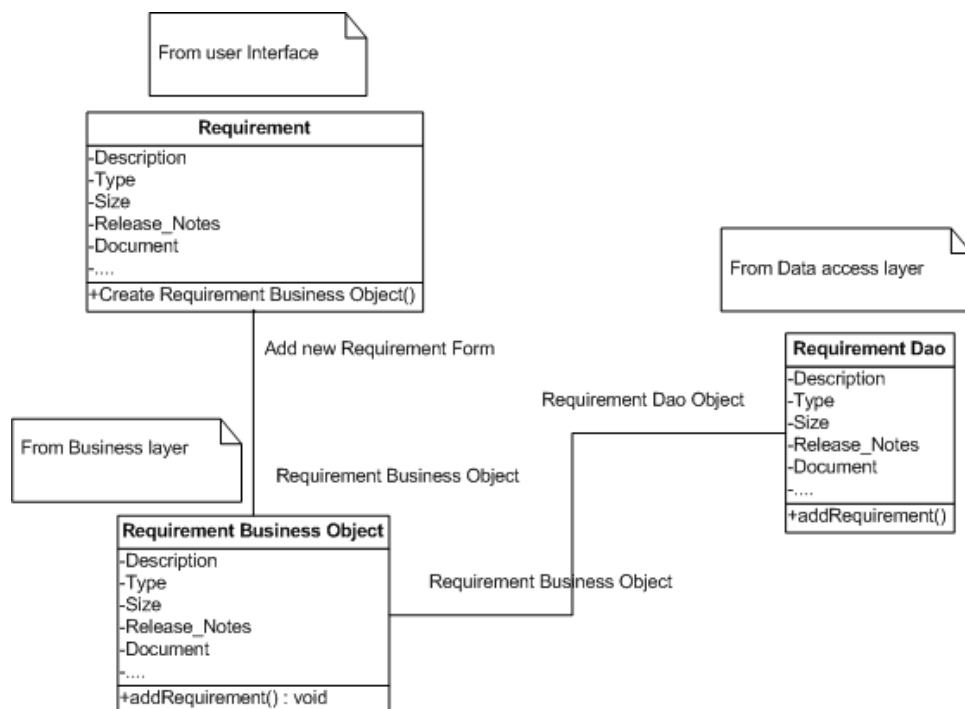
6.2 Security Group

Name	Description
[Setup.Admin]	Administrator is responsible to manage system, users, projects.
[User]	User can be member or PM of a project.
[Project.Manager]	PMs are allowed to have full access to their projects.

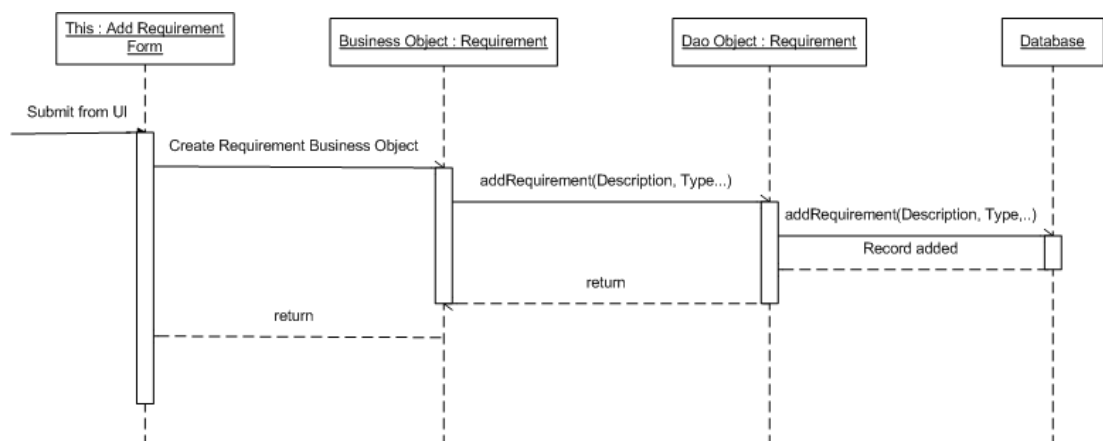
7 Details function design

1.1 Requirement_UC01 - Add Requirement Use Case

1.1.1 Class Diagram

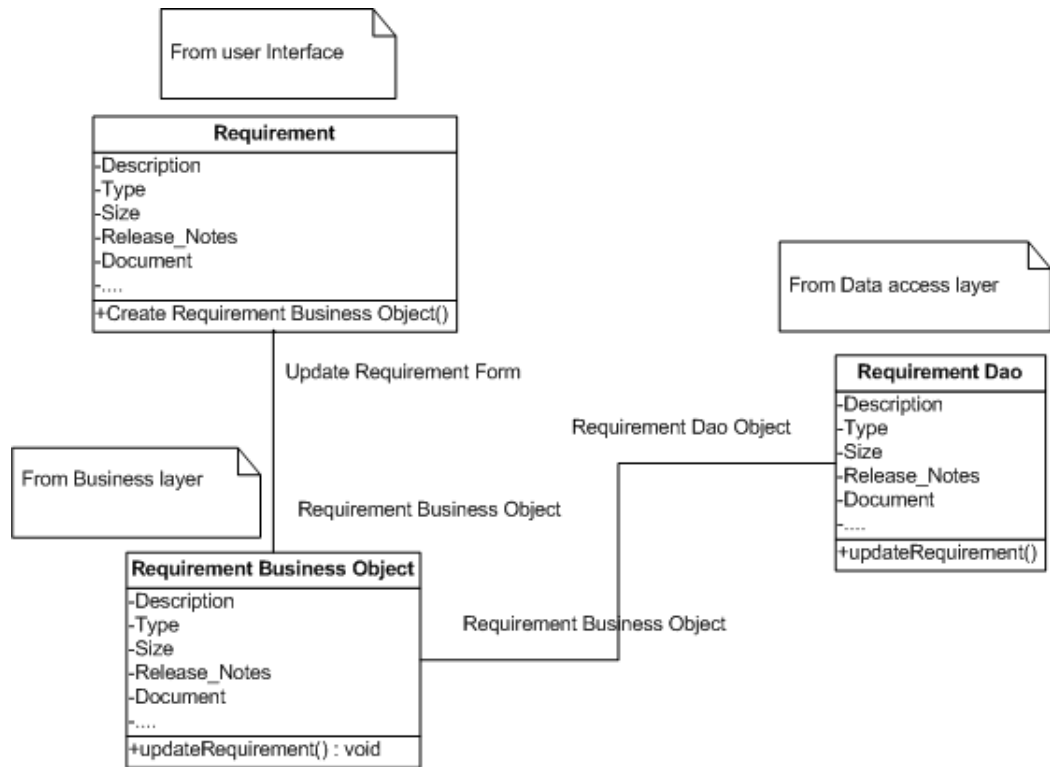


1.1.2 Sequence flow

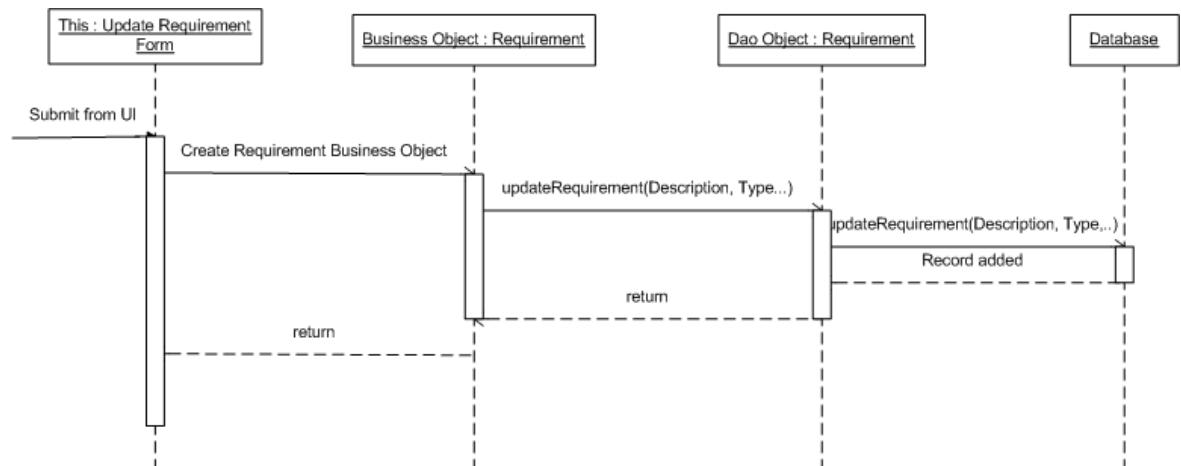


1.2 Requirement_UC02 - Update Requirement Use Case

1.2.1 Class Diagram

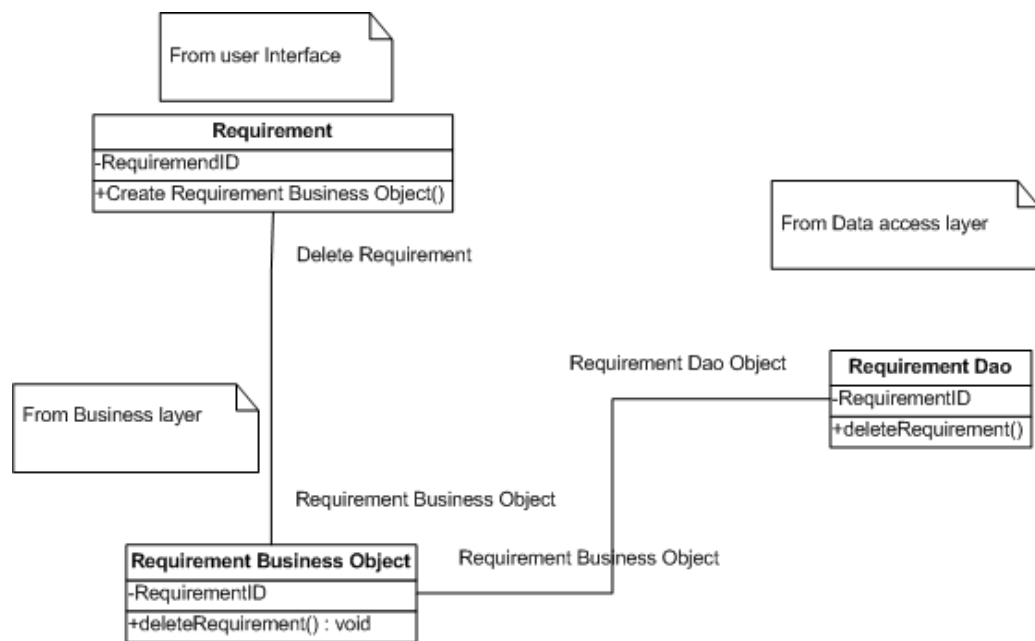


1.2.2 Sequence flow

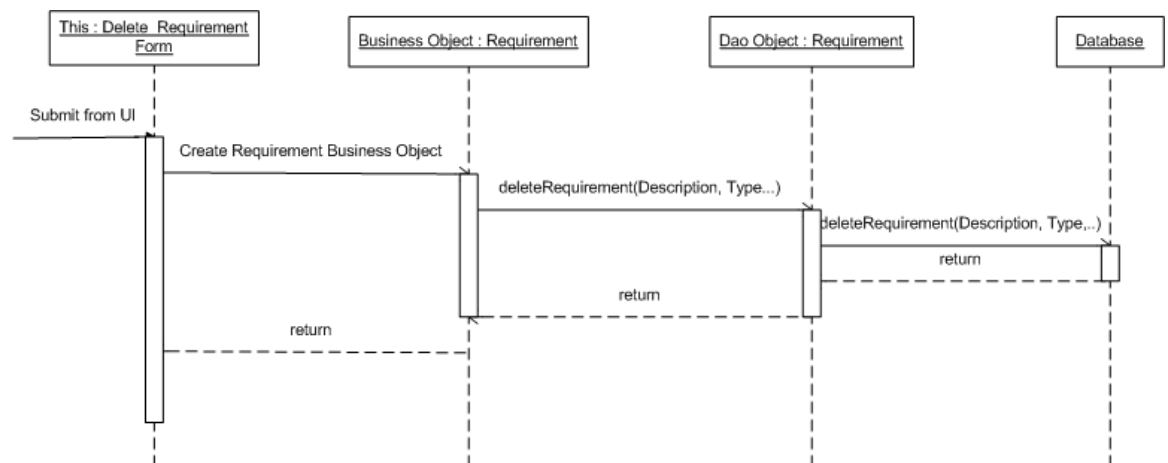


1.3 Requirement_UC03 - Delete Requirement Use Case

1.3.1 Class Diagram

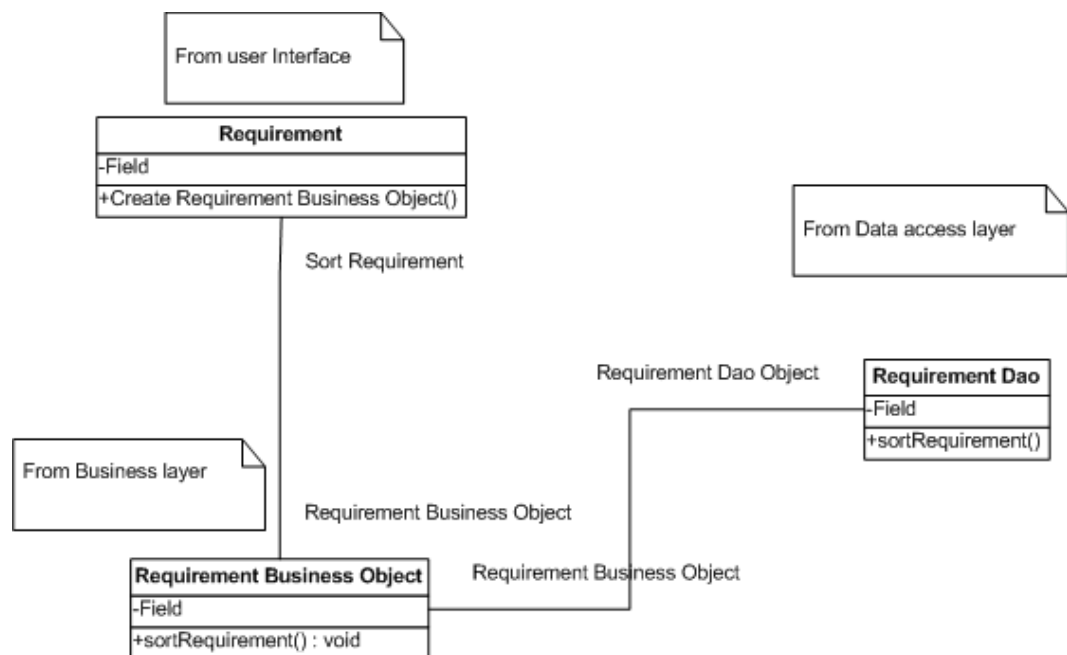


1.3.2 Sequence flow

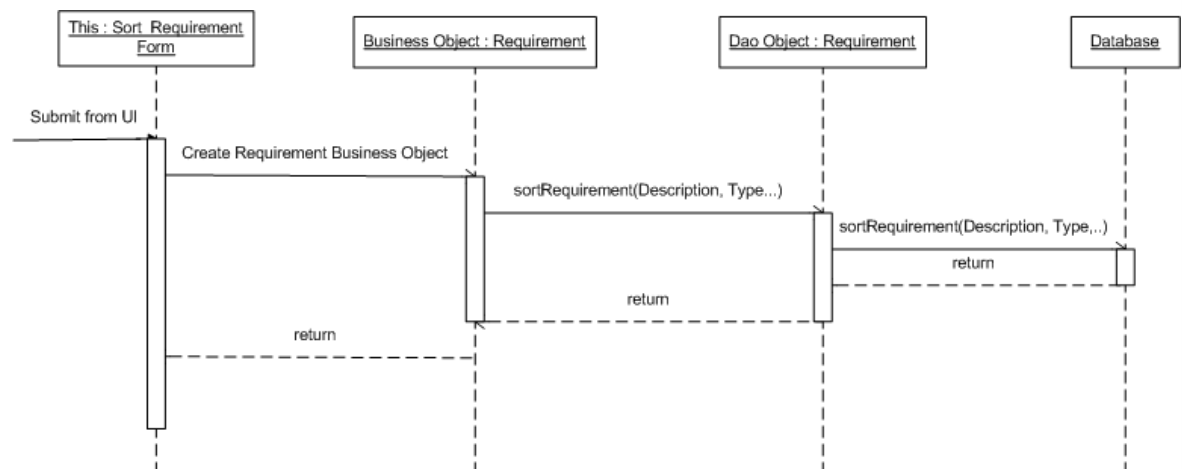


1.4 Requirement_UC04 - Sort Requirements Use Case

1.4.1 Class Diagram

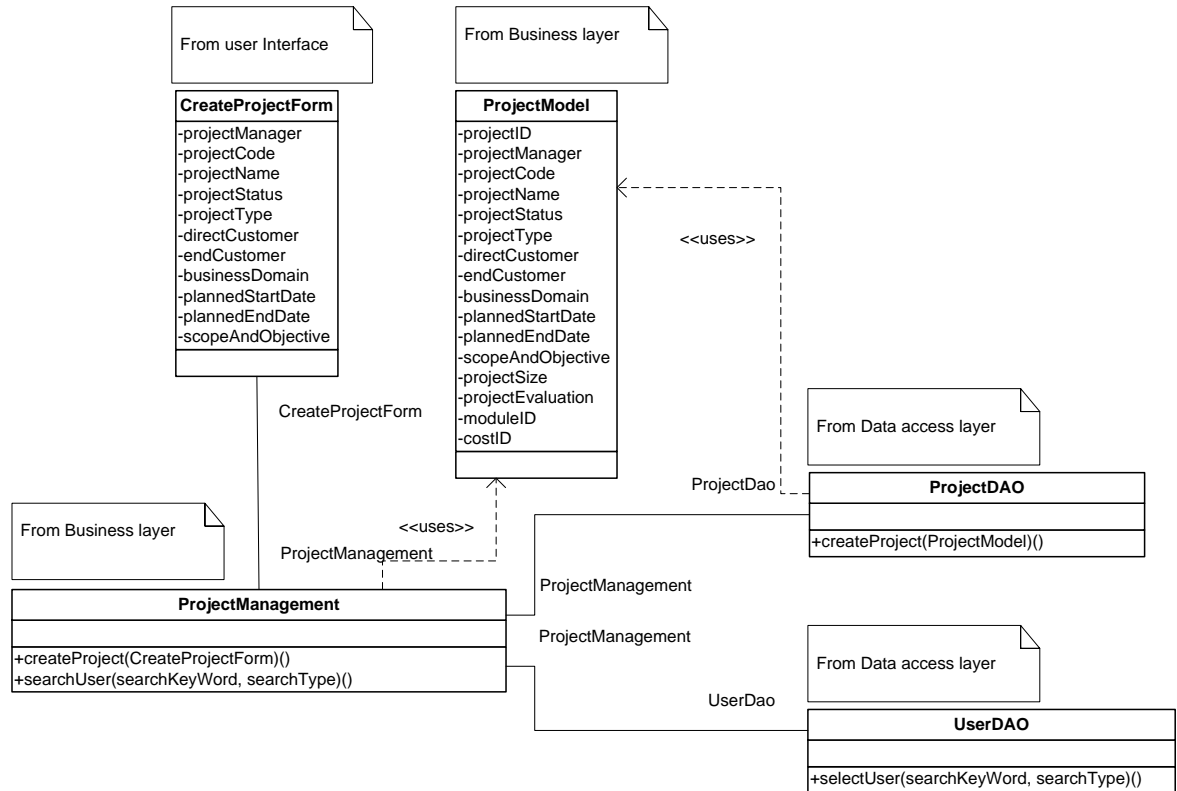


1.4.2 Sequence flow

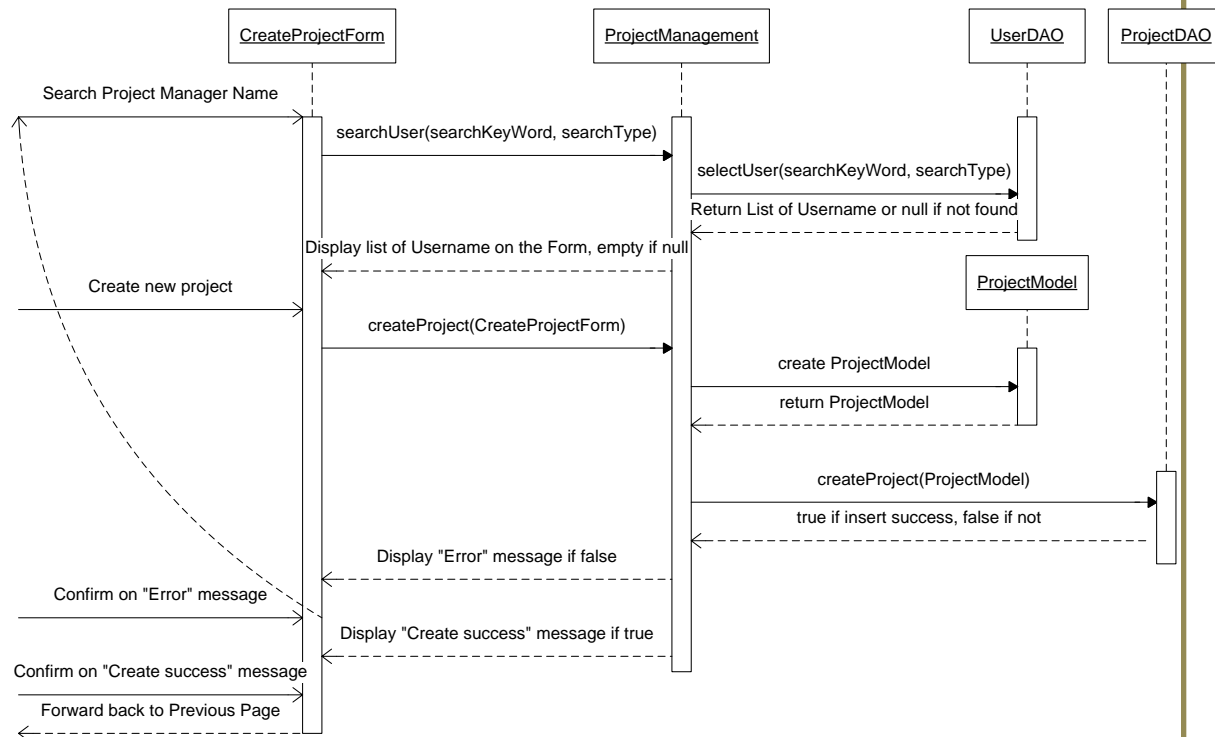


1.5 Admin_UC01 - Admin Create new Project Use Case

1.5.1 Class Diagram

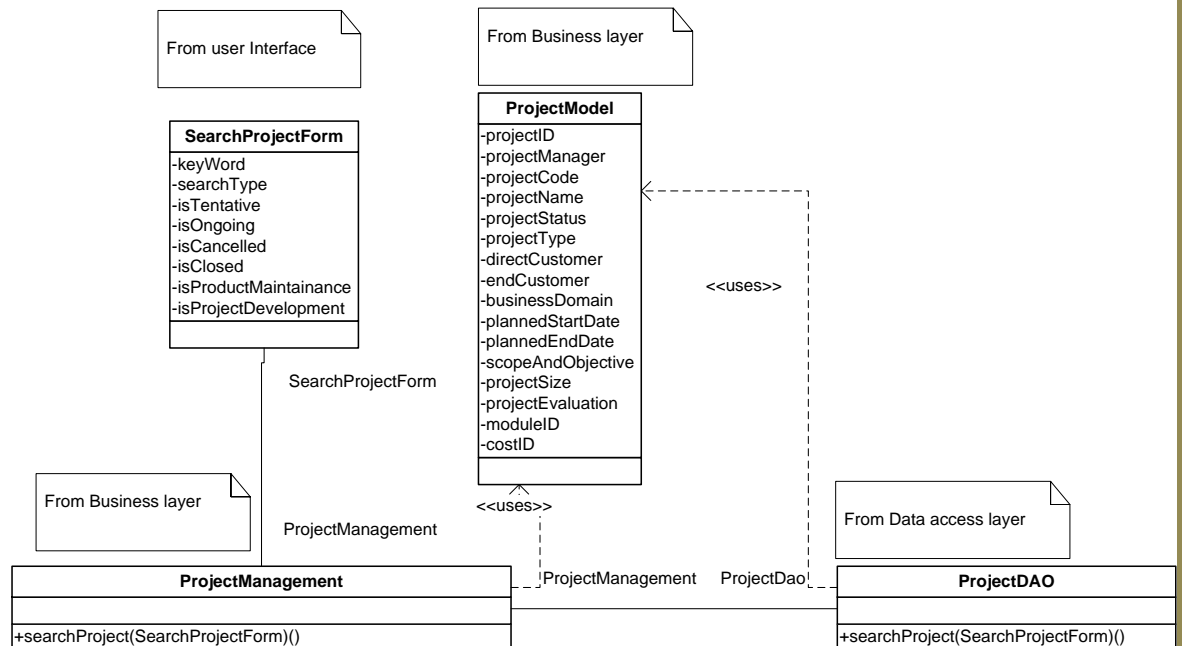


1.5.2 Sequence flow

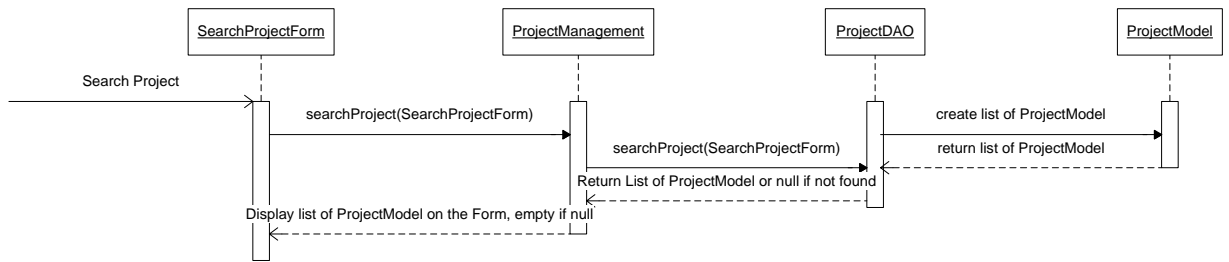


1.6 Admin_UC02 - Admin Search Project Use Case

1.6.1 Class Diagram

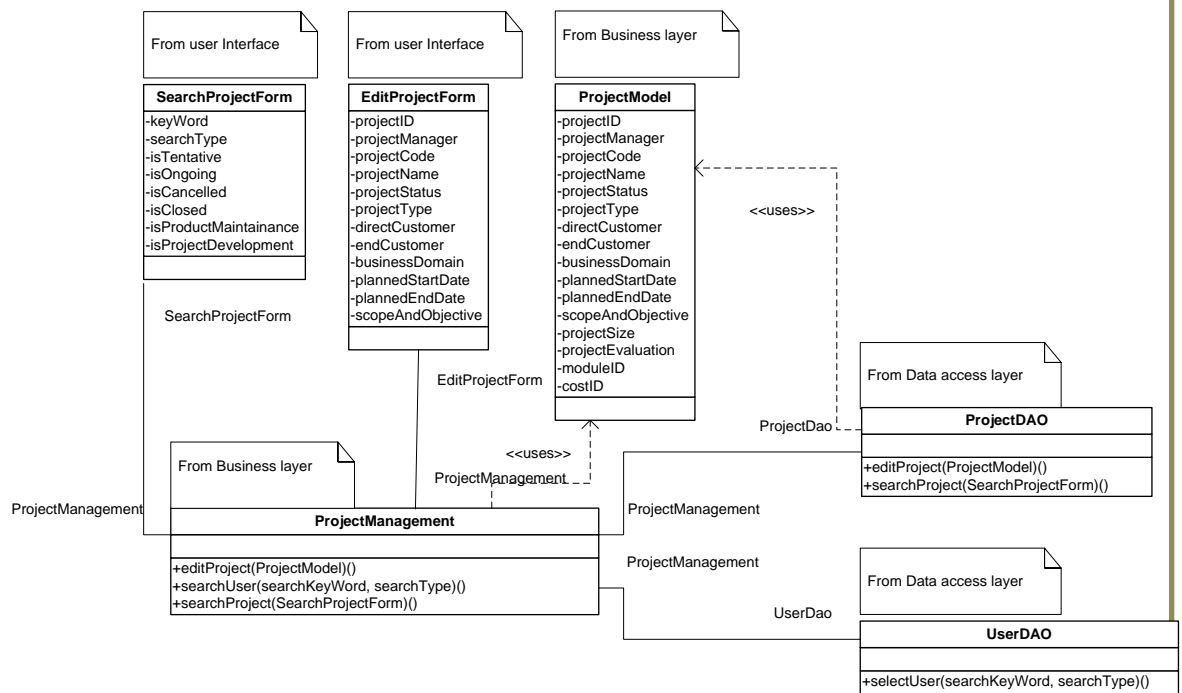


1.6.2 Sequence flow

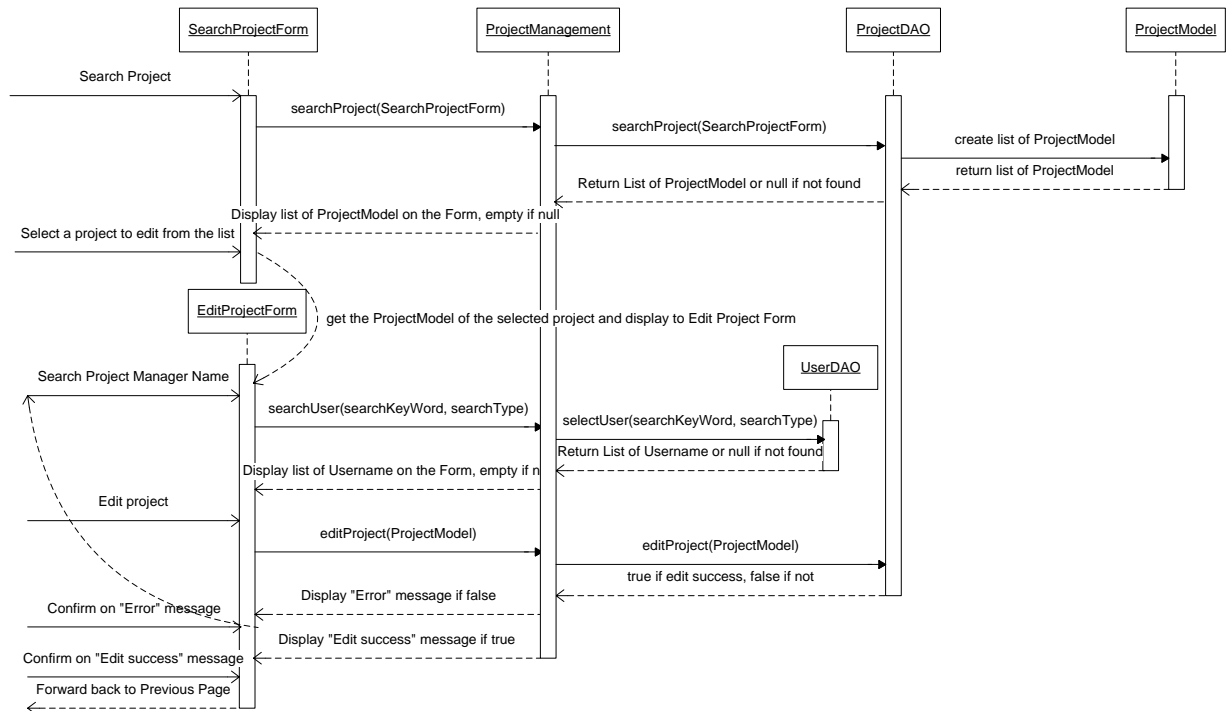


1.7 Admin_UC03 - Admin Edit Project Use Case

1.7.1 Class Diagram

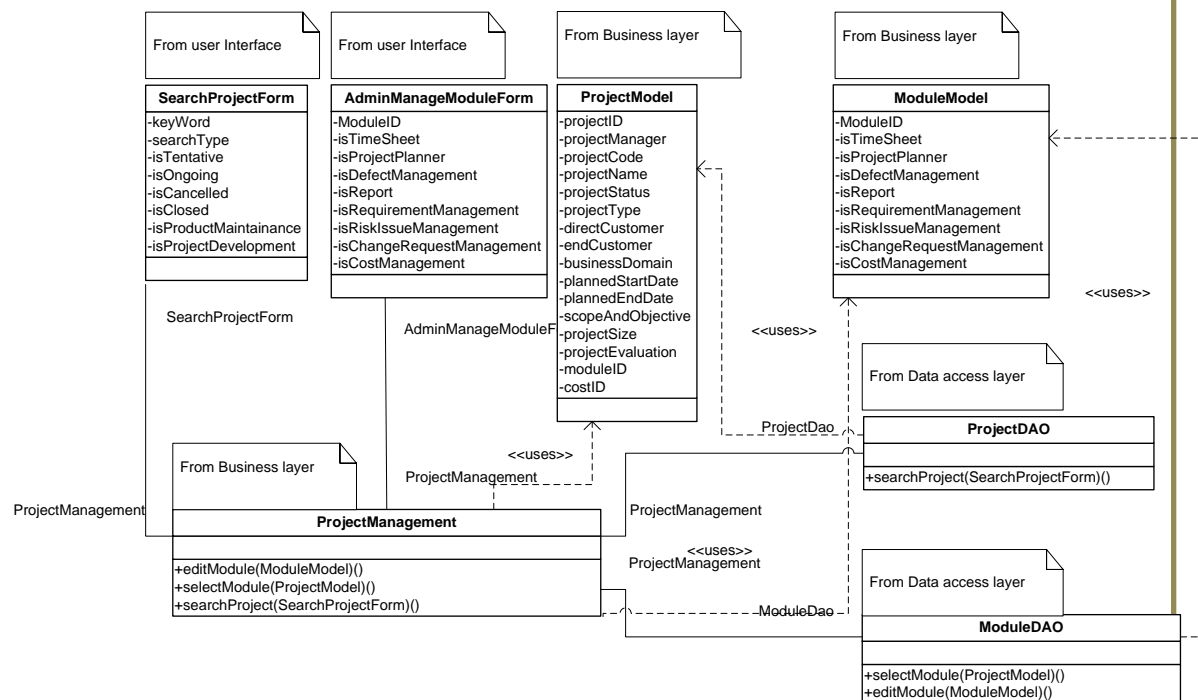


1.7.2 Sequence flow

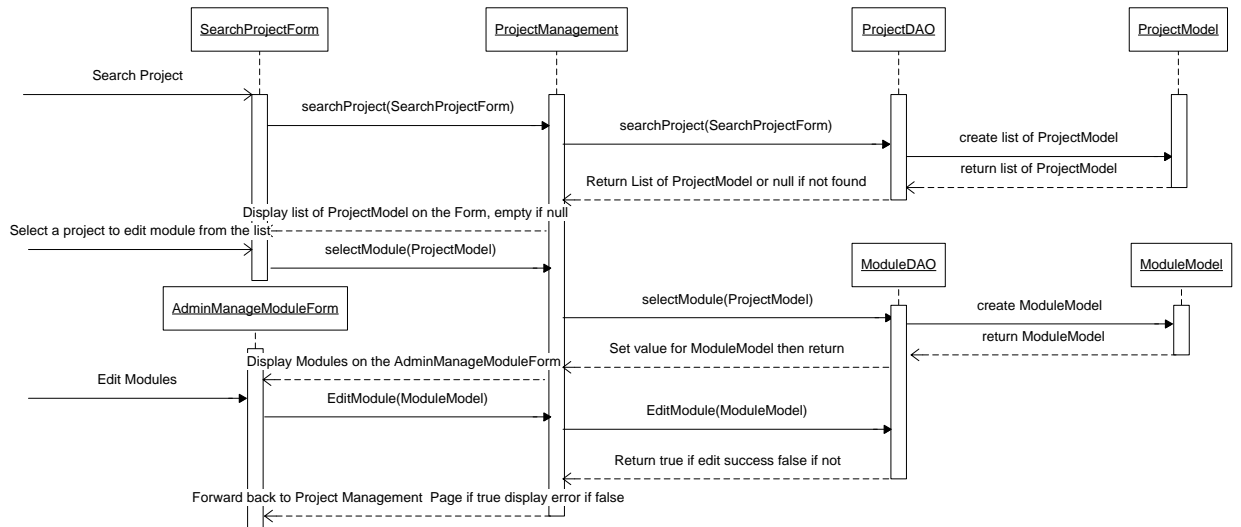


1.8 Admin_UC04 - Admin Mange Module Use Case

1.8.1 Class Diagram

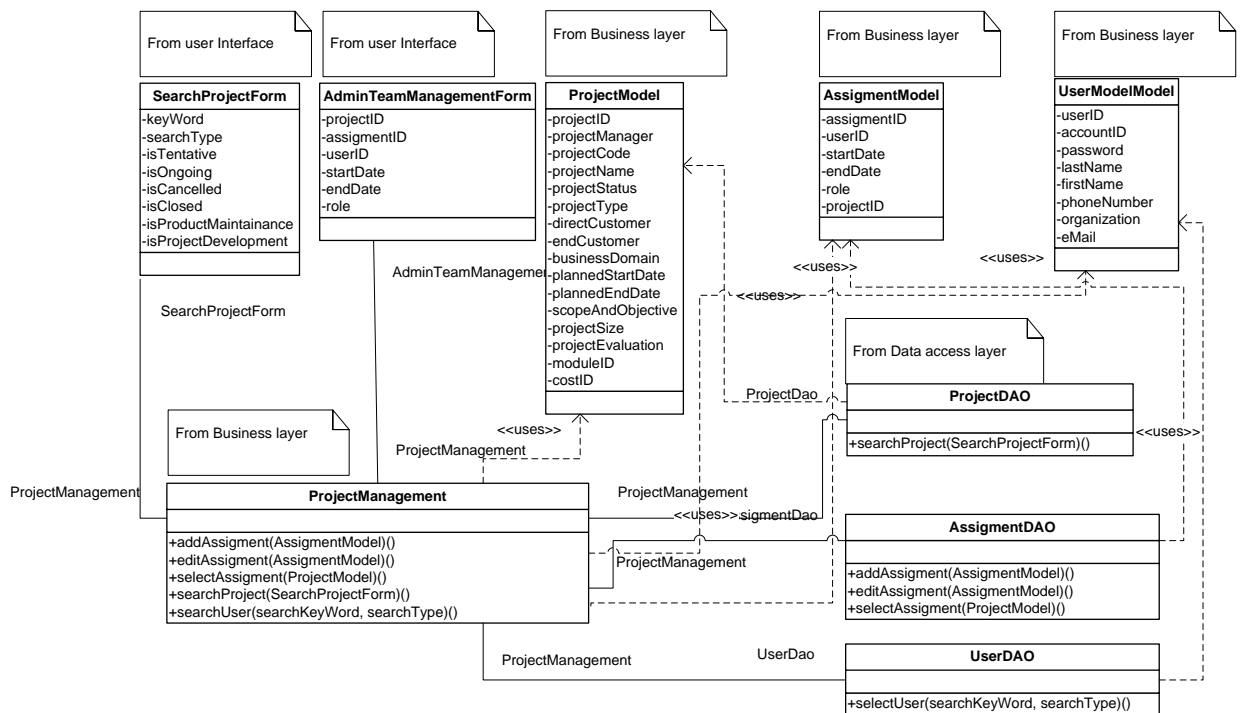


1.8.2 Sequence flow

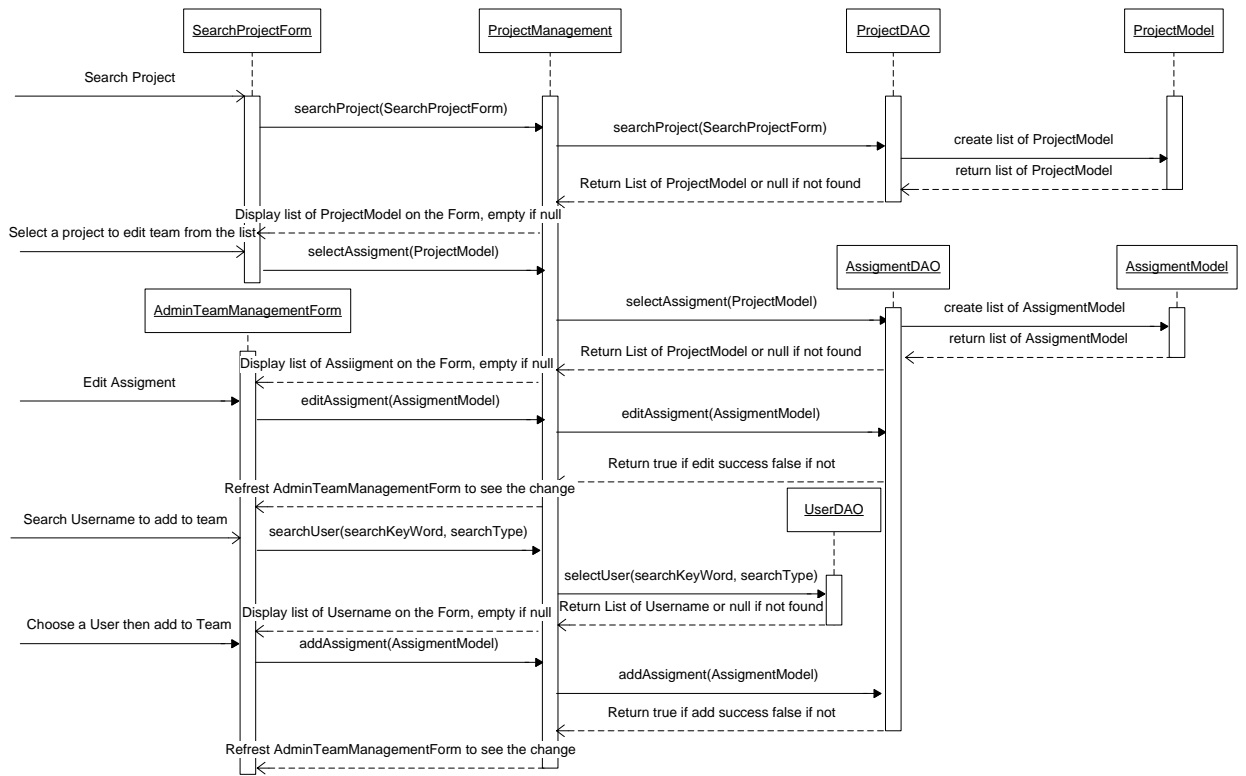


1.9 Admin_UC05 - Admin Team Management Use Case

1.9.1 Class Diagram

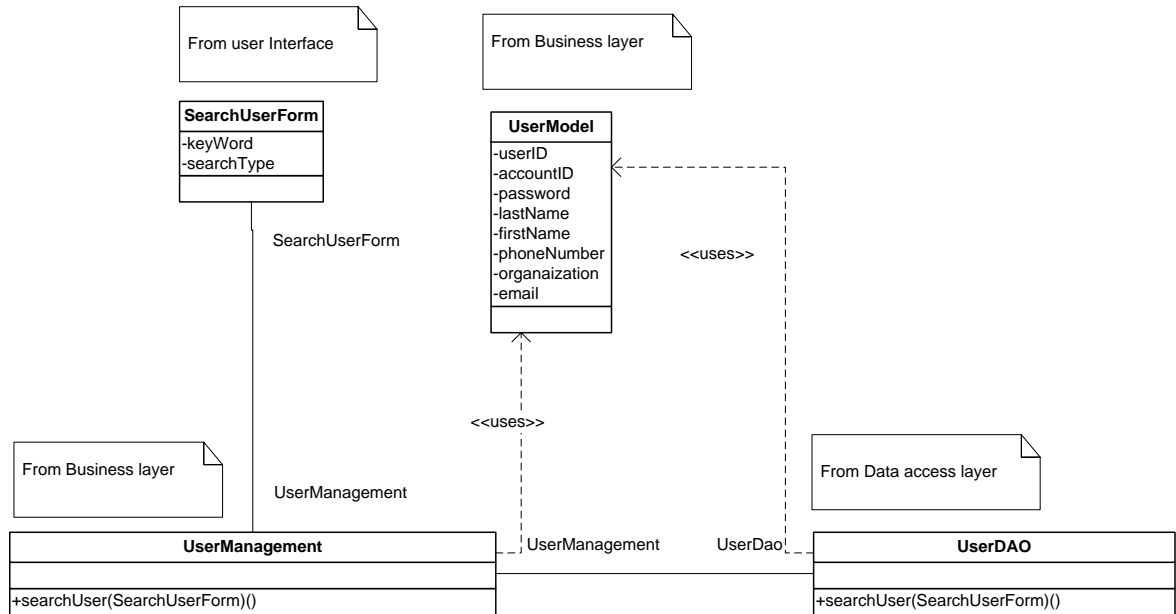


1.9.2 Sequence flow

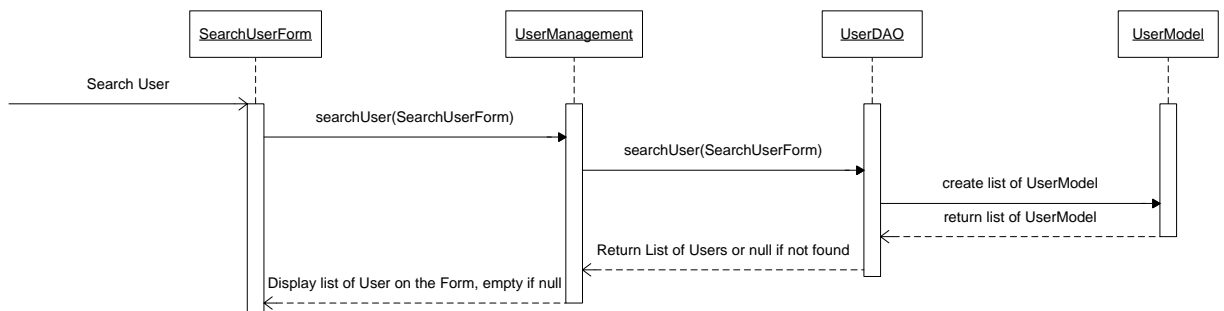


1.10 Admin_UC06 - Admin Search User Use Case

1.10.1 Class Diagram

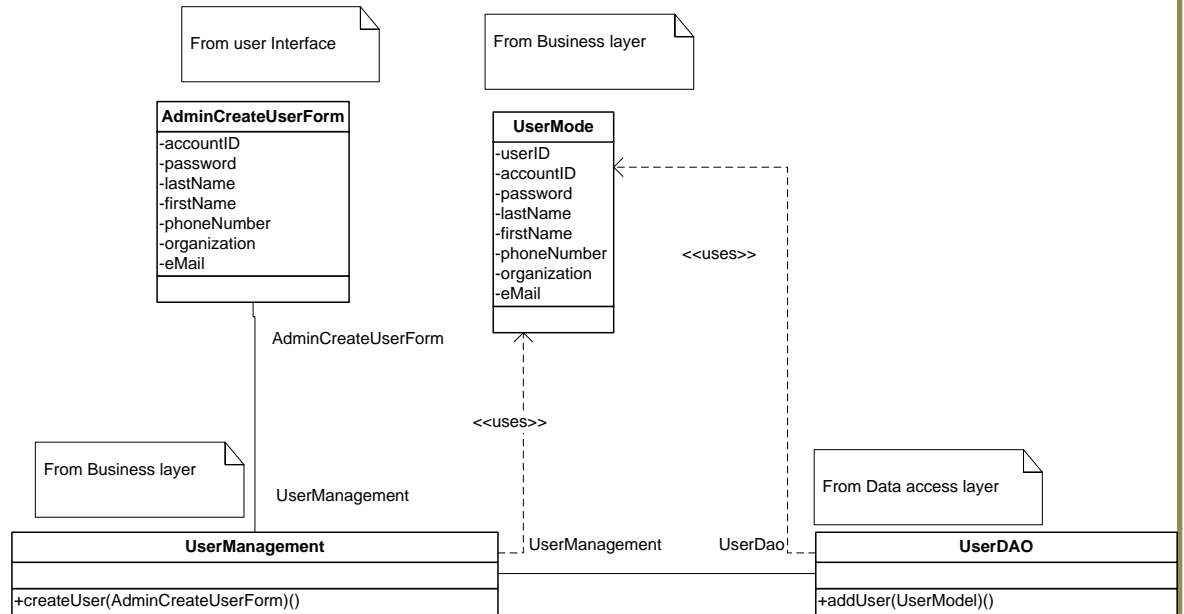


1.10.2 Sequence flow

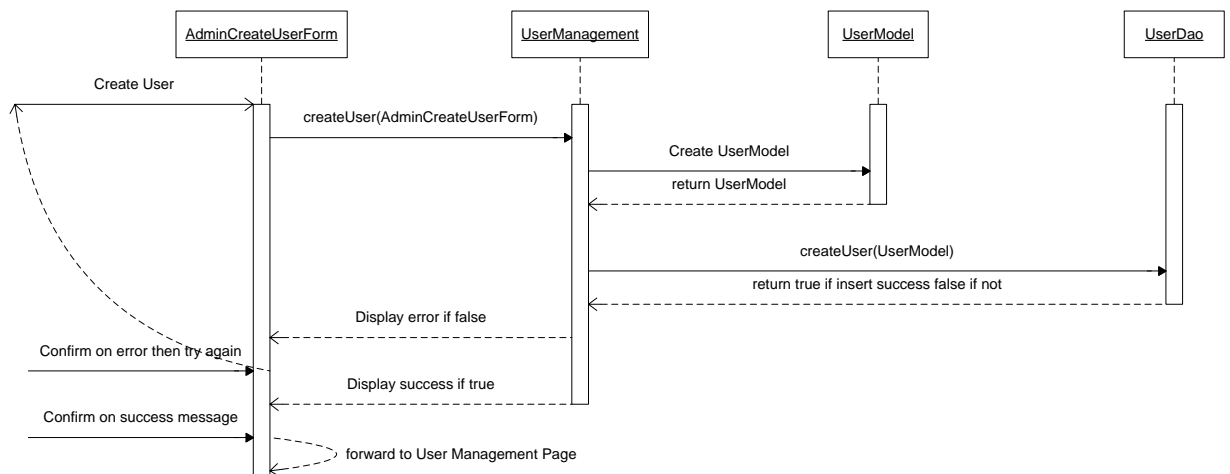


1.11 Admin_UC07 - Admin Create User Use Case

1.11.1 Class Diagram

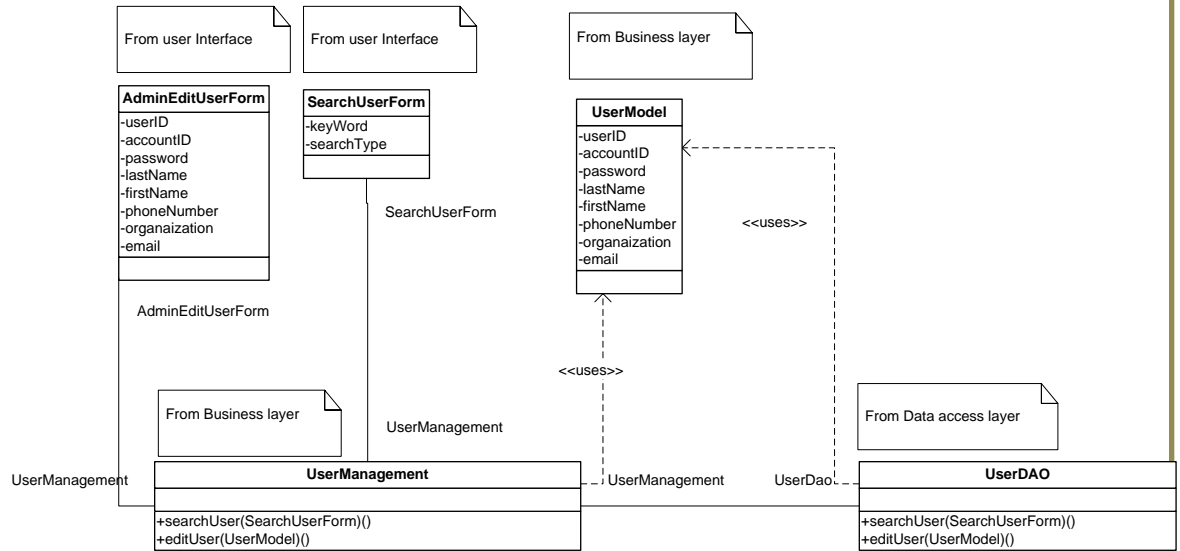


1.11.2 Sequence flow

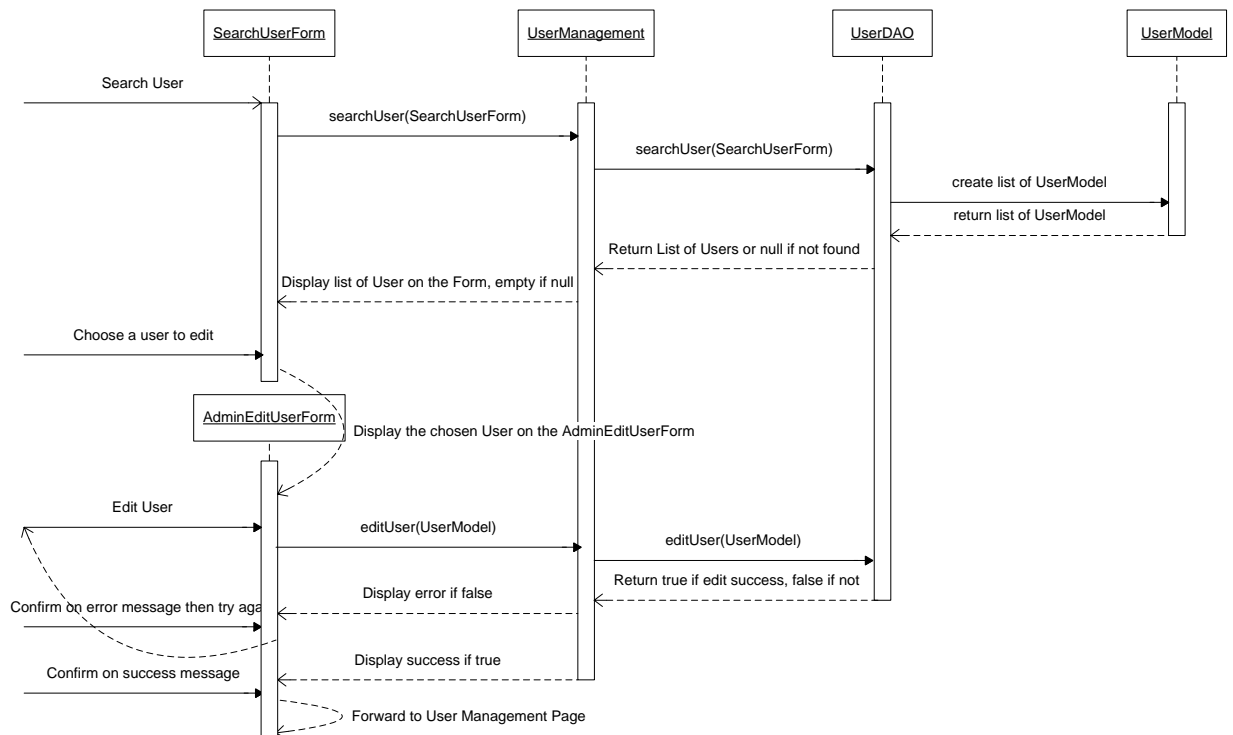


1.12 Admin_UC08 - Admin Edit User Use Case

1.12.1 Class Diagram

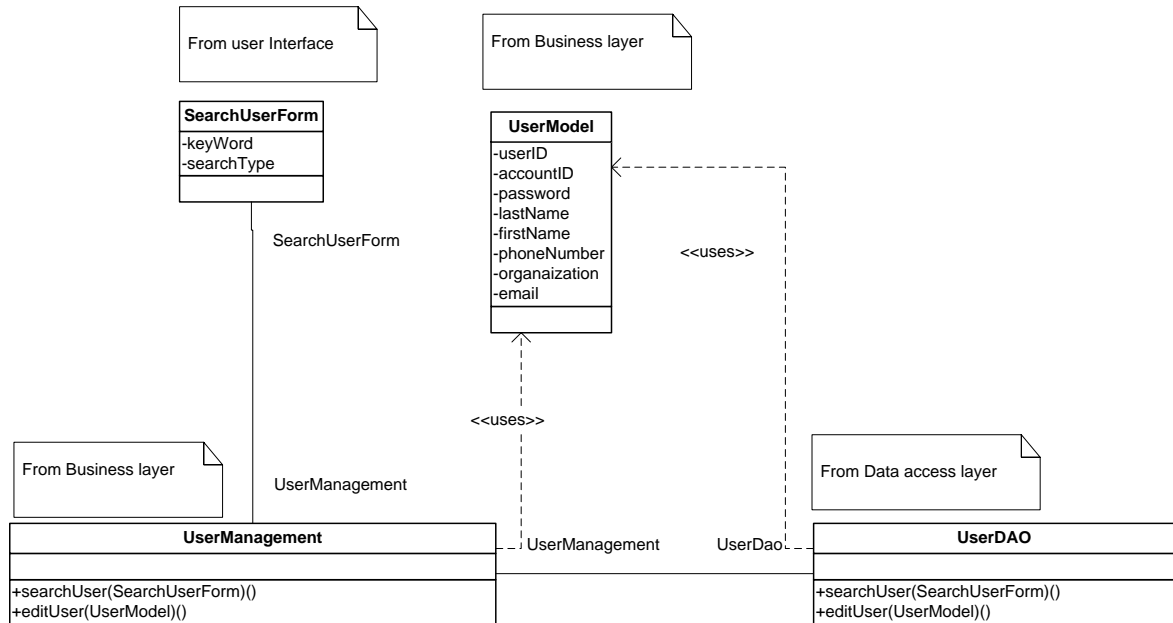


1.12.2 Sequence flow

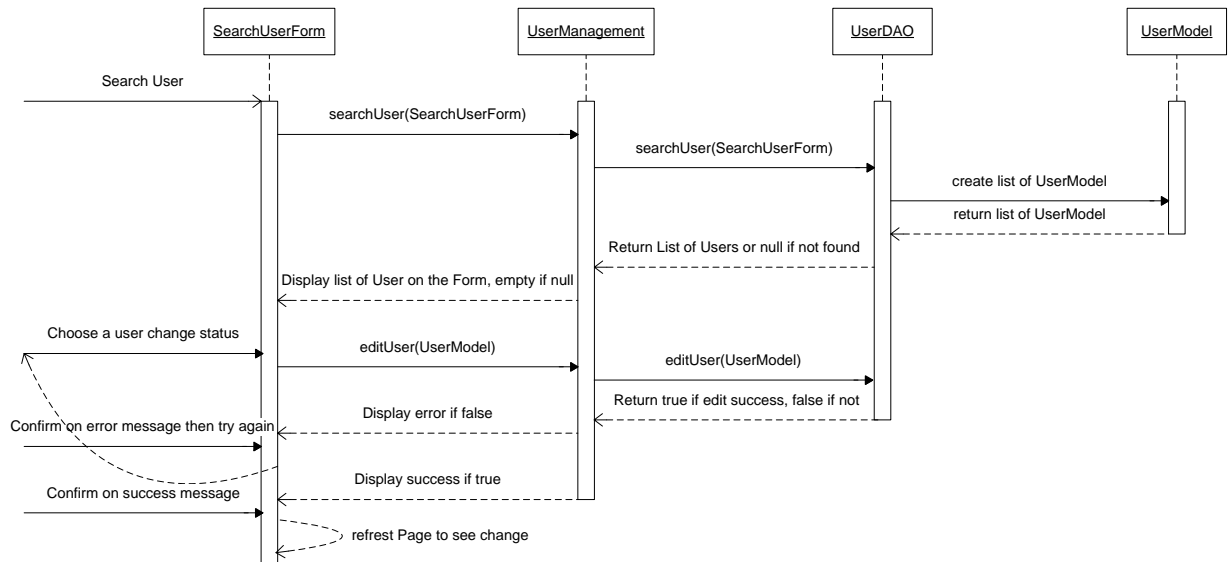


1.13 Admin_UC09 - Admin Change User's Status Use Case

1.13.1 Class Diagram

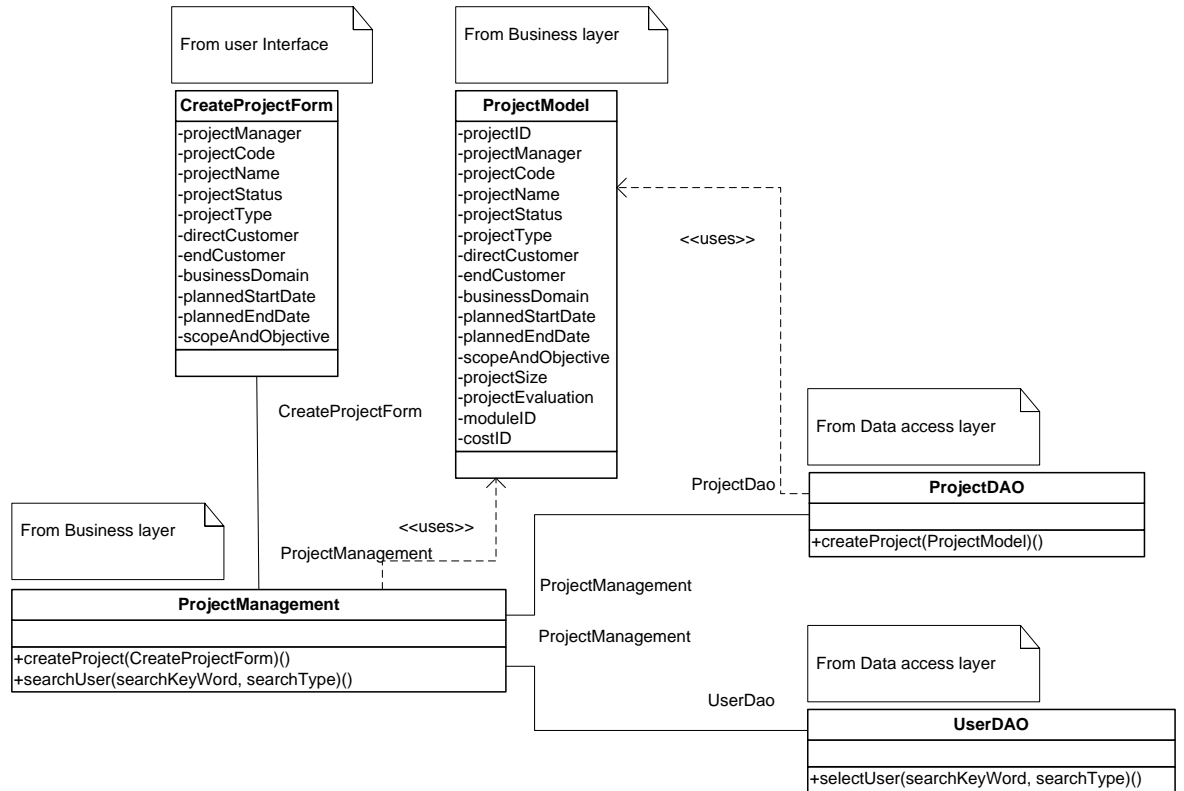


1.13.2 Sequence flow

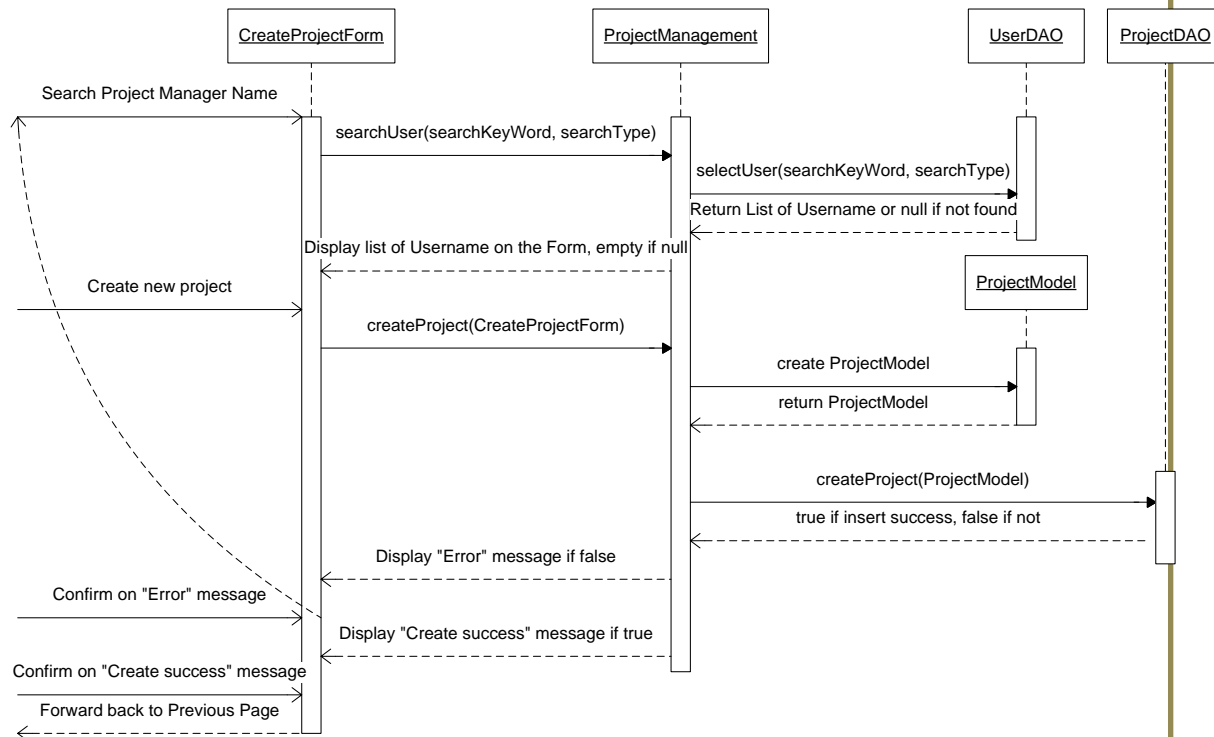


1.14 ProjectEye _UC01 - Create new Project Use Case

1.14.1 Class Diagram

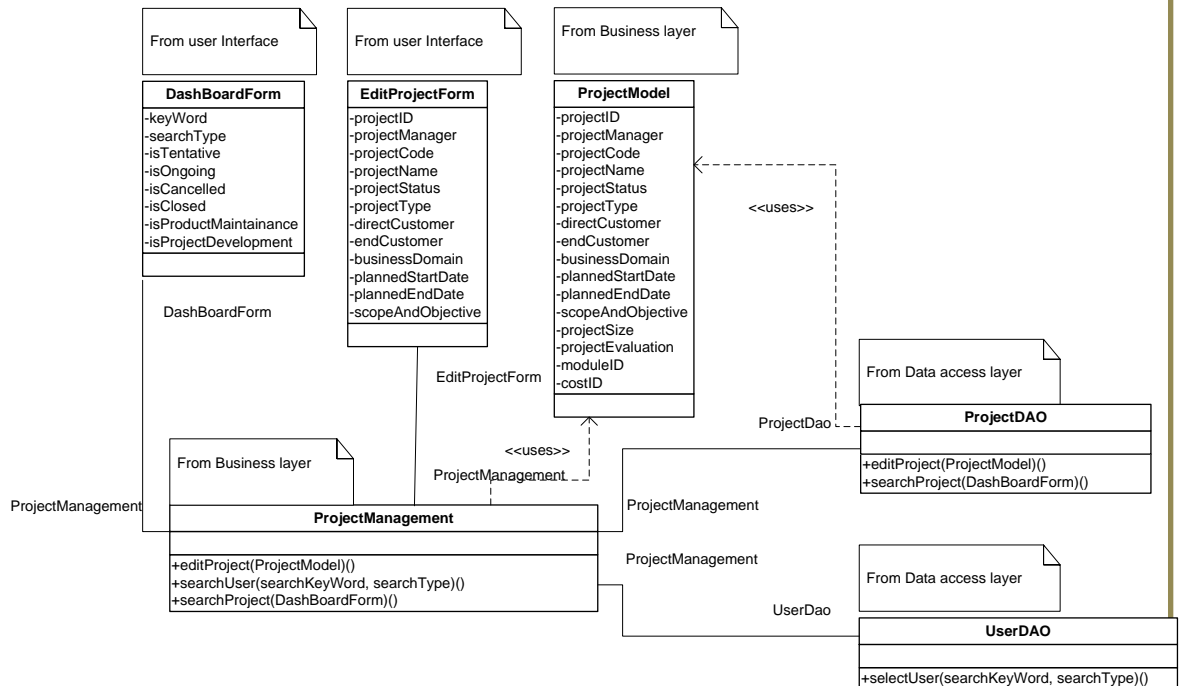


1.14.2 Sequence flow

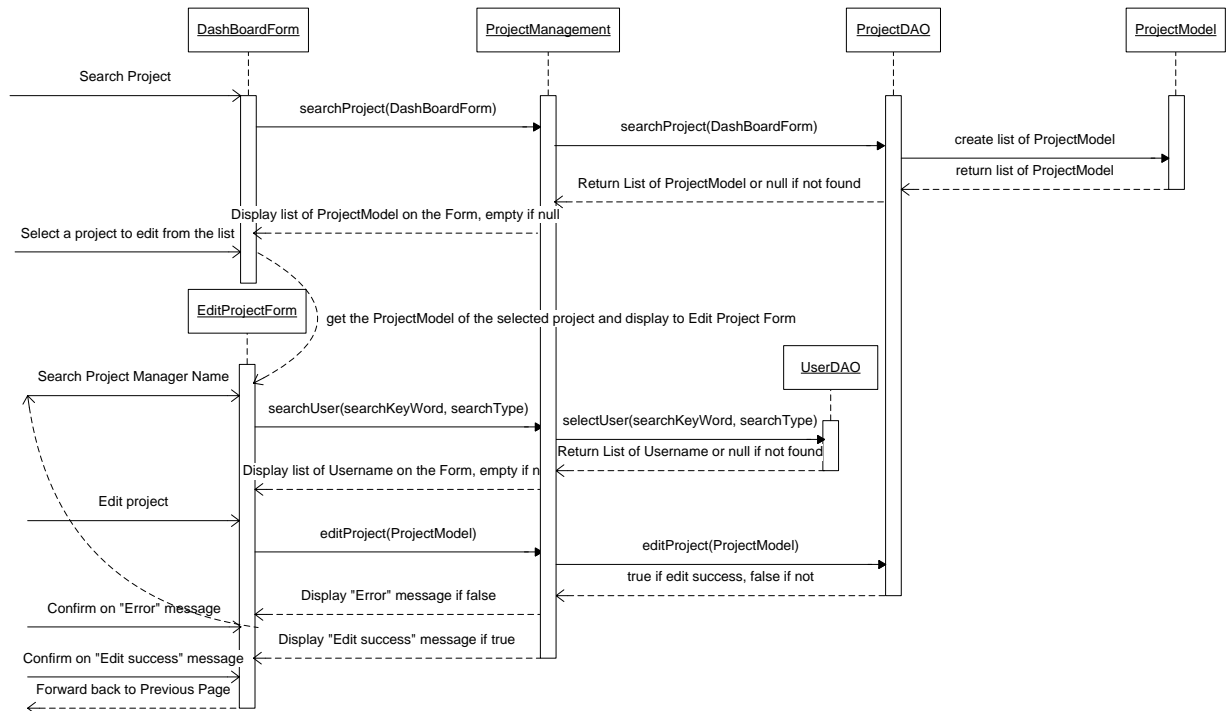


1.15 ProjectEye_UC02 - Edit Project Use Case

1.15.1 Class Diagram

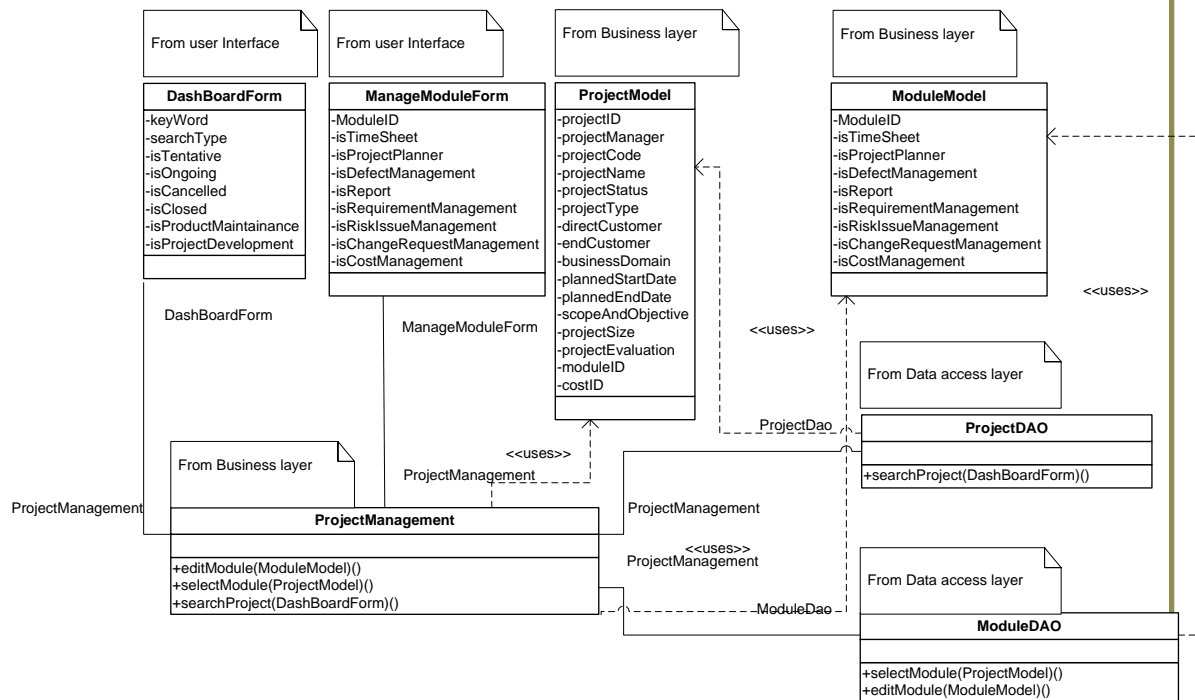


1.15.2 Sequence flow

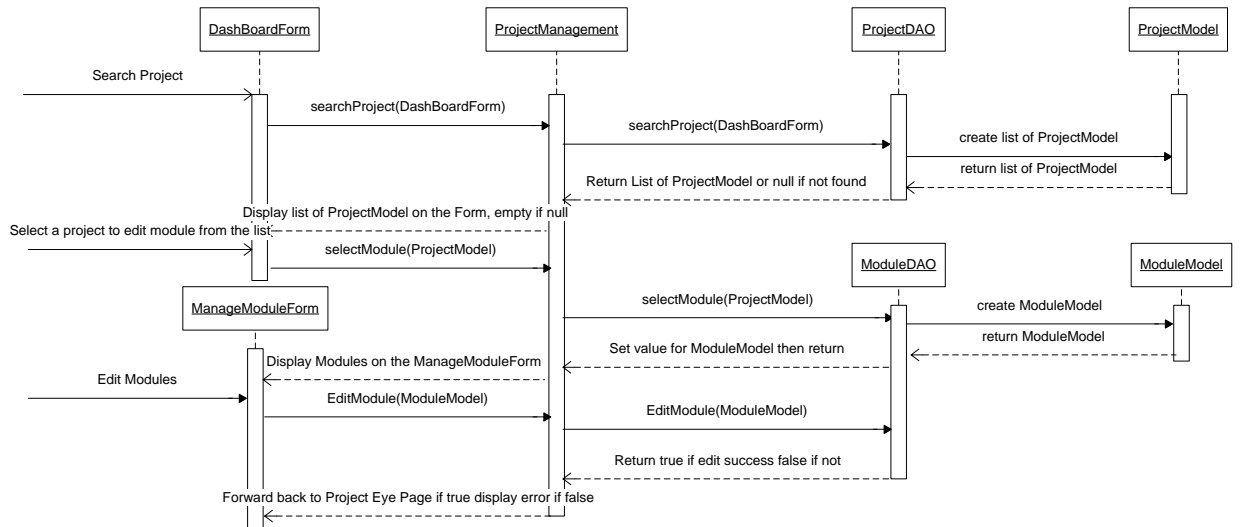


1.16 ProjectEye _UC03 - Manage Module Use Case

1.16.1 Class Diagram

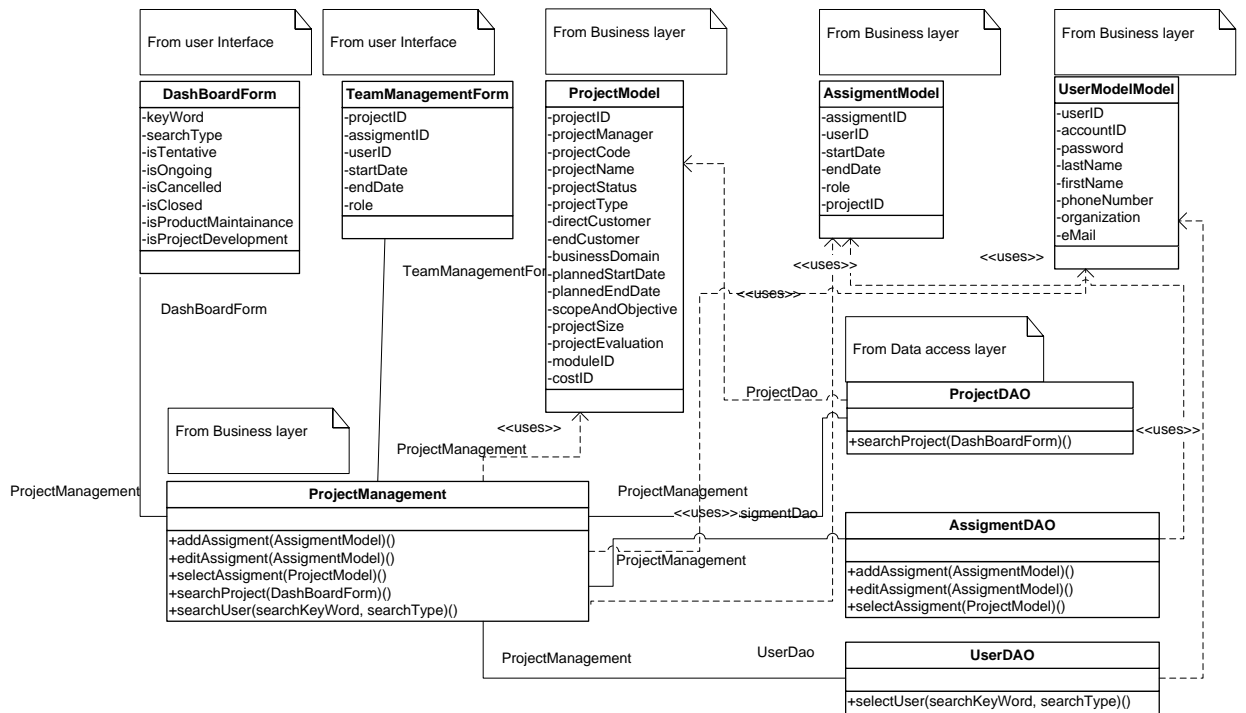


1.16.2 Sequence flow

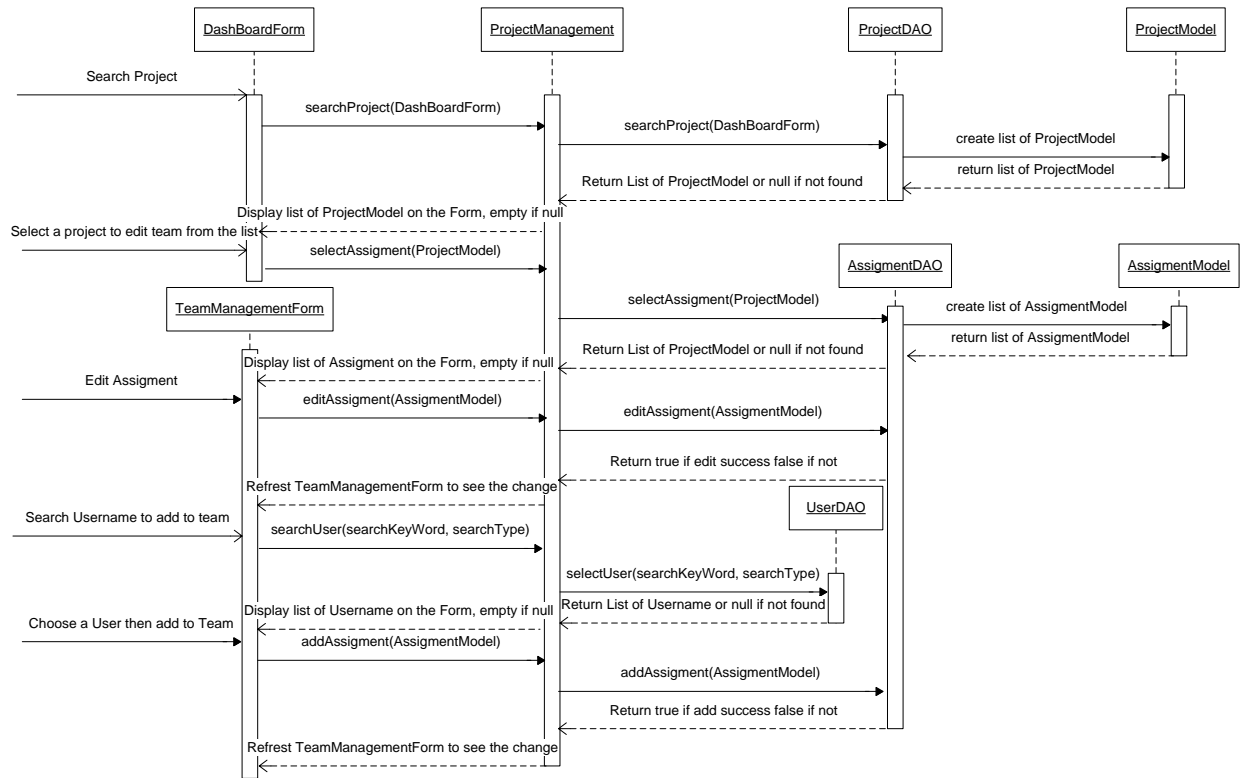


1.17 ProjectEye_UC04 - Team Management Use Case

1.17.1 Class Diagram

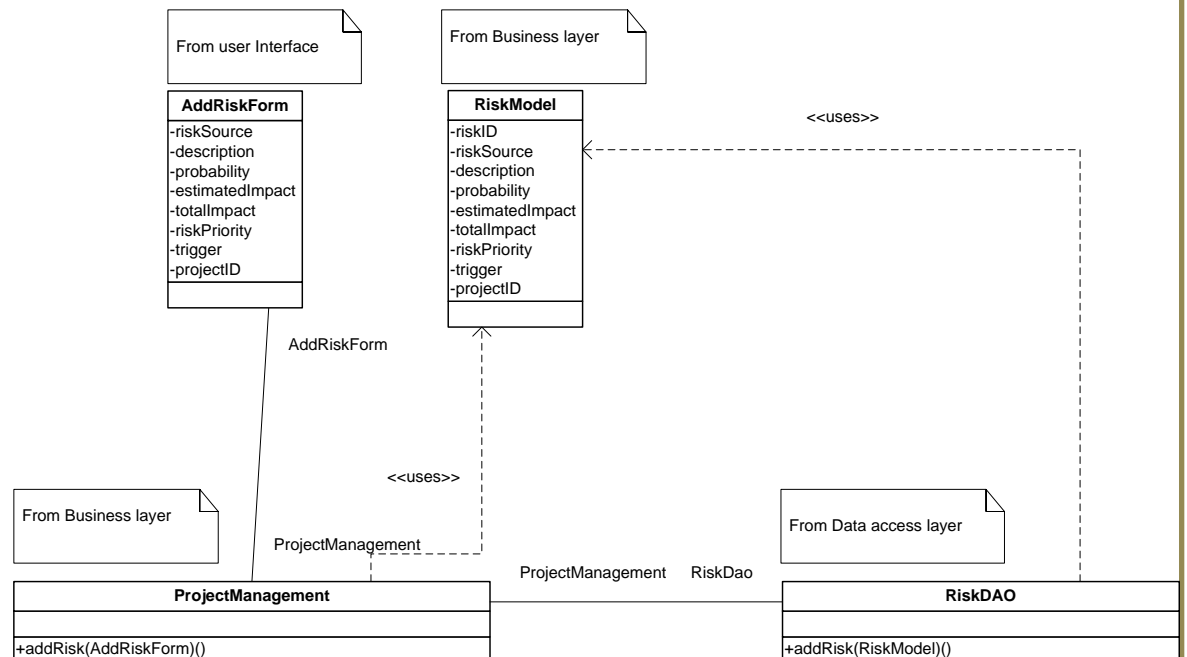


1.17.2 Sequence flow

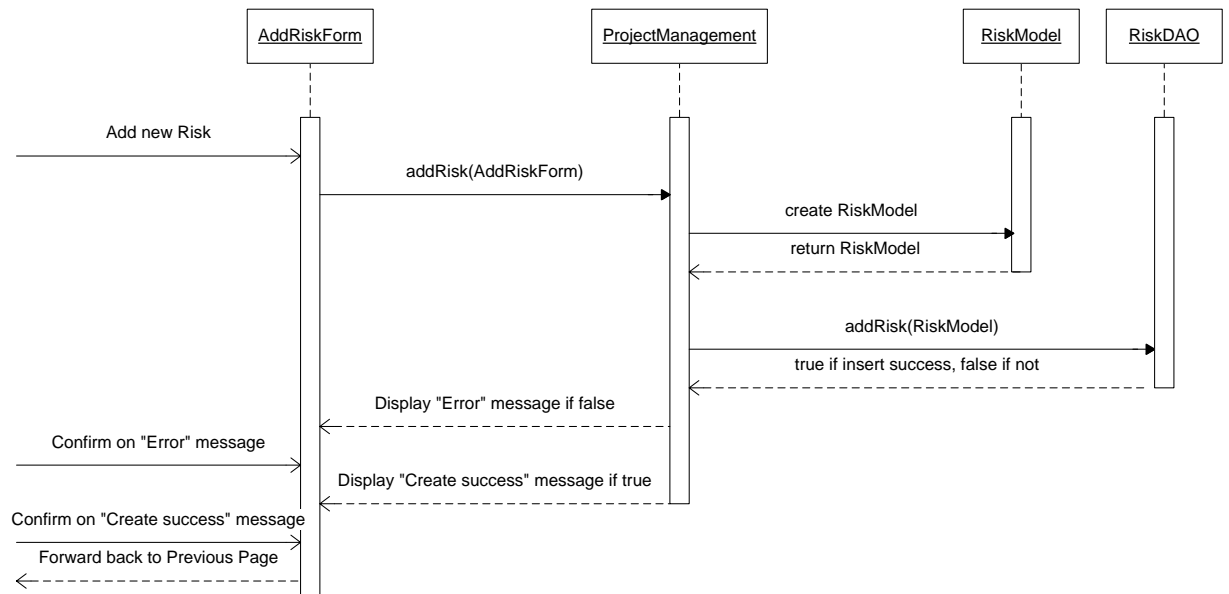


1.18 ProjectEye_UC05 - Add Risk Use Case

1.18.1 Class Diagram

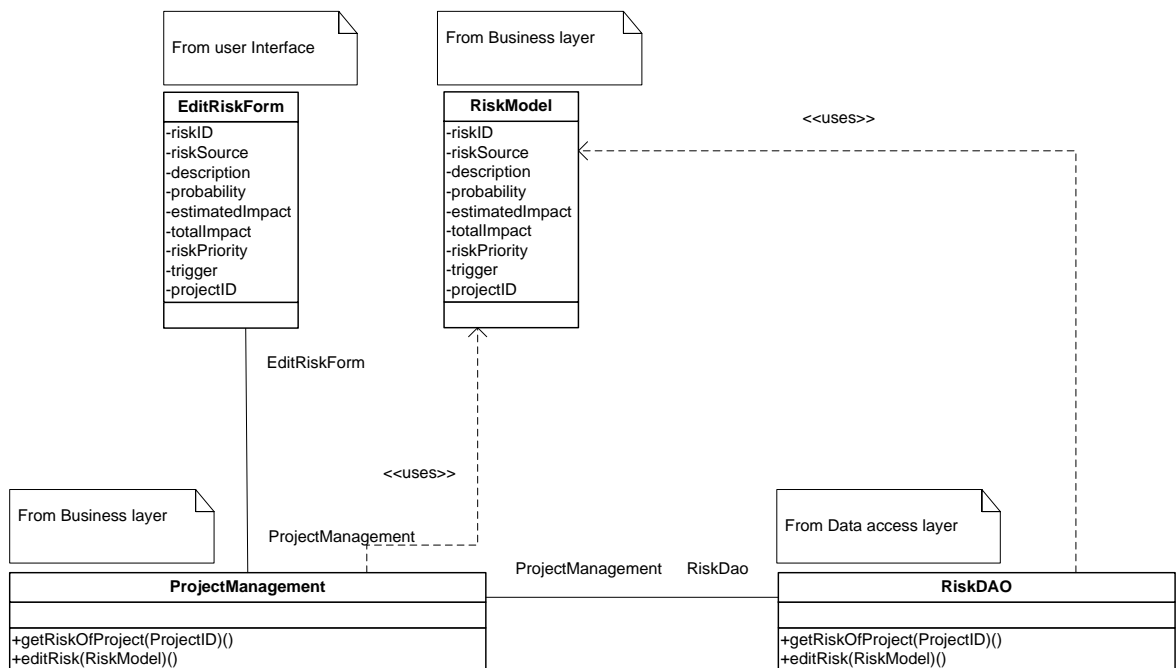


1.18.2 Sequence flow

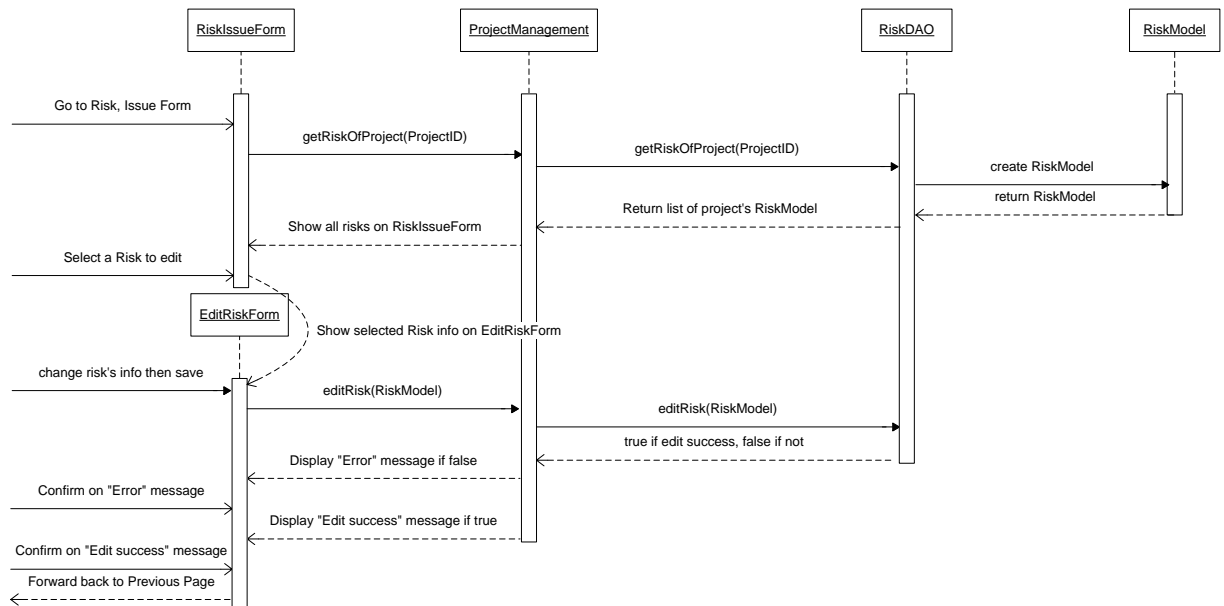


1.19 ProjectEye _UC06 - Edit Risk Use Case

1.19.1 Class Diagram

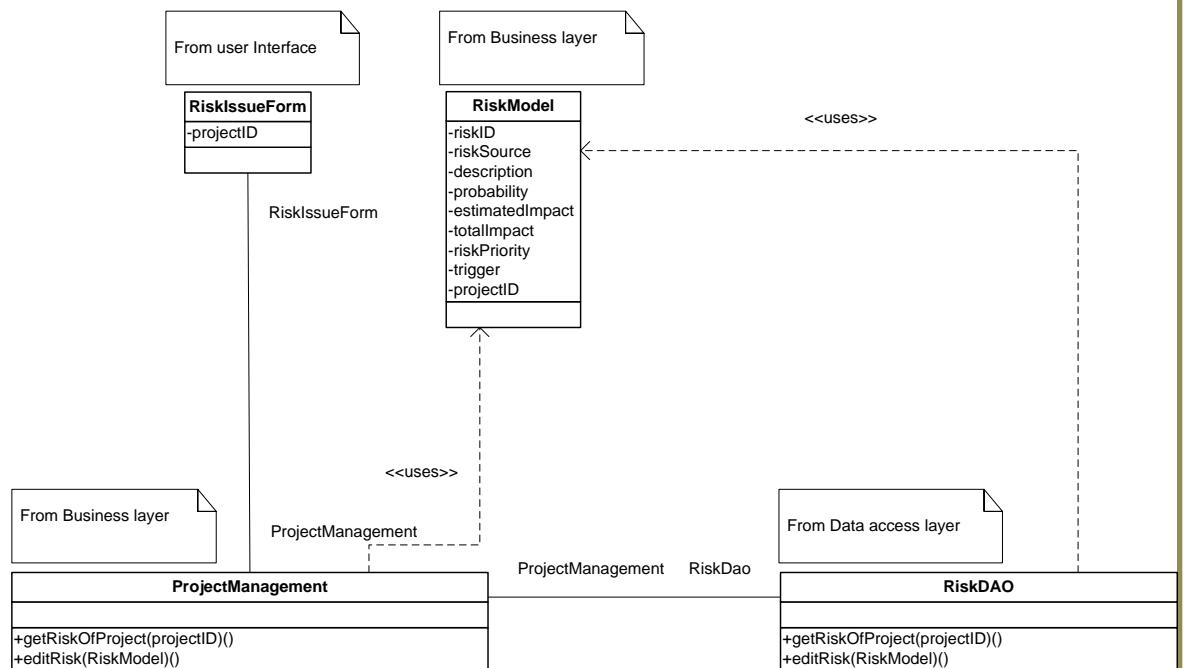


1.19.2 Sequence flow

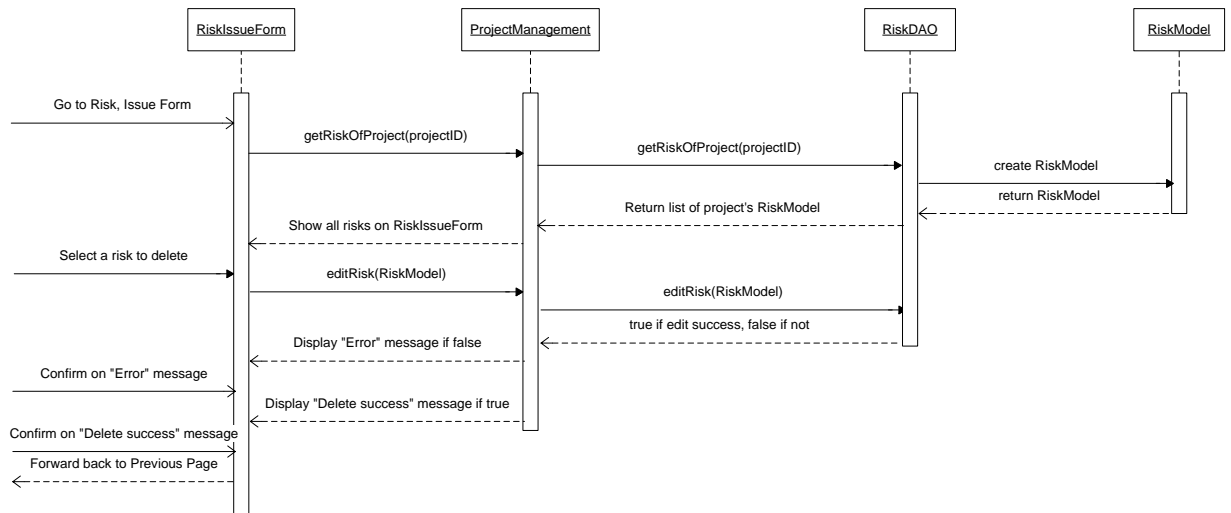


1.20 ProjectEye_UC07 - Delete Risk Use Case

1.20.1 Class Diagram

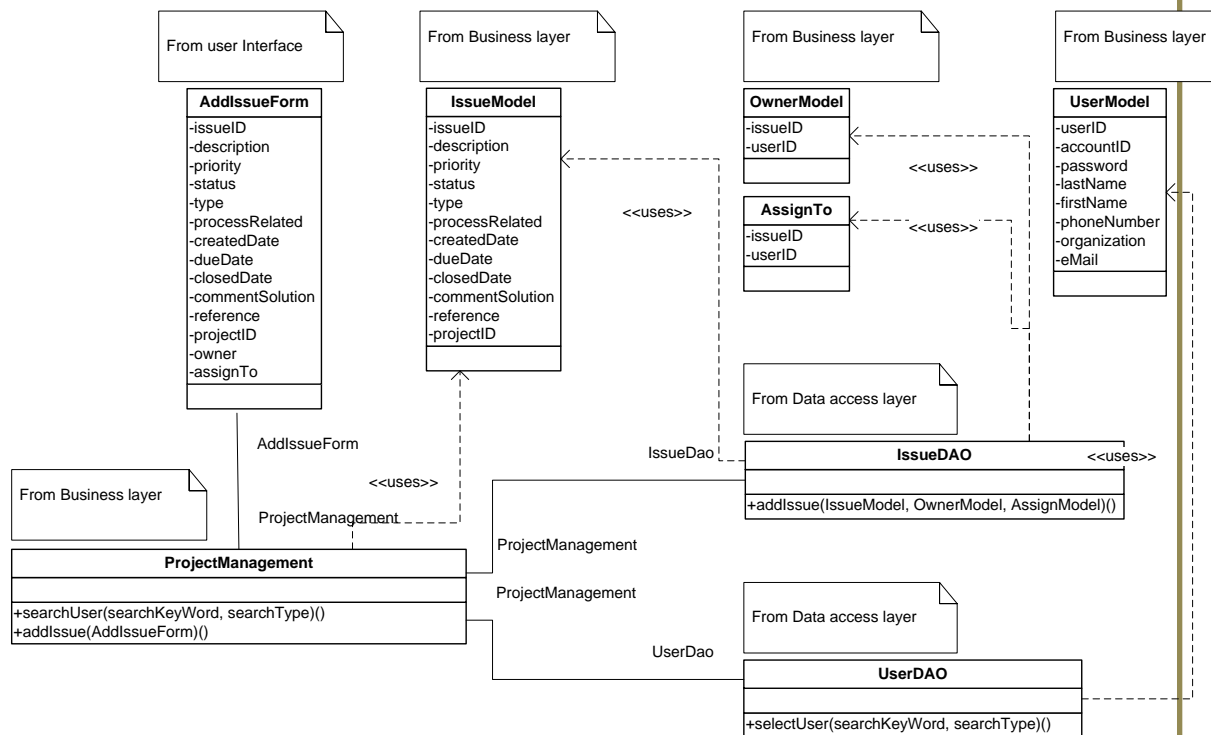


1.20.2 Sequence flow

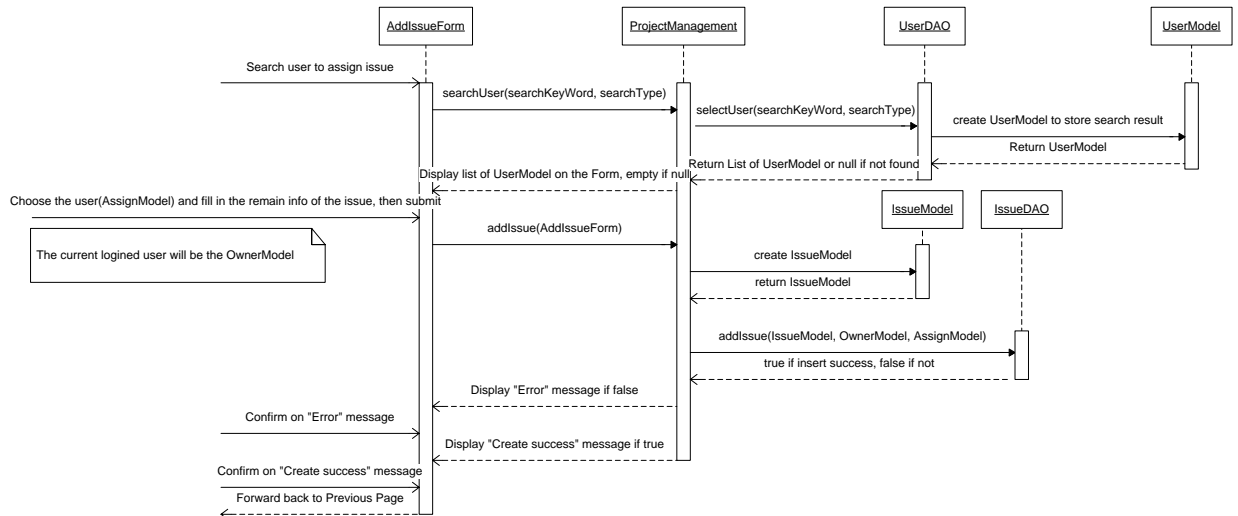


1.21 ProjectEye_UC08 - Add Issue Use Case

1.21.1 Class Diagram

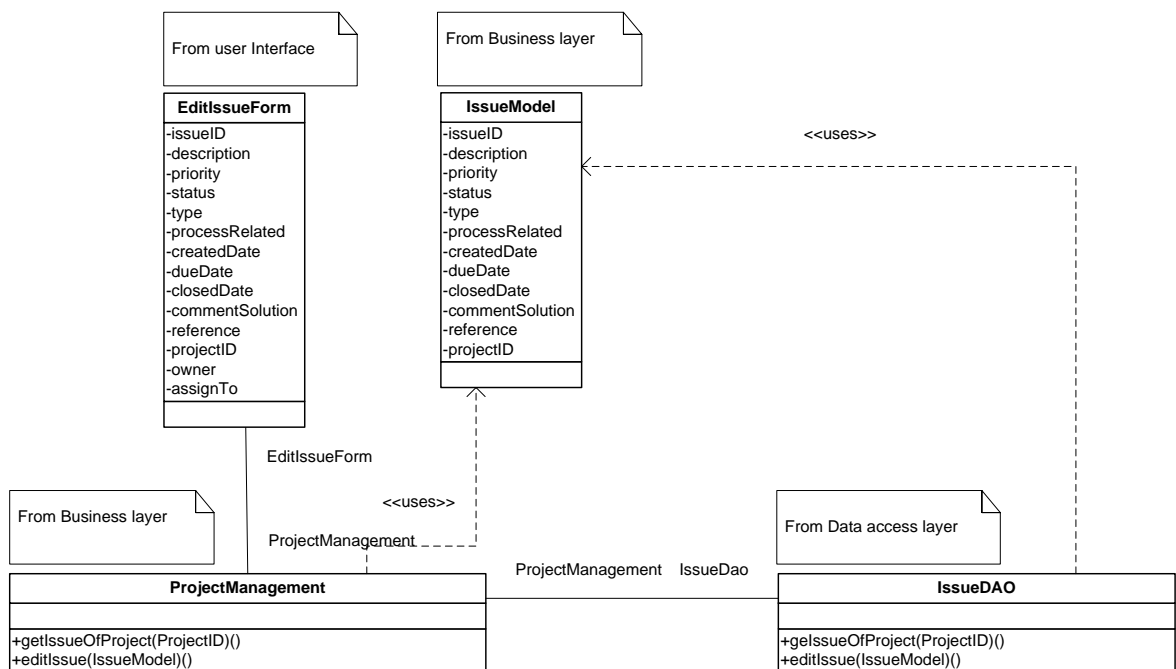


1.21.2 Sequence flow

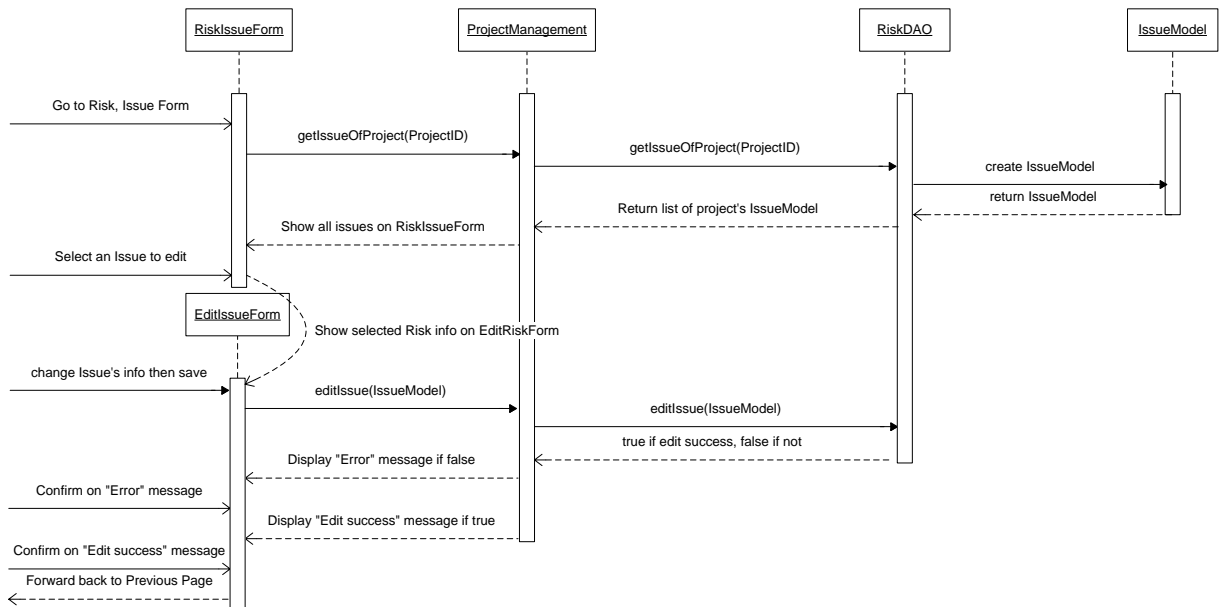


1.22 ProjectEye_UC09 - Edit Issue Use Case

1.22.1 Class Diagram

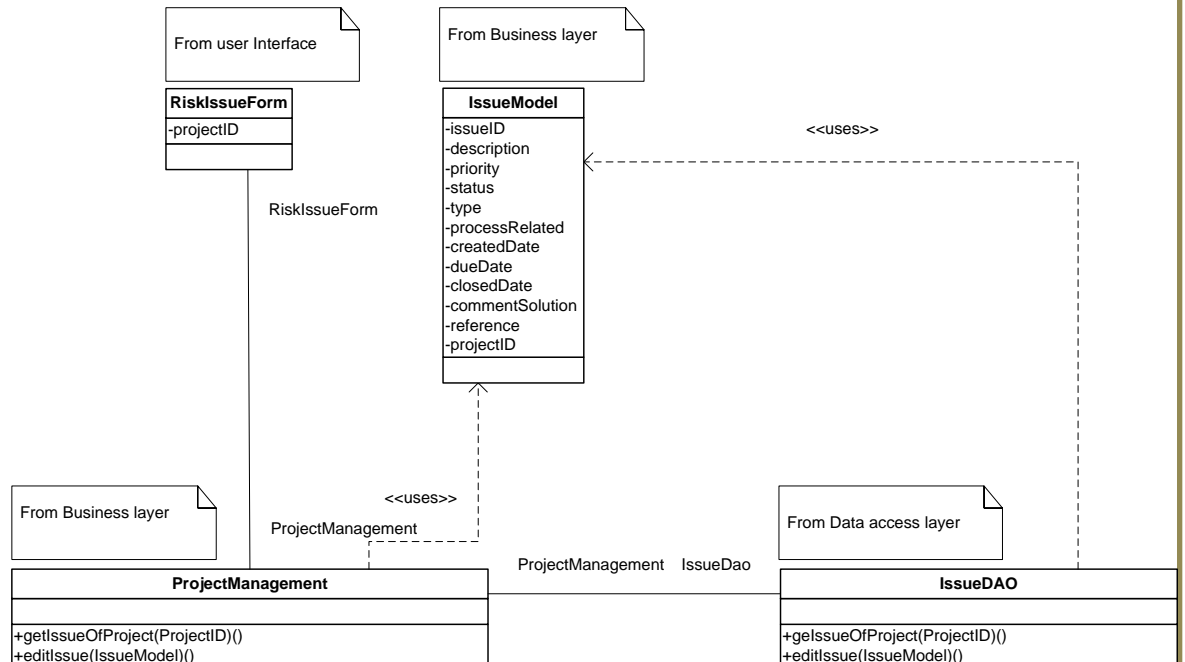


1.22.2 Sequence flow

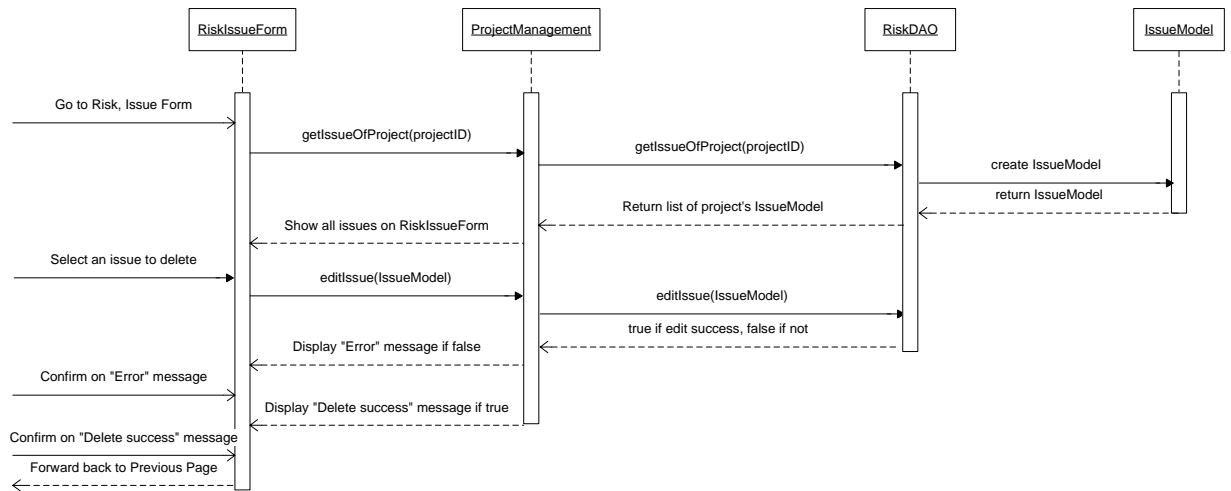


1.23 ProjectEye_UC10 - Delete Issue Use Case

1.23.1 Class Diagram

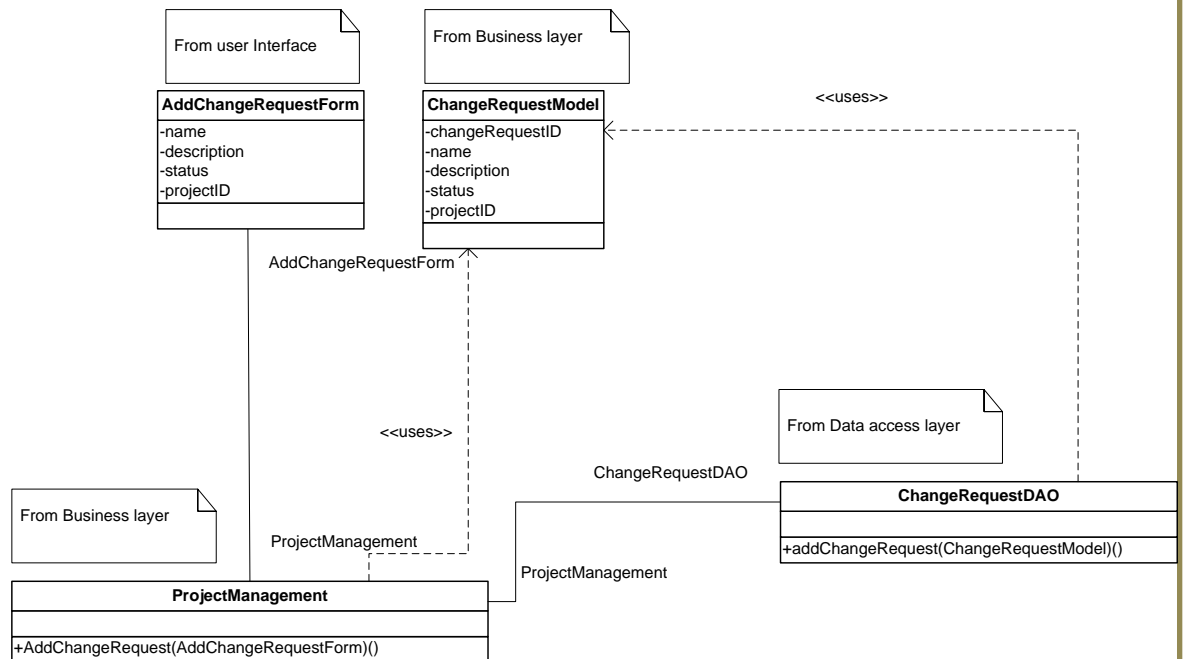


1.23.2 Sequence flow

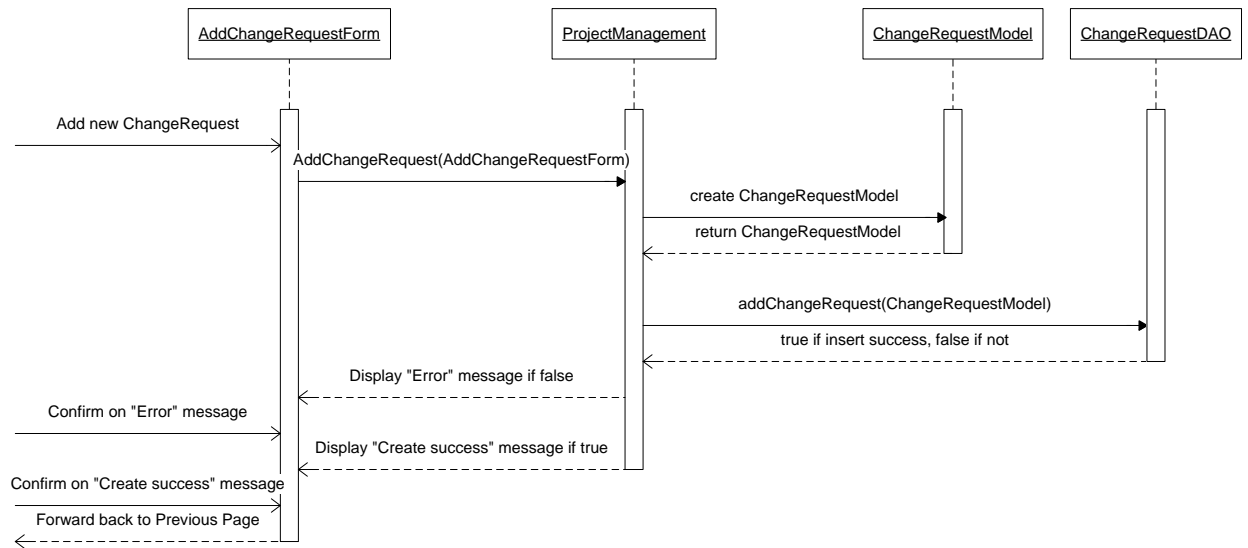


1.24 ProjectEye_UC11 - Add Change Request Use Case

1.24.1 Class Diagram

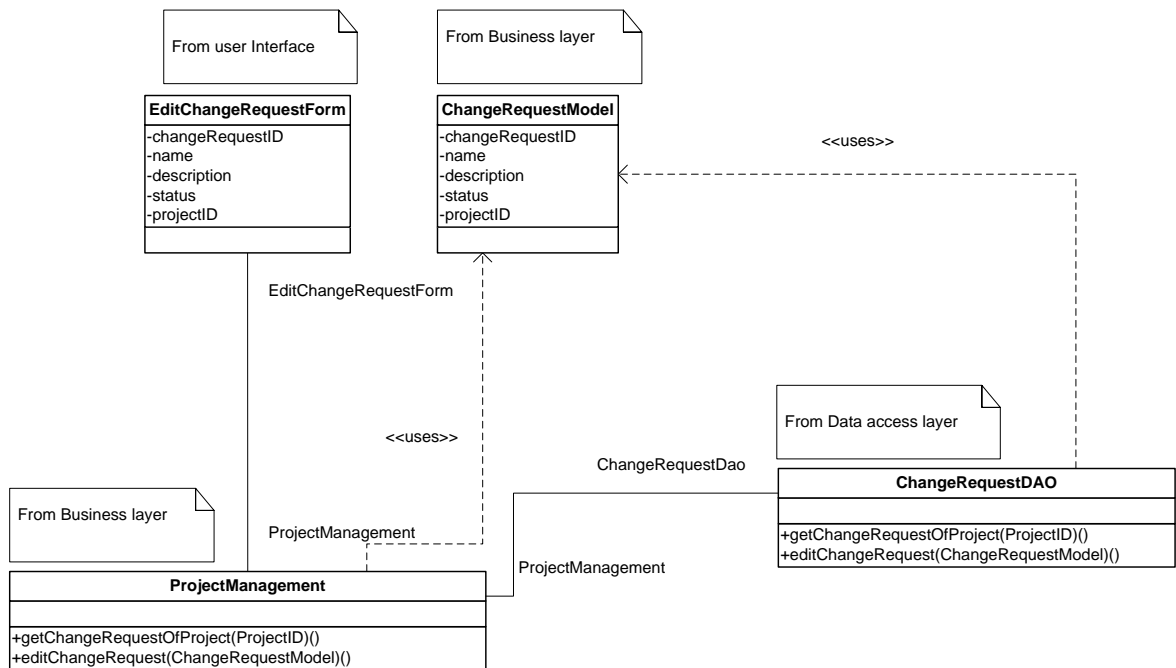


1.24.2 Sequence flow

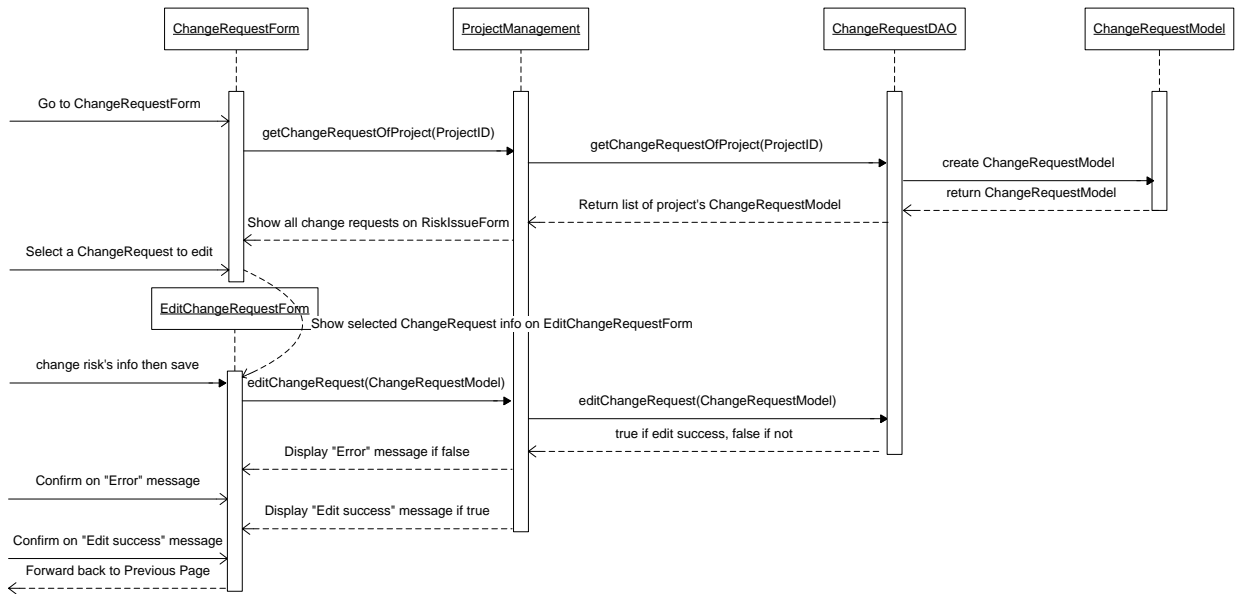


1.25 ProjectEye_UC12 - Edit Change Request Use Case

1.25.1 Class Diagram

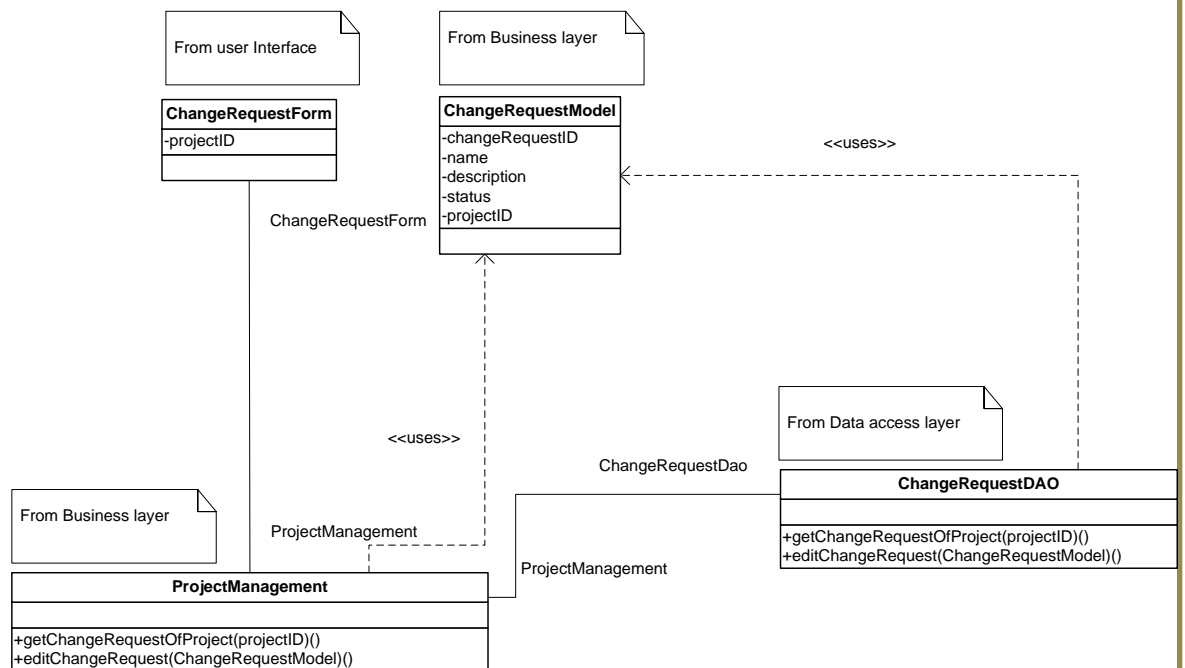


1.25.2 Sequence flow

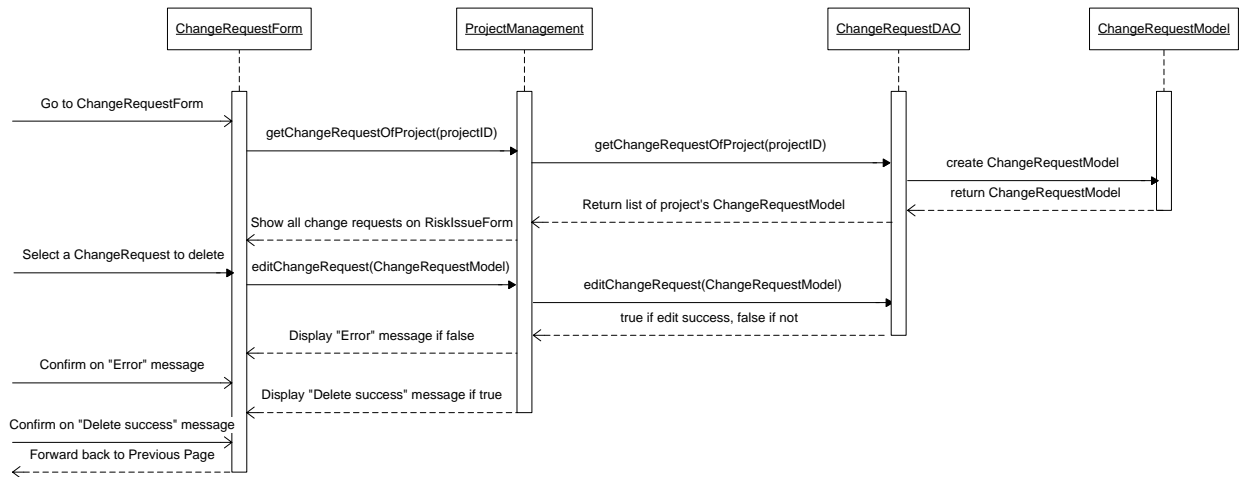


1.26 ProjectEye_UC13 - Delete Change Request Use Case

1.26.1 Class Diagram

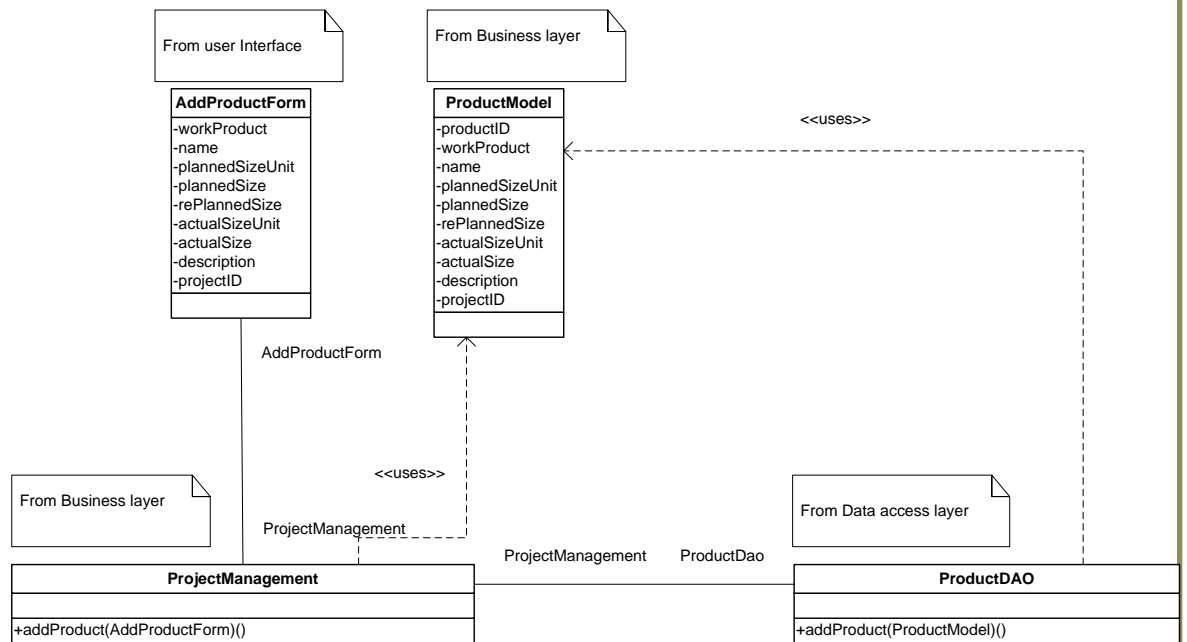


1.26.2 Sequence flow

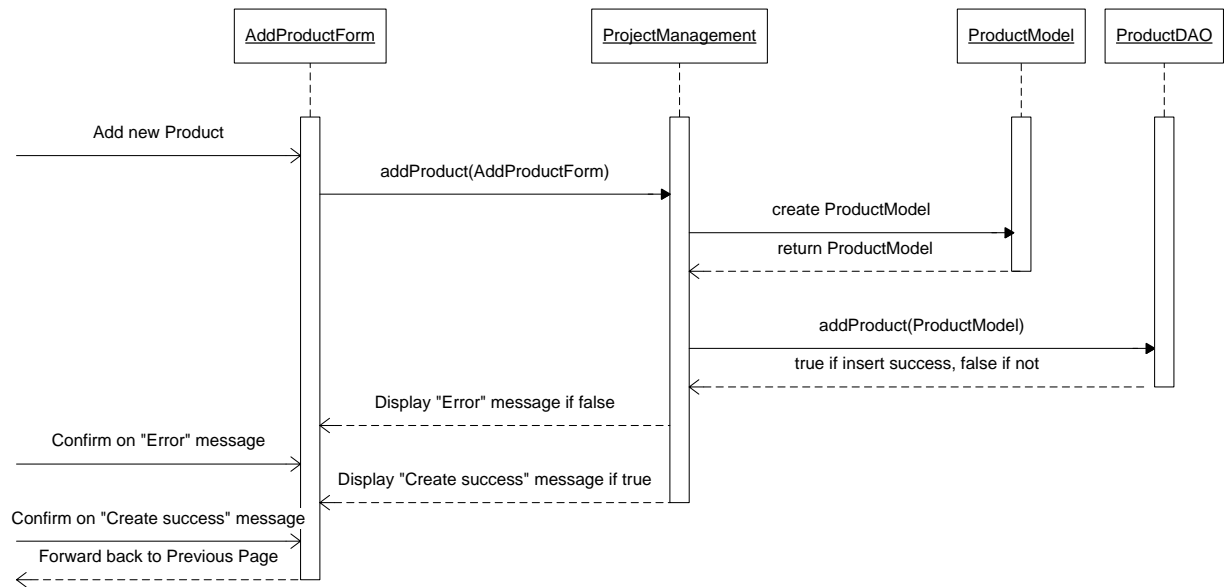


1.27 ProjectEye_UC14 - Add Product Use Case

1.27.1 Class Diagram

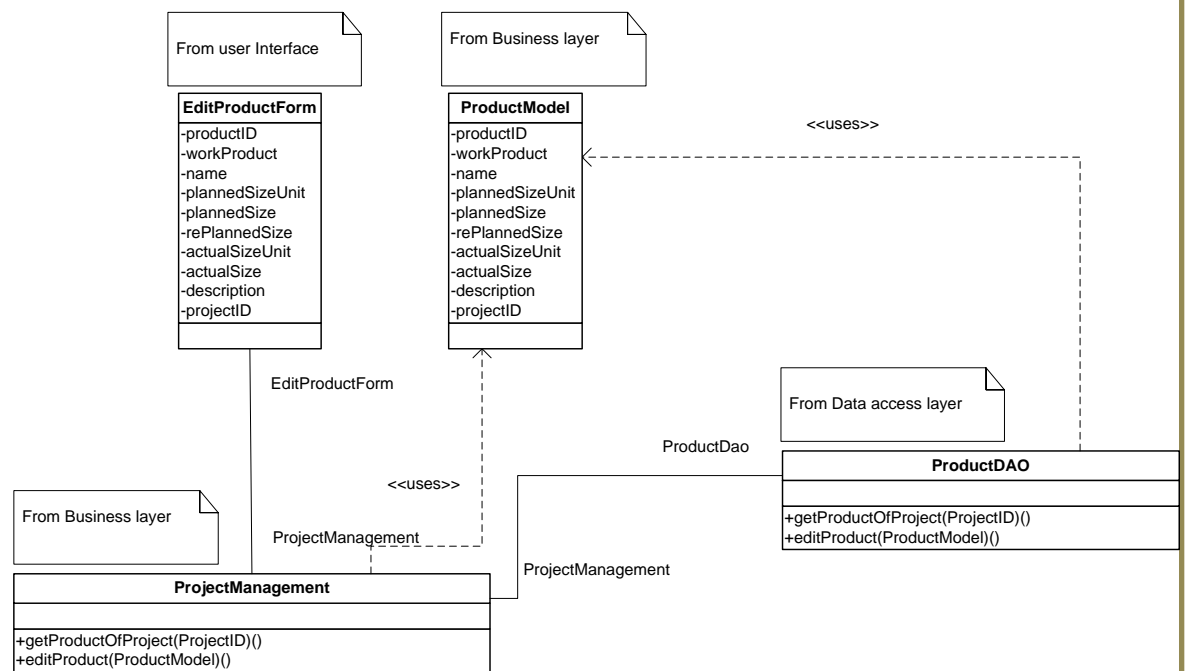


1.27.2 Sequence flow

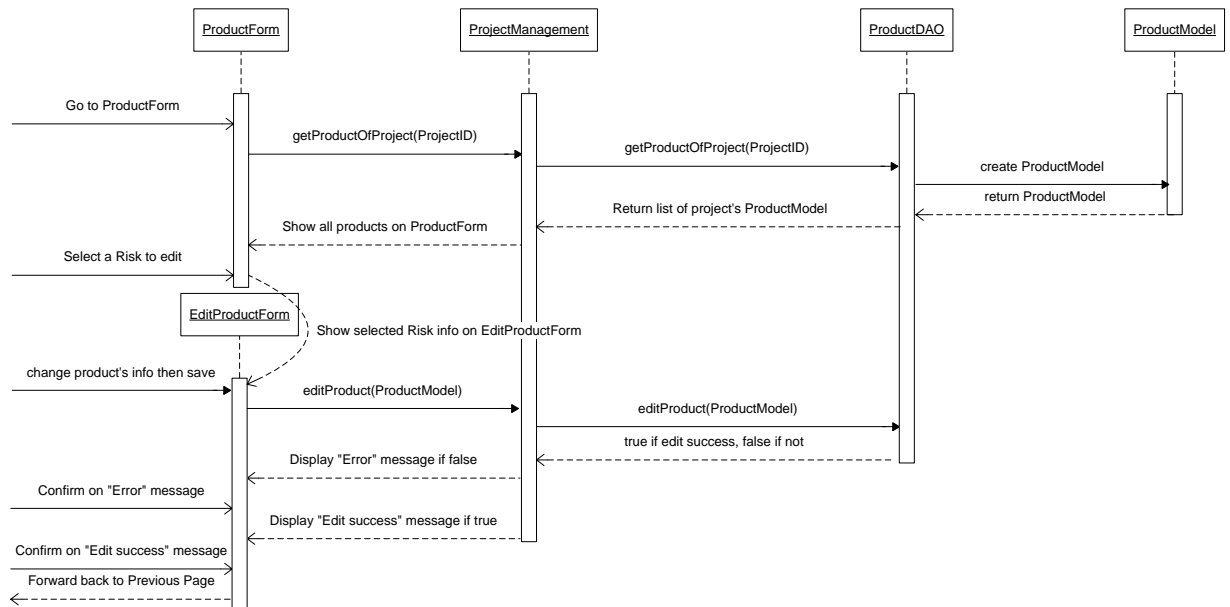


1.28 ProjectEye _UC15 - Edit Product Use Case

1.28.1 Class Diagram

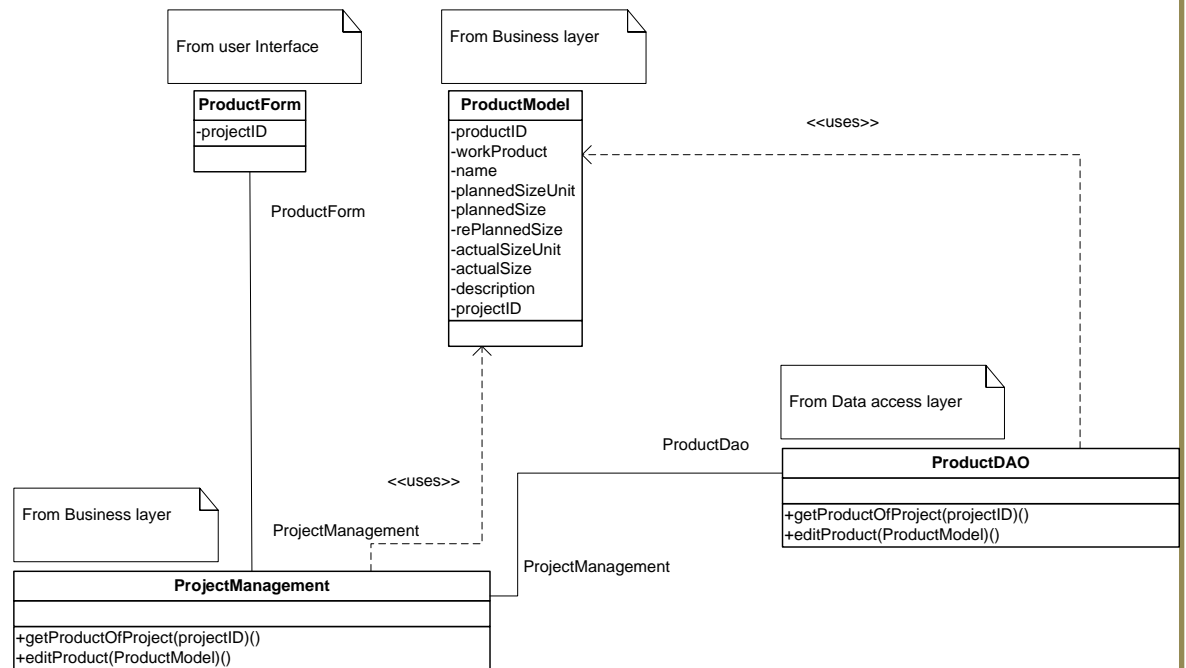


1.28.2 Sequence flow

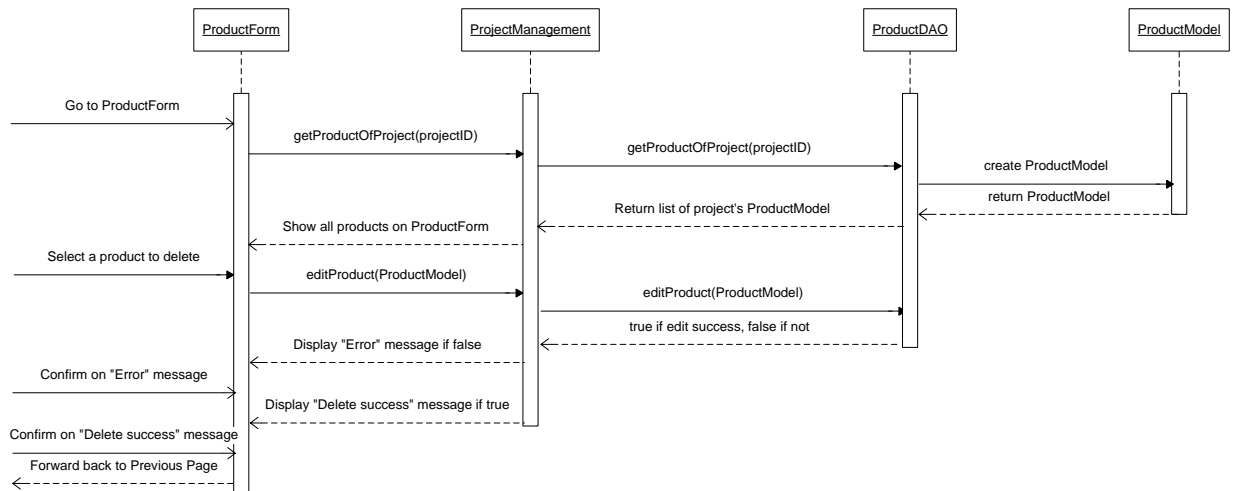


1.29 ProjectEye _UC16 - Delete Product Use Case

1.29.1 Class Diagram

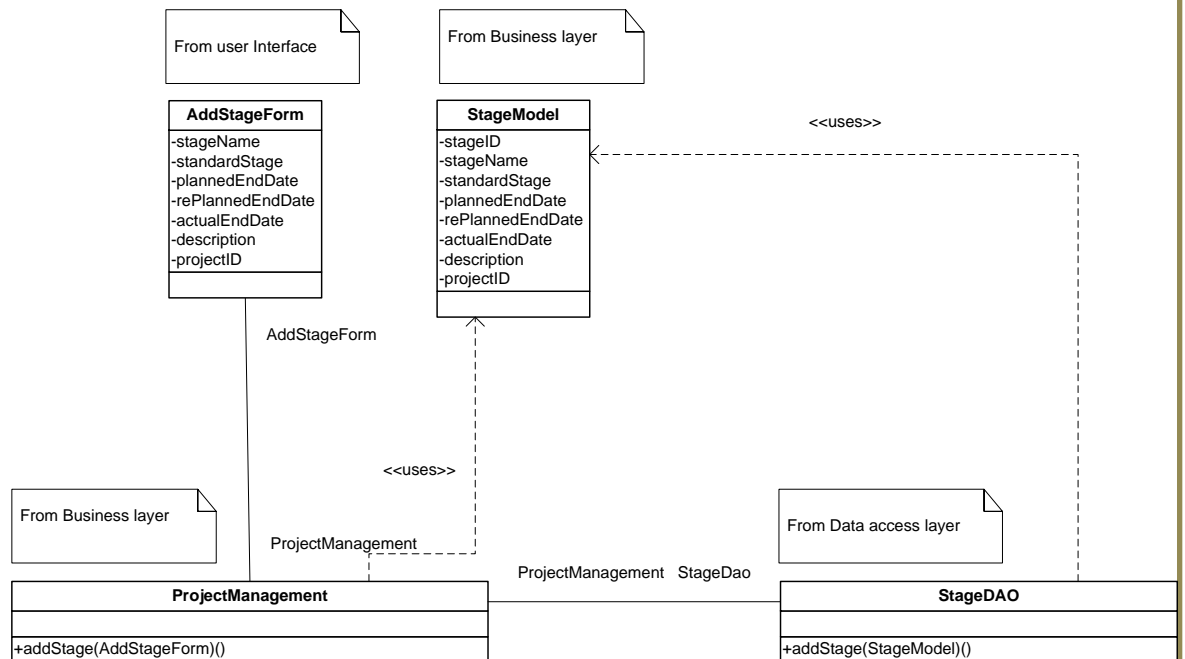


1.29.2 Sequence flow

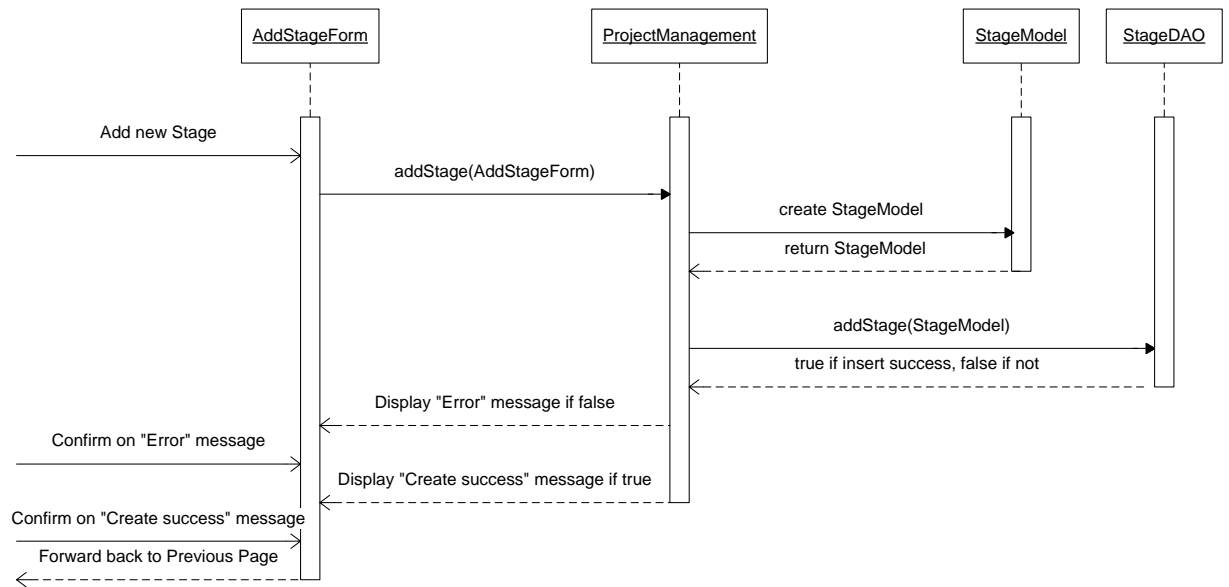


1.30 ProjectEye_UC17 - Add Stage Use Case

1.30.1 Class Diagram

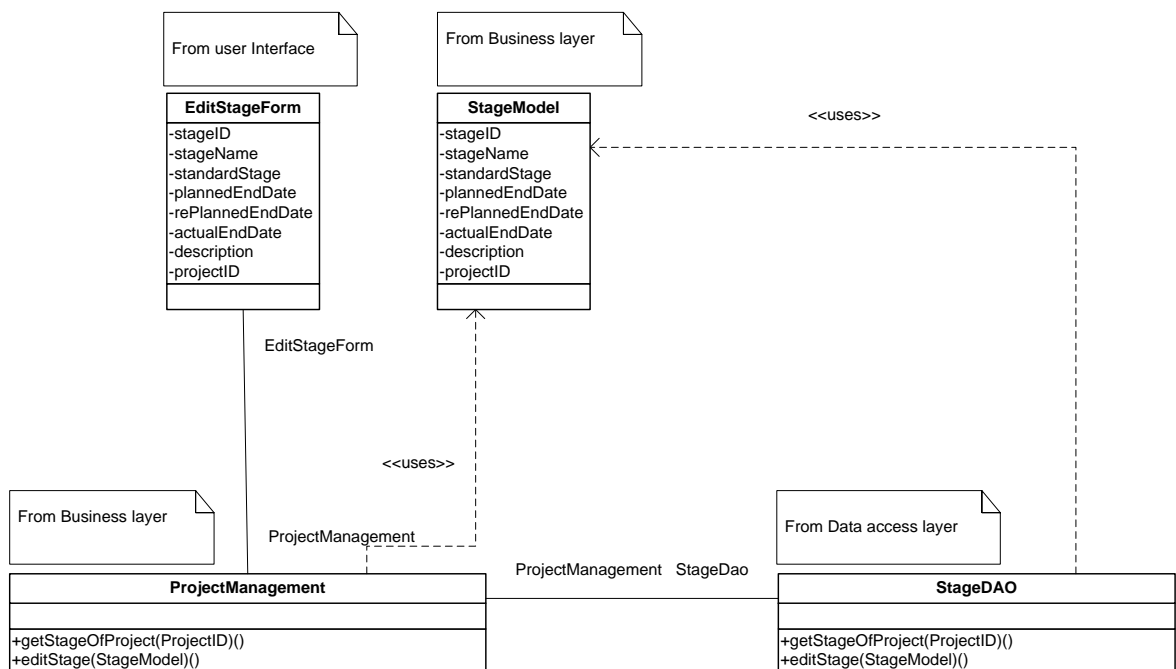


1.30.2 Sequence flow

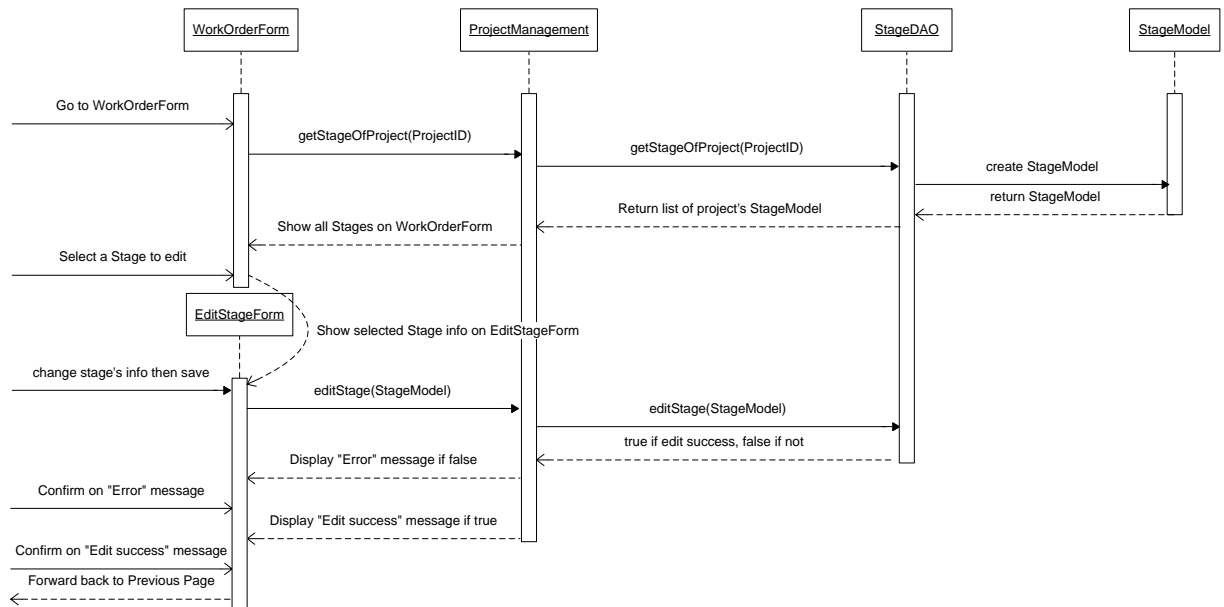


1.31 ProjectEye _UC18 - Edit Stage Use Case

1.31.1 Class Diagram

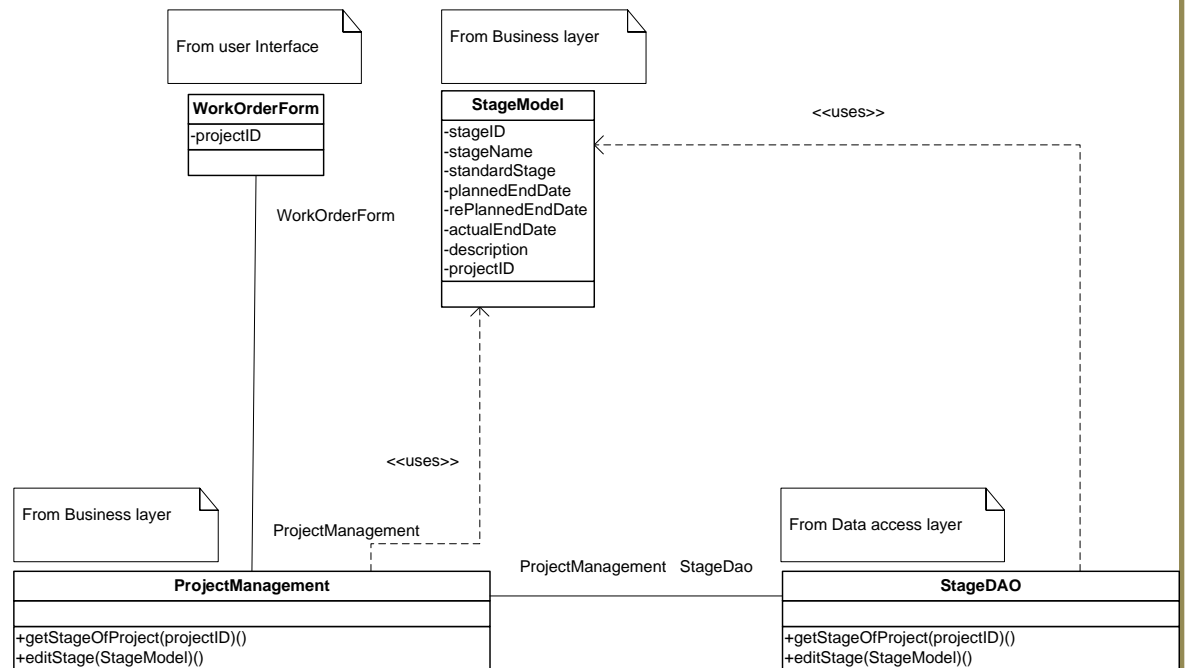


1.31.2 Sequence flow

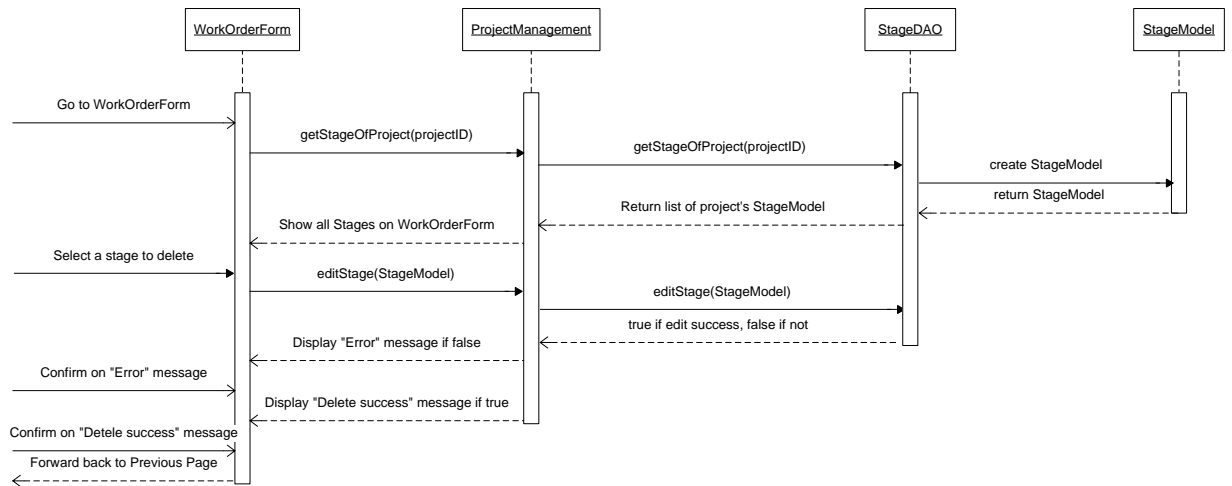


1.32 ProjectEye _UC19 - Delete Stage Use Case

1.32.1 Class Diagram

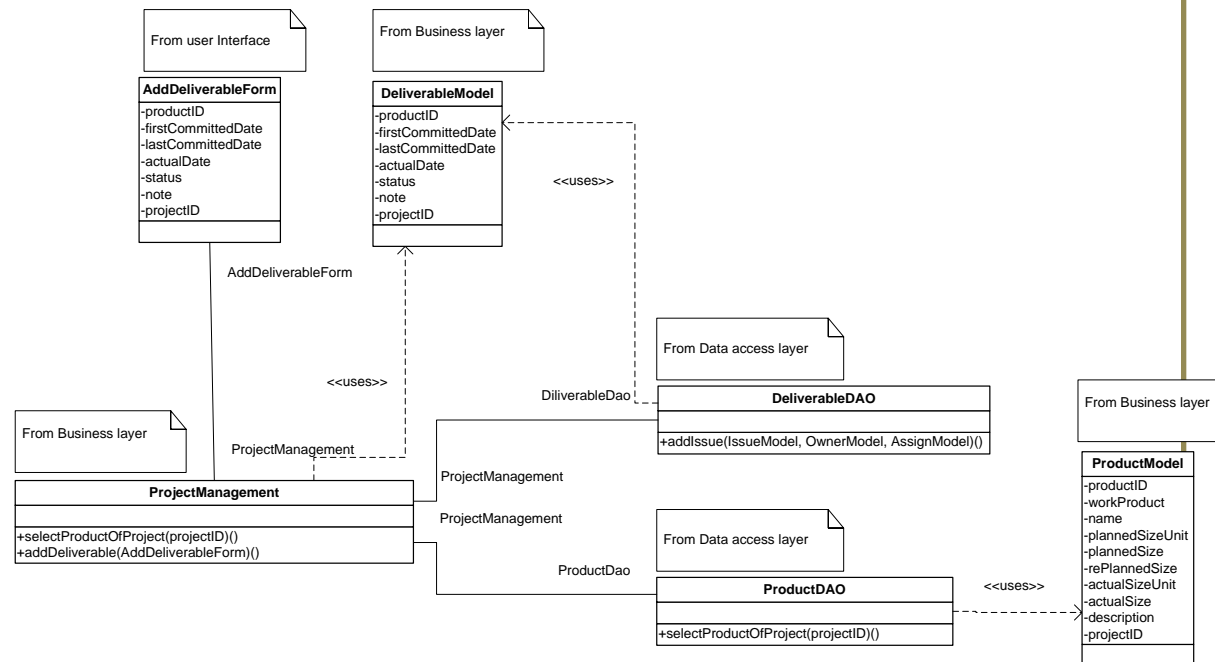


1.32.2 Sequence flow

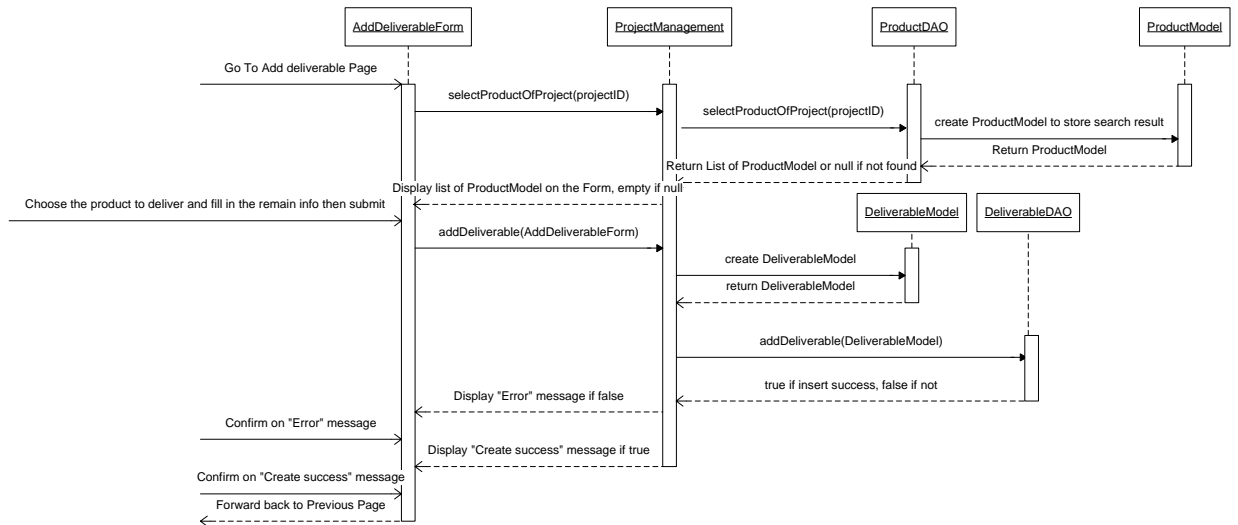


1.33 ProjectEye_UC20 - Add Deliverable Use Case

1.33.1 Class Diagram

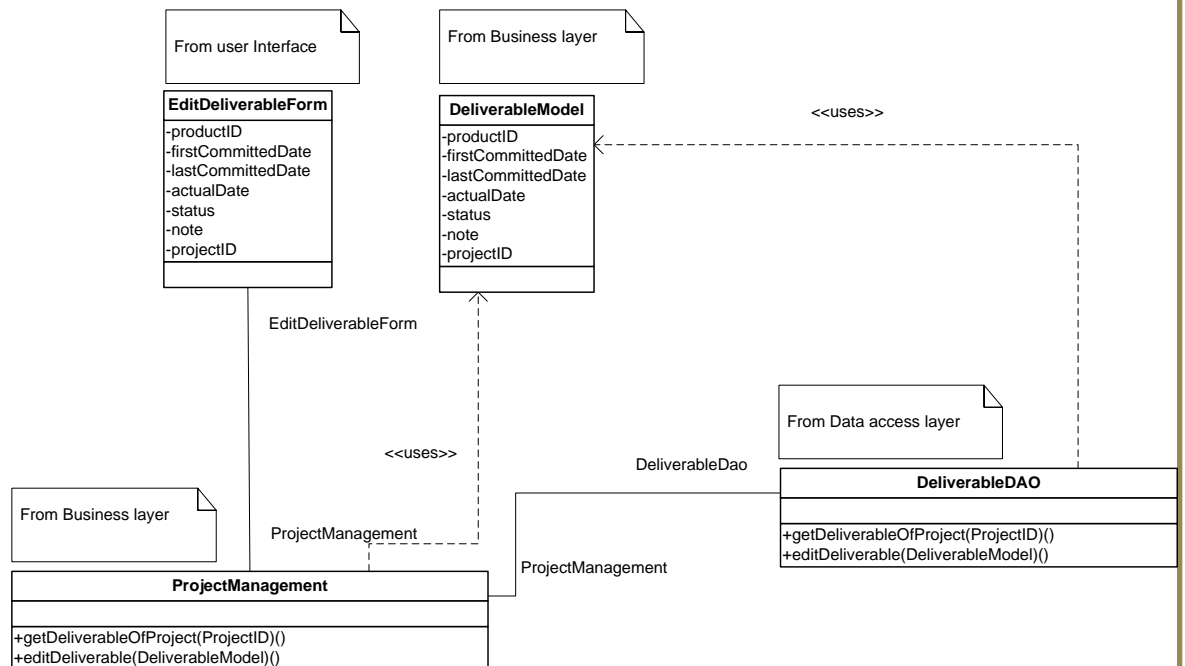


1.33.2 Sequence flow

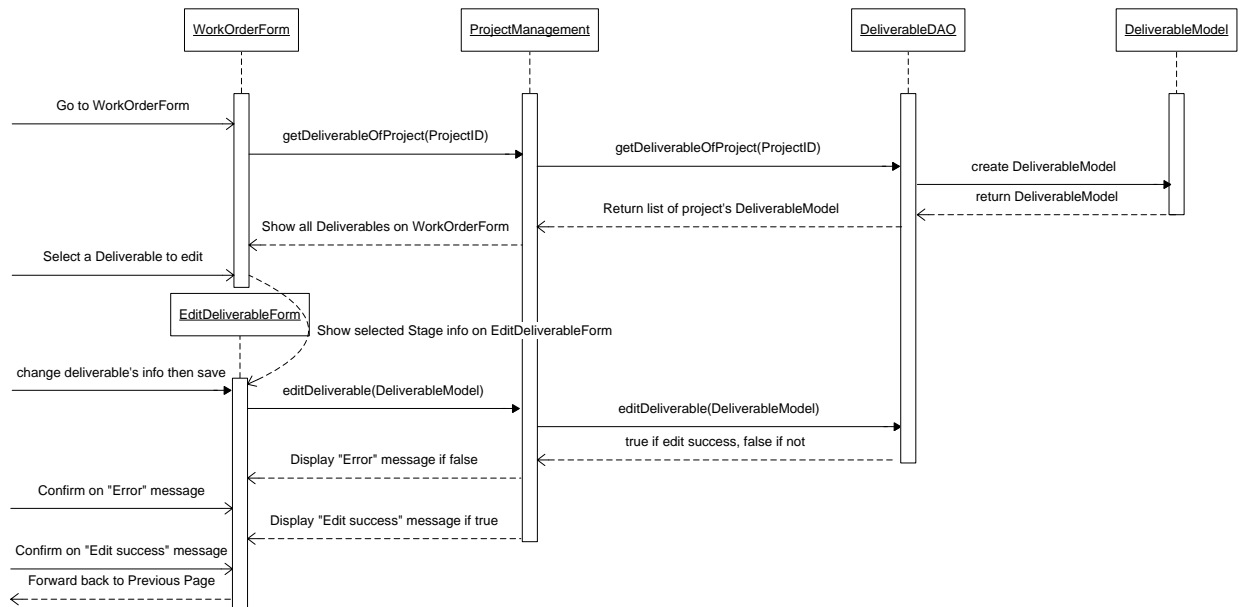


1.34 ProjectEye_UC21 - Edit Deliverable Use Case

1.34.1 Class Diagram

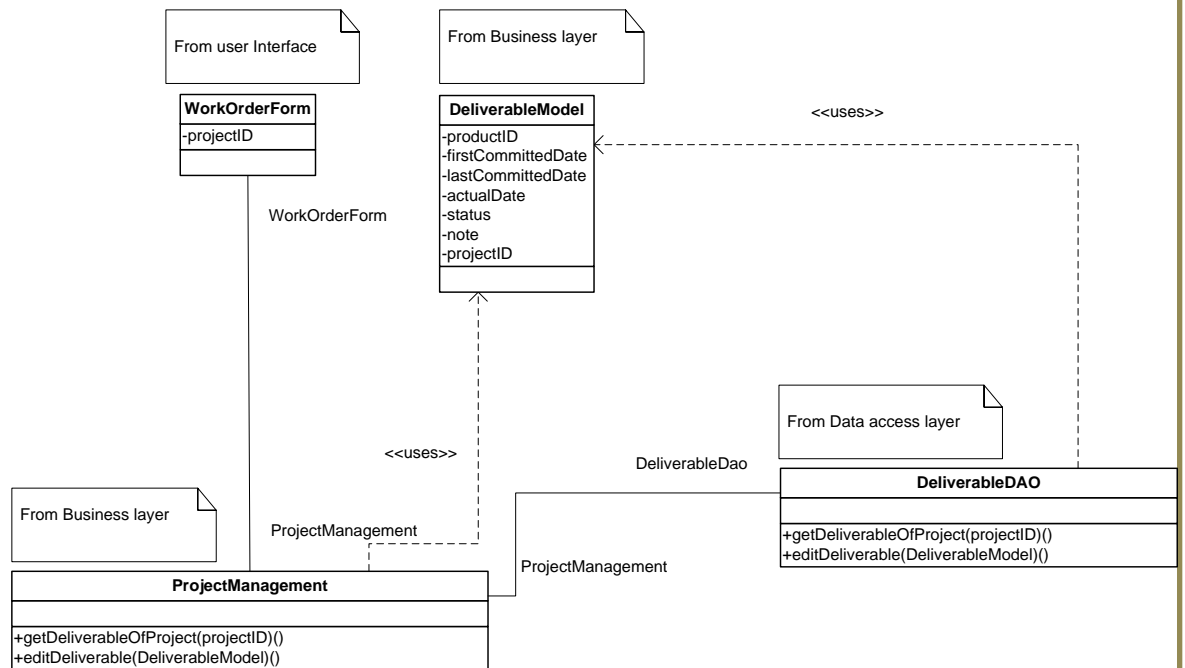


1.34.2 Sequence flow

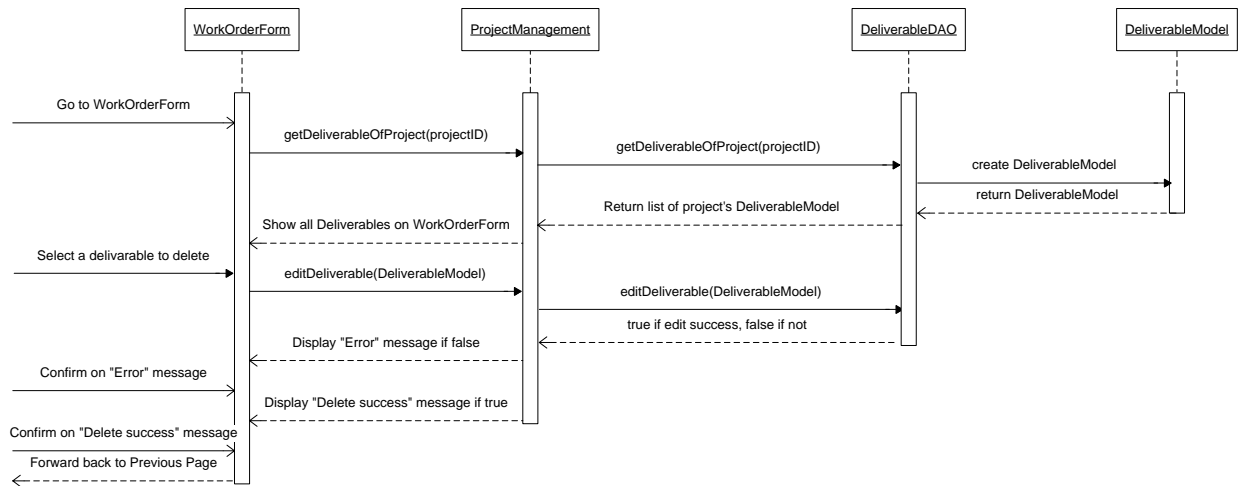


1.35 ProjectEye_UC22 - Delete Deliverable Use Case

1.35.1 Class Diagram

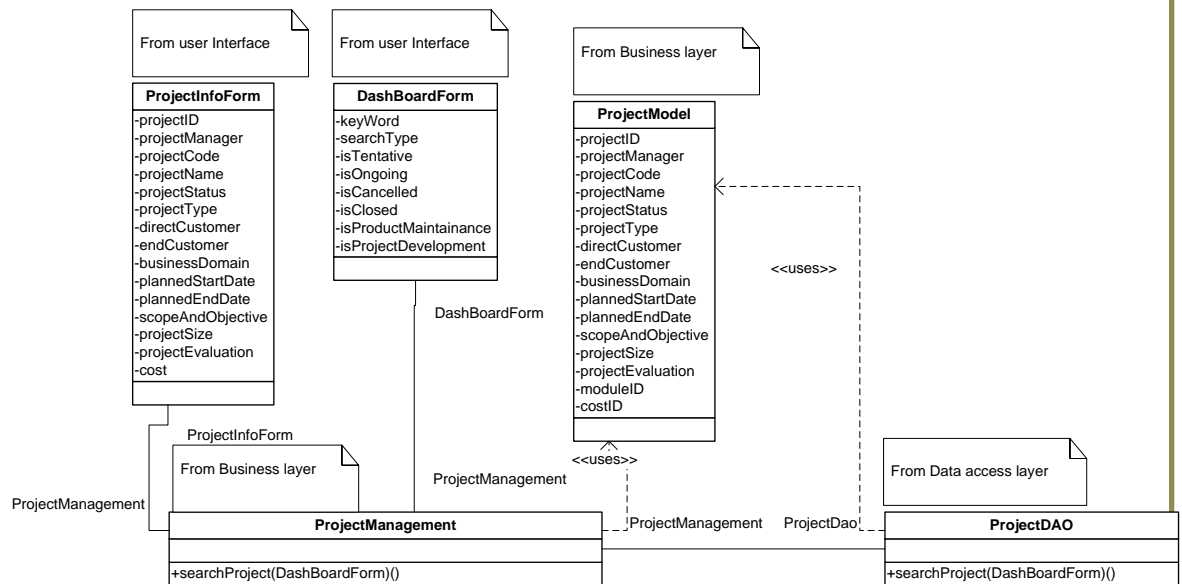


1.35.2 Sequence flow

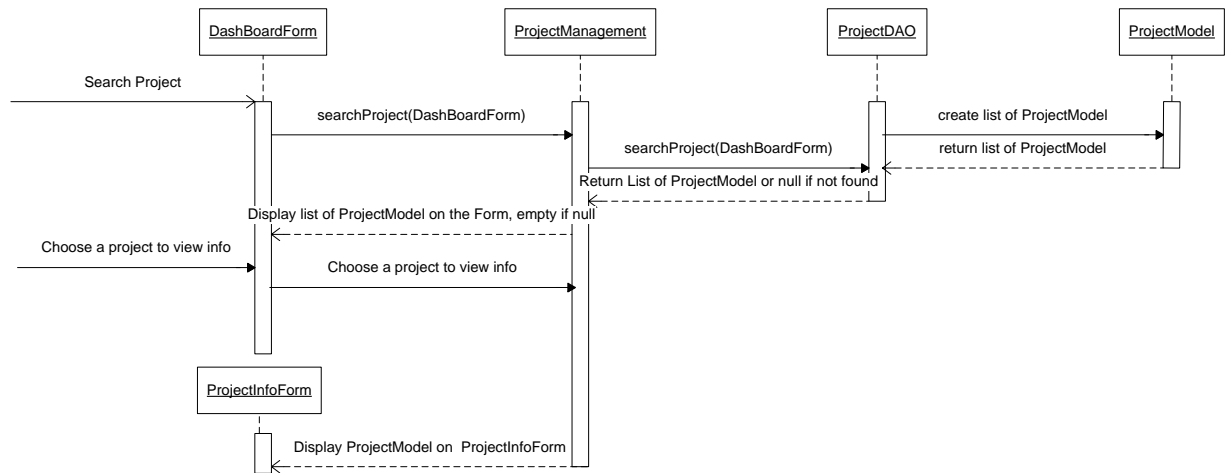


1.36 ProjectEye_UC23 - View Info Use Case

1.36.1 Class Diagram

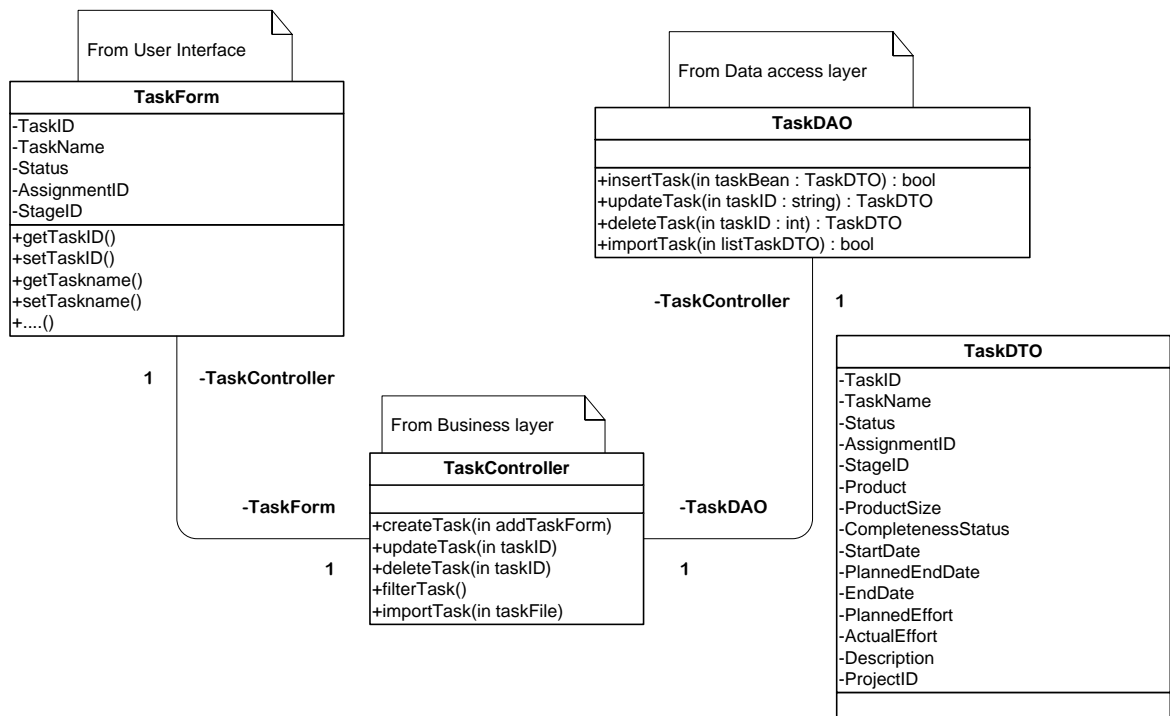


1.36.2 Sequence flow

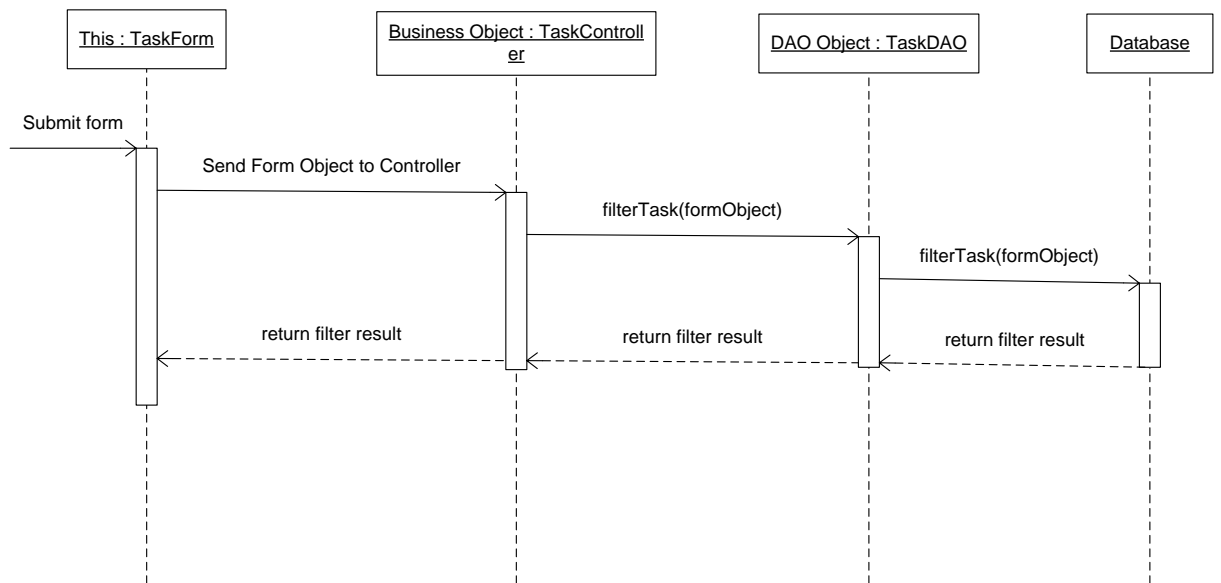


1.37 Planner_UC01- Filter Task Use Case

1.37.1 Class Diagram

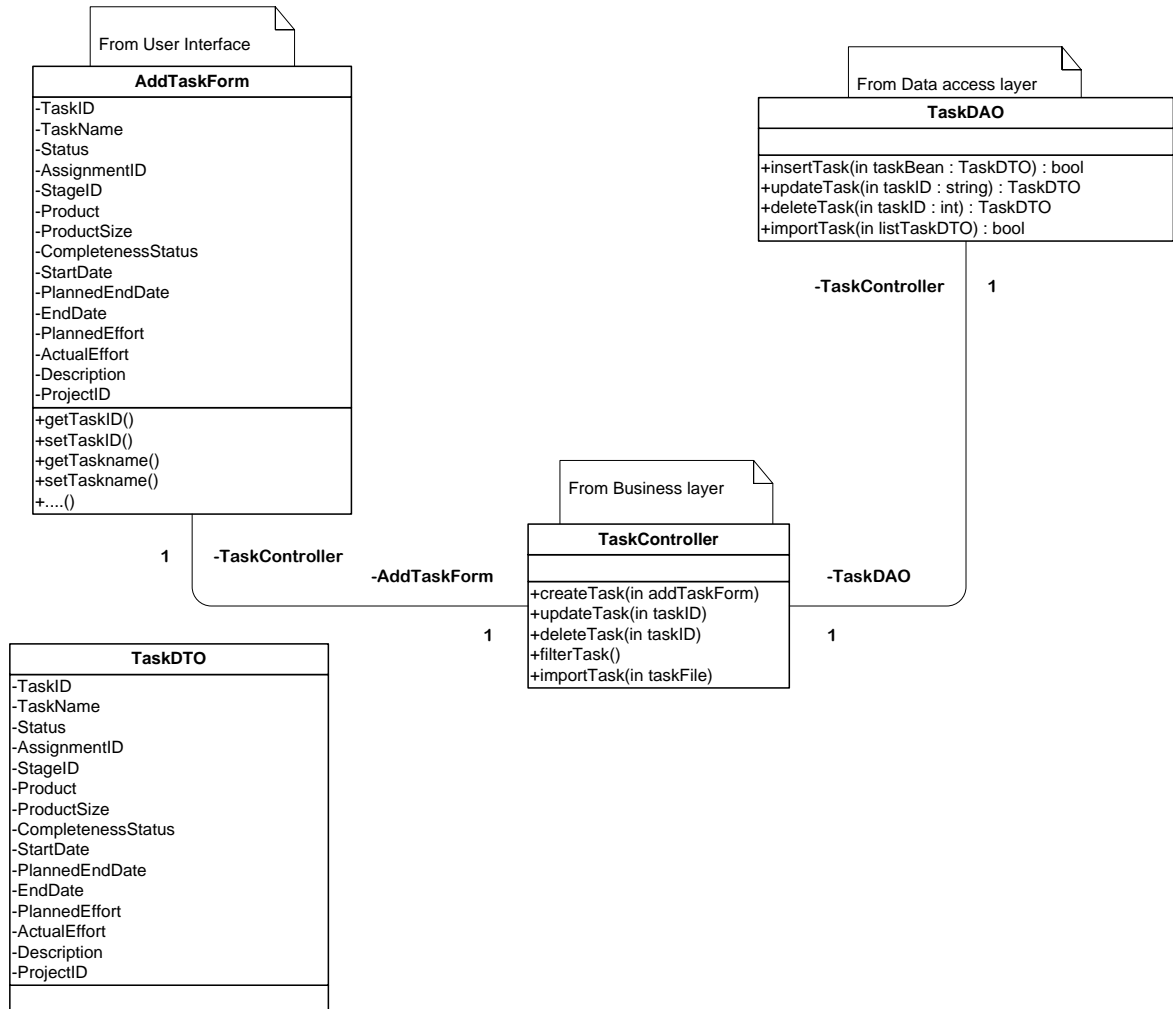


1.37.2 Sequence Flow

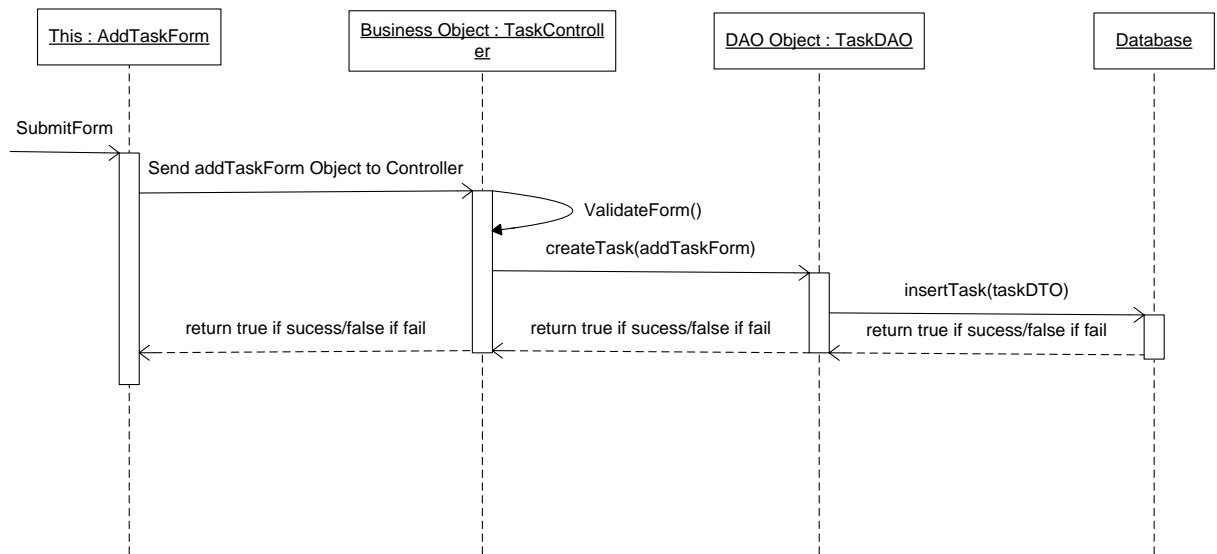


1.38 Planner_UC02 - Add Task Use Case

1.38.1 Class Diagram

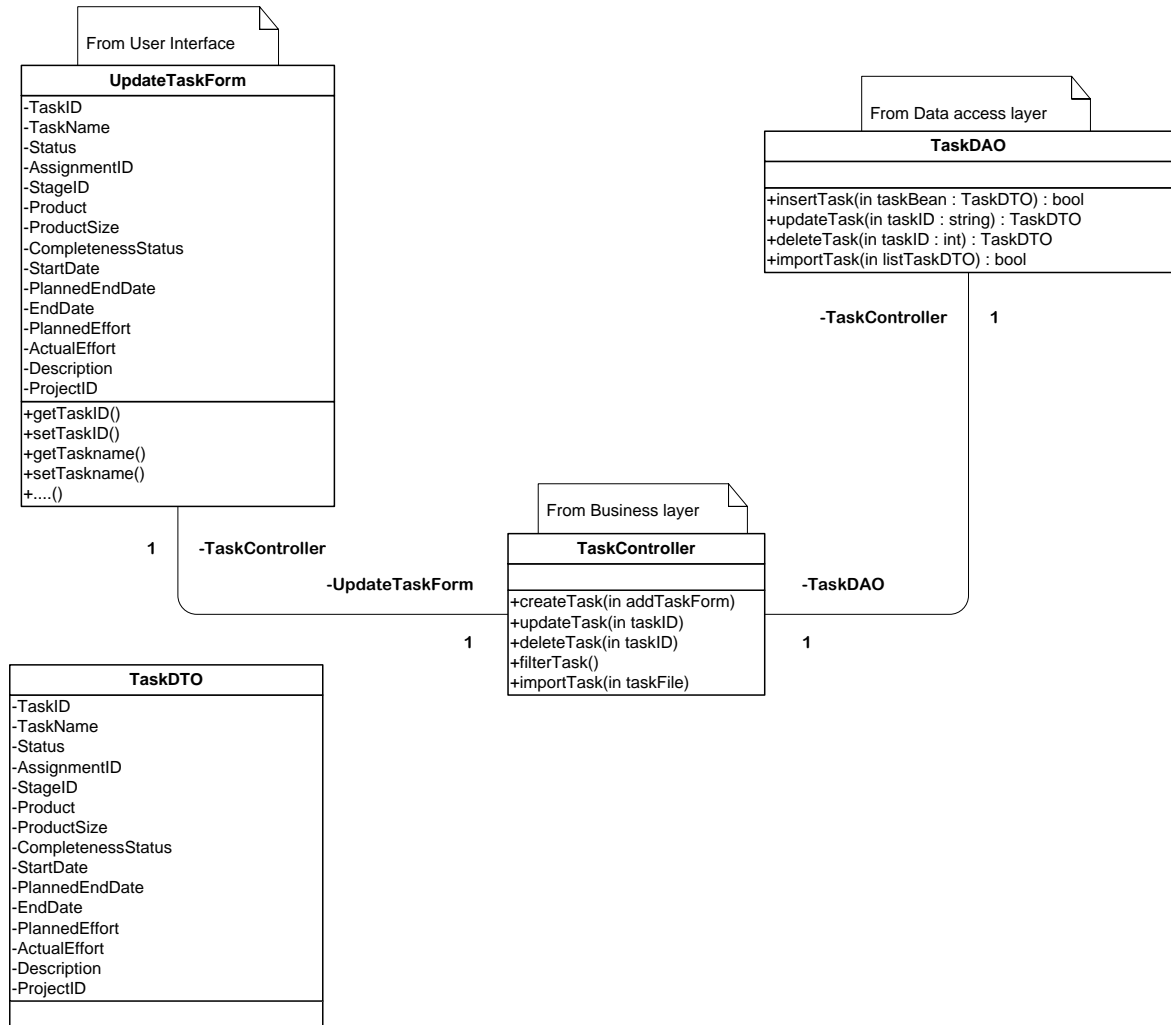


1.38.2 Sequence Flow

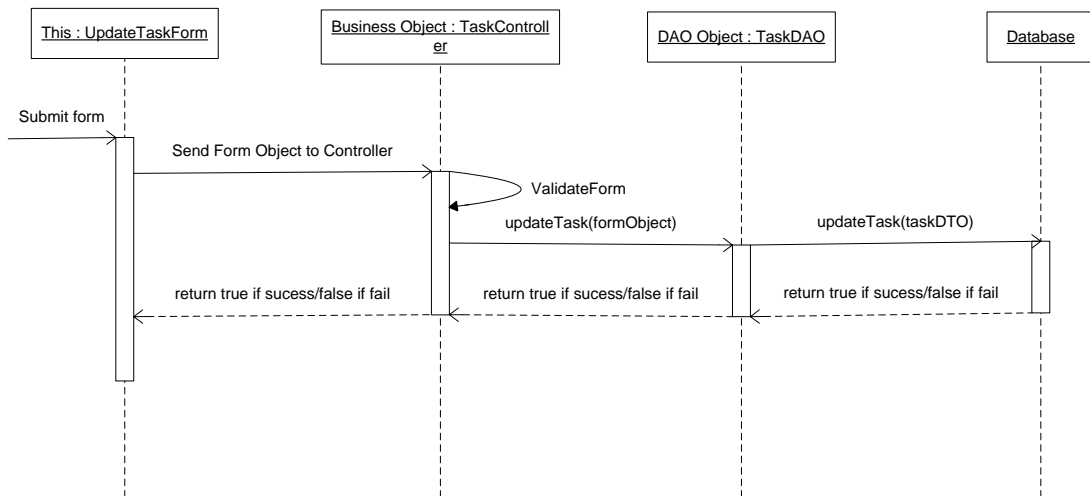


1.39 Planner_UC03 - Update Task Use Case

1.39.1 Class Diagram

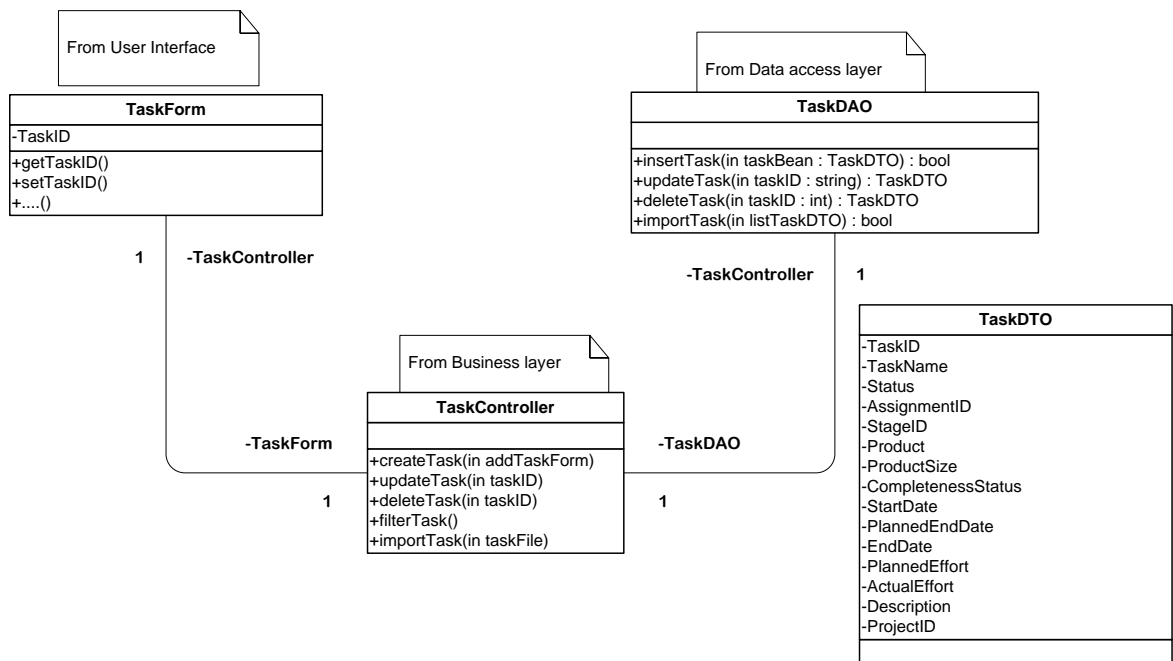


1.39.2 Sequence Flow

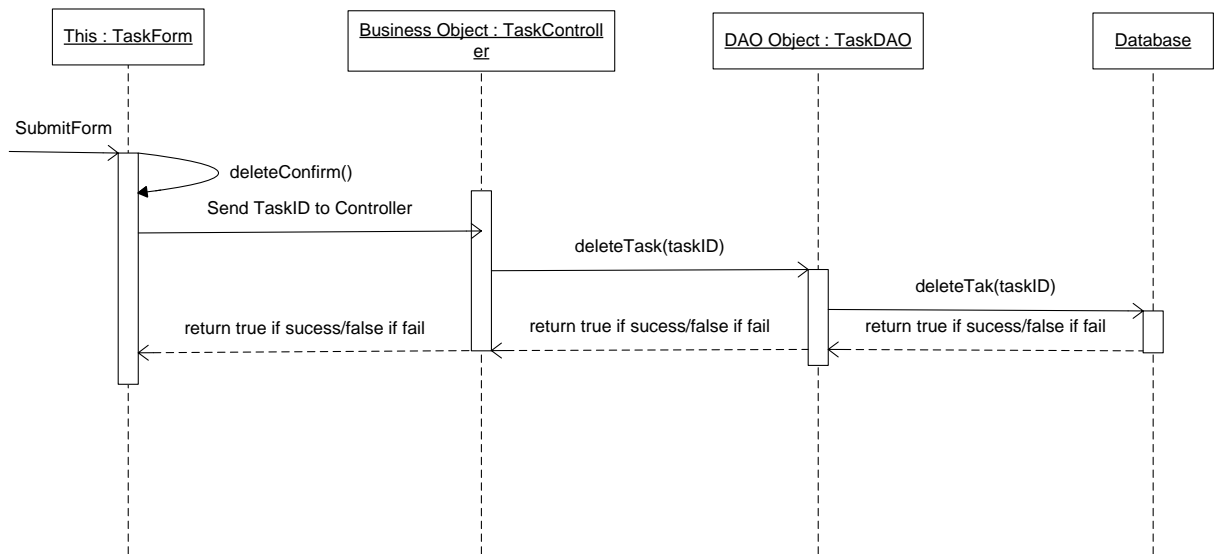


1.40 Planner_UC04 - Delete Task Use Case

1.40.1 Class Diagram

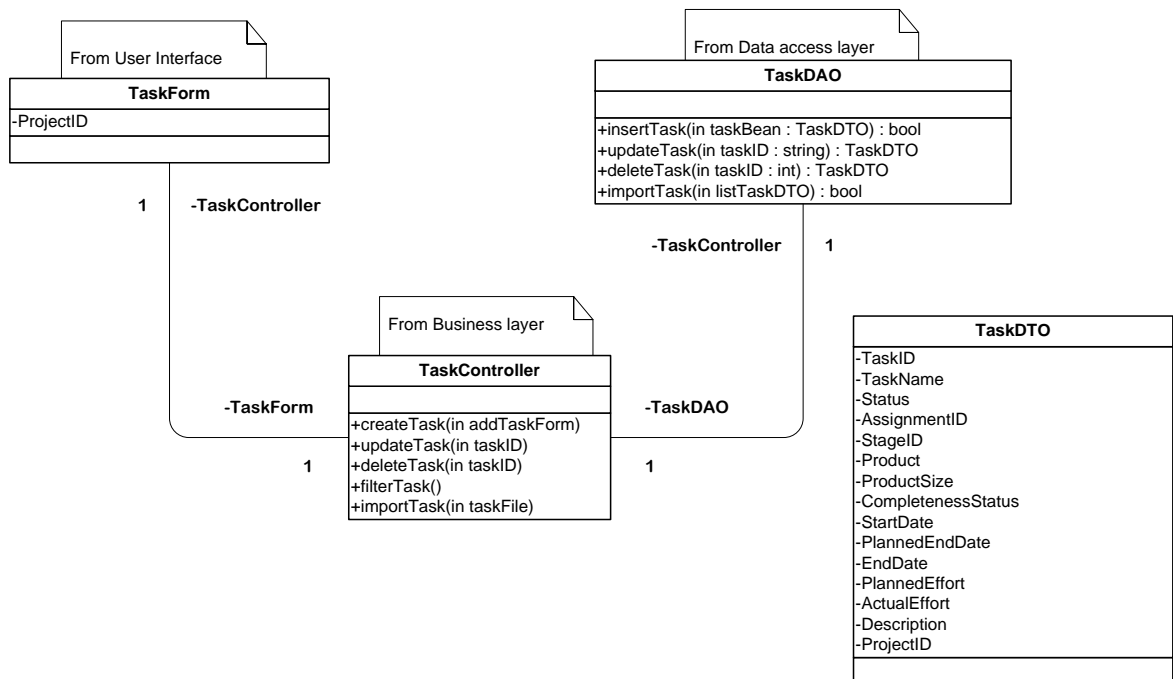


1.40.2 Sequence Flow

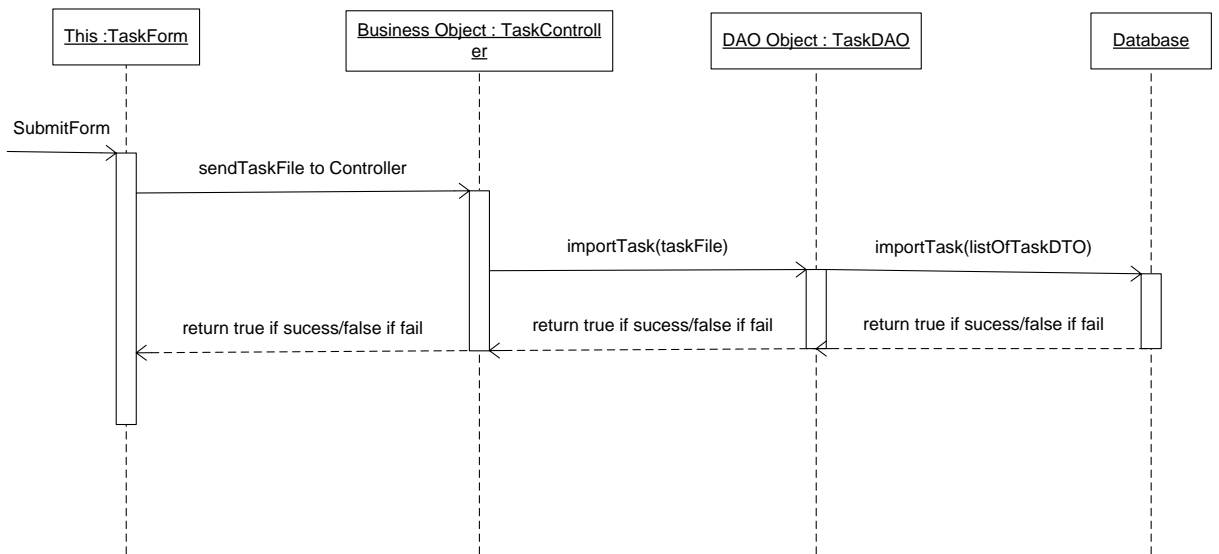


1.41 Planner_UC05 - Import Task Use Case

1.41.1 Class Diagram

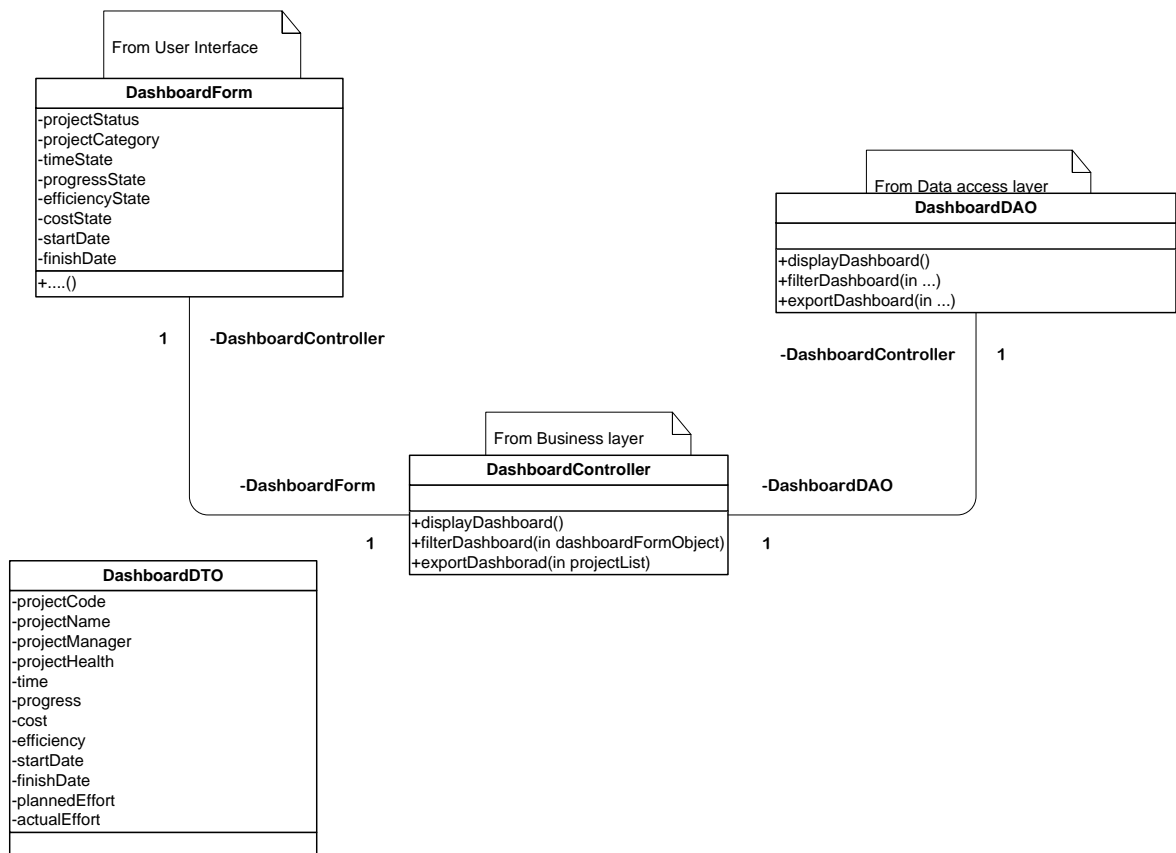


1.41.2 Sequence Flow

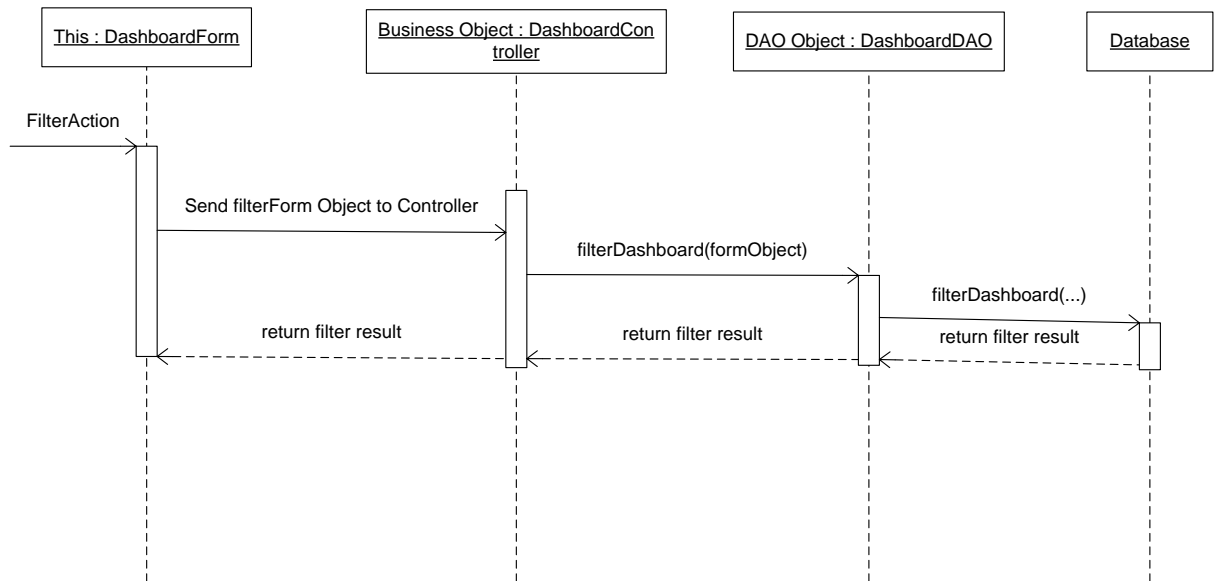


1.42 Dashboard _UC01 - Filter Project Use Case

1.42.1 Class Diagram

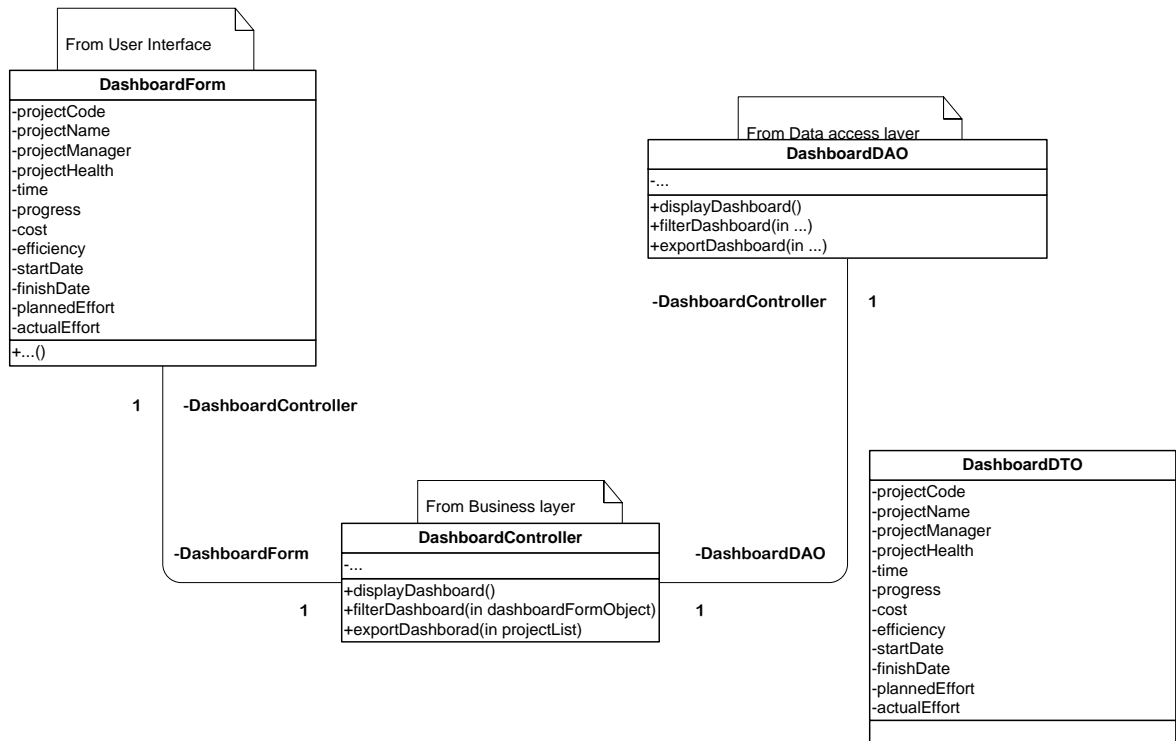


1.42.2 Sequence Flow

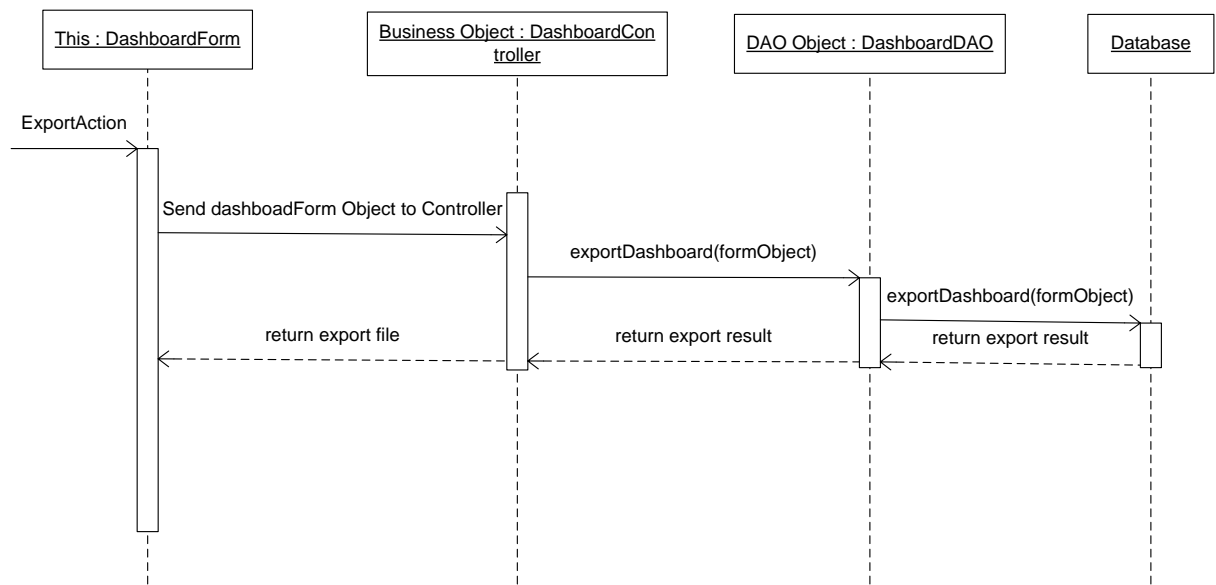


1.43 Dashboard_UC02 - Export Dashboard Use Case

1.43.1 Class Diagram



1.43.2 Sequence Flow



8. Configuration

Refer to Installation/Deployment Guide.

9. Packaging and Deployment

Refer to Installation /Deployment Guide.

E. Software Test Documentation

1. System Overview

Refer to Section A.

2. Test Approach

The testing for this project will consist of Unit, System/Integration (combined) and Acceptance test levels. It is hope that there will be at least one full time independent test person for system/integration testing. The test manager with the development team's participation will do most testing activity.

Unit Testing worked out by the developers and approved by the implementing team leader. Developers will manage all unit test information (sample, output, data printouts, and defect information...) and it can show when team required.

The test manager will perform System/Integration Testing and implementing team leader with assistance from the individual developers as required.

The test manager and development team leader will perform acceptance Testing. The acceptance test takes place for a period of 2 weeks after completion of the System/Integration test process. Programs will enter into Acceptance test after all critical and major defects corrected. A program may have one major defect as long as it does not obstruct testing of the program (There is a work around for the error). Prior to completion of acceptance testing all open critical and major defects must be corrected.

3. Features to be tested

3.1 Dashboard

Test all functions in Dashboard page includes

- List of projects.
- Display projects' health.
- Display projects' basic information.
- Export report

3.2 Planner

Test all functions in Planner page includes

- List of tasks.
- Display assignment.
- Add and assign task.
- Change task information.

- Feature sort, update, delete
- Export report

3.3 Report

Test all functions in Report page includes

- List type of report to choose.
- Link to export chose kind of report.

3.4 Project Eye

Test all functions in Project Eye page includes

- List of projects.
- Display projects' information.
- Add new project.
- Edit projects' information.
- Feature sort, update, delete
- Team management (add, update, delete user).
- Product management (add, update, delete).
- Work Order management (insert, update delete stage, deliverable).
- Change Request (insert, update, delete)
- Risk, Issue (insert, update, delete)

3.5 Timesheet

Test all functions in Timesheet page includes

- List of timesheet.
- Display timesheet.
- Add timesheet.
- Feature sort, update, delete
- Export report

3.6 DMS

Test all functions in DMS page includes

- List of defects.
- Add, assign defect.
- Feature sort, update, delete
- Export report

3.7 Requirement

Test all functions in Requirement page includes

- List of requirements.
- Add requirement.
- Feature sort, update, delete
- Export report.

3.8 Admin

Test all functions in Admin page includes

- List of users.
- Reset password for user.
- New users.
- Feature update, delete user
- Create, Update, delete project

3.9 Android

- View list or project with status.
- View detail status of a project.

4. Features not to be tested

The following is a list of the areas that will NOT be tested in this system:

4.1 Text formatting

There was not enough time and this feature is not so important, so we pass this case and assume that all the text is format correctly.

4.2 Image formatting

There was not enough time and this feature is not so important, so we pass this case and assume that the entire image is not need to format correctly.

4.3 Performance

There was not enough time so we cannot optimize source code and improve performance. We can only ensure the system work well but not at its best performance.

4.4 Network Connection & Security

With each user, it will be different. We only ensure that this system will affect to network.

4.5 Performance

There was not enough time so we cannot optimize source code and improve performance. We can only ensure the system work well but not at its best performance.

5. Test Case

5.1 Project Eye

5.1.1 Check view project list

Content	Precondition	Test case procedure	Expected output
Check view project list	N/A	1 Log in	1. Able to view list of projects.

5.1.2 Create project

Content	Precondition	Test case procedure	Expected output
Create Project	1. Log In	2 Log in 3 Click "Create Project"	2. Place to input information. 3. Validation 4. Submit Ok

5.1.3 Team management

Content	Precondition	Test case procedure	Expected output
Team Management	1. Log In 2. Project Manager Role	1. Log in 2a. Go to project which User is PM. 2b. or Create new project.	1. Able to search, add, remove team member.

5.1.4 Create Product

Content	Precondition	Test case procedure	Expected output
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Create product	1. Log In as PM of a project	1. Go to project that user is PM. 2. Create product link	1. Place to input information. 2. Validation 3. Submit Ok
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5.1.5 Delete Product

Content	Precondition	Test case procedure	Expected output
Delete product	1. Log In as PM of a project	1 Go to project that user is PM. 2 Choose product to Delete	1. Product deleted

5.1.6 Update Product

Content	Precondition	Test case procedure	Expected output
Update product	1. Log In as PM of a project	1. Go to project that user is PM. Choose product to update	1. View current information and input new ones. 2. Validation 3. Submit Ok

5.1.7 Create Risk

Content	Precondition	Test case procedure	Expected output
Create risk	1. Log In as PM of a project	1 Go to project that user is PM. 2 Create risk link	1. Place to input information. 2. Validation 3. Submit Ok

5.1.8 Delete Risk

Content	Precondition	Test case procedure	Expected output
Delete risk	Log In as PM of a project	1 Go to project that user is PM. 2 Choose risk to Delete	1. risk deleted

5.1.9 Update Risk

Content	Precondition	Test case procedure	Expected output
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Update risk	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Choose risk to update 	<ol style="list-style-type: none"> 2. View current information and input new ones. 3. Validation 4. Submit Ok
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5.1.10 Create Issue

Content	Precondition	Test case procedure	Expected output
Create issue	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Create issue link 	<ol style="list-style-type: none"> 1. Place to input information. 2. Validation 3. Submit Ok

5.1.11 Delete Issue

Content	Precondition	Test case procedure	Expected output
Delete issue	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Choose issue to Delete 	1 issue deleted

5.1.12 Update Issue

Content	Precondition	Test case procedure	Expected output
Update issue	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Choose issue to update 	<ol style="list-style-type: none"> 1. View current information and input new ones. 2. Validation 3. Submit Ok

5.1.13 Create Change

Content	Precondition	Test case procedure	Expected output
Create change	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Create change link 	<ol style="list-style-type: none"> 1. Place to input information. 2. Validation 3. Submit Ok

5.1.14 Delete Change

Content	Precondition	Test case procedure	Expected output
Delete change	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Choose change to Delete 	1. change deleted

5.1.15 Update Change

Content	Precondition	Test case procedure	Expected output
Update change	Log In as PM of a project	<ol style="list-style-type: none"> 1. Go to project that user is PM. 2. Choose change to update 	<ol style="list-style-type: none"> 1 View current information and input new ones. 2. Validation 3. Submit Ok

5.1.16 Create Stage

Content	Precondition	Test case procedure	Expected output
Create stage	Log In as PM of a project	<ol style="list-style-type: none"> 3. Go to project that user is PM. 4. Create stage link 	<ol style="list-style-type: none"> 4. Place to input information. 5. Validation 6. Submit Ok

5.1.17 Delete Stage

Content	Precondition	Test case procedure	Expected output
Delete stage	Log In as PM of a project	<ol style="list-style-type: none"> 3. Go to project that user is PM. 4. Choose stage to Delete 	<ol style="list-style-type: none"> 4. stage deleted

5.1.18 Update Stage

Content	Precondition	Test case procedure	Expected output
Update stage	Log In as PM of a project	<ol style="list-style-type: none"> 3. Go to project that user is PM. 4. Choose stage to update 	<ol style="list-style-type: none"> 2 View current information and input new ones. 5. Validation 6. Submit Ok

5.1.19 Create Deliverable

Content	Precondition	Test case procedure	Expected output
Create deliverable	Log In as PM of a project	<ol style="list-style-type: none"> 5. Go to project that user is PM. 6. Create deliverable link 	<ol style="list-style-type: none"> 7. Place to input information. 8. Validation 9. Submit Ok

5.1.20 Delete Deliverable

Content	Precondition	Test case procedure	Expected output
Delete deliverable	Log In as PM of a project	<ol style="list-style-type: none"> 5. Go to project that user is PM. 6. Choose deliverable to Delete 	<ol style="list-style-type: none"> 7. deliverable deleted

5.1.21 Update Deliverable

Content	Precondition	Test case procedure	Expected output
Update deliverable	Log In as PM of a project	5. Go to project that user is PM. 6. Choose deliverable to update	3 View current information and input new ones. 8. Validation 9. Submit Ok

5.1.22 Add Cost

Content	Precondition	Test case procedure	Expected output
Create cost	Log In as PM of a project	7. Go to project that user is PM. 8. Create cost link	10. Place to input information. 11. Validation 12. Submit Ok

5.1.23 Delete Cost

Content	Precondition	Test case procedure	Expected output
Delete cost	Log In as PM of a project	7. Go to project that user is PM. 8. Choose cost to Delete	10. cost deleted

5.1.24 Update Cost

Content	Precondition	Test case procedure	Expected output
Update cost	Log In as PM of a project	7. Go to project that user is PM. 8. Choose cost to update	4 View current information and input new ones. 11. Validation 12. Submit Ok

5.1.25 View Cost Status

Content	Precondition	Test case procedure	Expected output
Check view cost information	Logged in	1. Click on one cost entry link	1 Able to view list of cost entry of that project

5.1.26 Project Owner update project Information

Content	Precondition	Test case procedure	Expected output
Project Owner update project detail	Log In as project Owner of a project	1. Choose project link that user is owner 2. Click update	3. View current information and input new ones. 4. Validation

			5. Submit Ok
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5.1.27 Project Owner assign PM

Content	Precondition	Test case procedure	Expected output
Project owner assign PM	Log In as project Owner of a project	<ol style="list-style-type: none"> 1. Choose project link that user is owner 2. Click team management 3. Choose team member to change role to PM 	<ol style="list-style-type: none"> 1. Role change 2. Submit OK

5.1.28 Project Owner delete project

Content	Precondition	Test case procedure	Expected output
Project Owner delete project	Log In as project Owner of a project	<ol style="list-style-type: none"> 1. Choose project link that user is owner 2. Click delete 	<ol style="list-style-type: none"> 1. Project deleted

5.2 Planner

5.2.1 Check view project list

Content	Precondition	Test case procedure	Expected output
Check view project list	Member of one project	<ol style="list-style-type: none"> 1 Log in 	<ol style="list-style-type: none"> 2 Able to view list of projects that logged-in user is member.

5.2.2 Check view tasks list of a project

Content	Precondition	Test case procedure	Expected output
Check view task list	<ol style="list-style-type: none"> 2. Logged in 	<ol style="list-style-type: none"> 2 Click on one project link 	<ol style="list-style-type: none"> 3 Able to view list of task of that project

5.2.3 Check PM can Add/Delete/Assign Task

Content	Precondition	Test case procedure	Expected output
Check PM can ADA task	<ol style="list-style-type: none"> 1 Logged in 2 User is PM of at least one project 	<ol style="list-style-type: none"> 1 Log in 2 Click on project link that user is PM 	<ol style="list-style-type: none"> 1. Able to view Add, assign, delete buttons.

5.2.4 Check Add Task

Content	Precondition	Test case procedure	Expected output
Check add task	1 Logged in 2 User is PM of at least one project	1 Log in 2. Click on project link that user is PM 3. Click add button	1 Place to input information. 2 Validation 3 Submit Ok

5.2.5 Check Delete Task

Content	Precondition	Test case procedure	Expected output
Check delete task	1 Logged in 2 User is PM of at least one project	1 Log in 2 Click on project link that user is PM 3 Tick one task and Click delete button	Task deleted

5.2.6 Check Assign Task

Content	Precondition	Test case procedure	Expected output
Check assign task	3 Logged in 4 User is PM of at least one project	1 Log in 3. Click on project link that user is PM 4. Tick at least one task and Click assign button	1 task is assigned

5.2.7 Check team member can update Task

Content	Precondition	Test case procedure	Expected output
Check member can update task	1 Logged in 2 User is member of at least one project	1 Log in 2 Click on project link that user is member 3 Tick at least one task and Click update button	1. Search action on change of the box.

5.2.8 Check Update Task

Content	Precondition	Test case procedure	Expected output
Check update task	1 Logged in 2 User is member of at least one	1 Log in 2 Click on project link that user is member	1 See current values, Place to input information.

	project	3 Tick at least one task and Click update button	2 Validation 3 Submit Ok
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5.2.9 Check Search Task

Content	Precondition	Test case procedure	Expected output
Check search task	1 Logged in	1. Log in 2. View list task and type in to search box	2. Search action on change of the box.

5.2.10 Check Sort Task

Content	Precondition	Test case procedure	Expected output
Check sort task	1 Logged in	1. Log in 2. View list task and click on any column header	1 tasks are sorted by clicked column.

5.3 Requirement

5.3.1 Check view project list

Content	Precondition	Test case procedure	Expected output
Check view project list	Member of one project	3 Log in	4 Able to view list of projects that logged-in user is member.

5.3.2 Check view requirements list of a project

Content	Precondition	Test case procedure	Expected output
Check view requirement list	5. Logged in	4 Click on one project link	5 Able to view list of requirements of that project

5.3.3 Check PM can Add/Update/Delete Requirement

Content	Precondition	Test case procedure	Expected output
Check PM can AUD requirement	1 Logged in 2 User is PM of at least one project	3 Log in 4 Click on project link that user is PM	4. Able to view Add, Update, Remove buttons.

5.3.4 Check Add requirement

Content	Precondition	Test case procedure	Expected output
Check add requirement	1 Logged in 2 User is PM of at least one project	2 Log in 5. Click on project link that user is PM 6. Click add button	4 Place to input information. 5 Validation 6 Submit Ok

5.3.5 Check Update requirement

Content	Precondition	Test case procedure	Expected output
Check update requirement	4 Logged in 5 User is PM of at least one project	4 Log in 5 Click on project link that user is PM 6 Tick one requirement and Click update button	1 See current value and able to input new information. 2 Validation 3 Submit Ok

5.3.6 Check Remove requirement

Content	Precondition	Test case procedure	Expected output
Check remove requirement	6 Logged in 7 User is PM of at least one project	2 Log in 6. Click on project link that user is PM 7. Tick at least one requirement and Click remove button	1 Requirements are removed and the list refresh.

5.3.7 Check Search requirement

Content	Precondition	Test case procedure	Expected output
Check search requirement	2 Logged in	3. Log in 4. View list requirements and type in to search box	3. Search action on change of the box.

5.3.8 Check Sort requirement

Content	Precondition	Test case procedure	Expected output
Check sort requirement	2 Logged in	1. Log in 2. View list requirement and click on any column header	1 Requirements are sorted by clicked column.

5.4 Timesheet

5.4.1 Check PM view all timesheet list

Content	Precondition	Test case procedure	Expected output
Check PM view timesheet list	N/A	Log in as PM	1. Able to view all list timesheet.

5.4.2 Check team members view their own timesheet

Content	Precondition	Test case procedure	Expected output
Check team member view timesheet list	N/A	Log in as team member	1. Able to view list timesheet of their own.

5.4.3 Check team members can Add/Update/Delete their own timesheet

Content	Precondition	Test case procedure	Expected output
Check team member can AUD timesheet	N/A	Log in as team member	Able to view Add, Update, Delete buttons of their own timesheet.

5.4.4 Check PM can Delete all timesheet

Content	Precondition	Test case procedure	Expected output
Check PM delete timesheet	N/A	Log in as PM	Able to view Delete buttons of all timesheet.

5.4.5 Check PM can Approve/Reject all timesheet

Content	Precondition	Test case procedure	Expected output
Check PM approve/reject timesheet	N/A	Log in as PM	Able to view Approve/Reject buttons of all timesheet.

5.4.6 Check Add timesheet

Content	Precondition	Test case procedure	Expected output
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Check add timesheet	User is team member of at least one project	<ol style="list-style-type: none"> 1 Log in 2 Click add button 	<ol style="list-style-type: none"> 1. Place to input information. 2. Validation 3. Submit Ok
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5.4.7 Check update timesheet

Content	Precondition	Test case procedure	Expected output
Check update timesheet	User is team member of at least one project	<ol style="list-style-type: none"> 1. Log in 2. Tick at least one timesheet and Click update button 	<ol style="list-style-type: none"> 1. View current value and Place to input new information. 2. Validation 3. Submit Ok

5.4.8 Check Delete timesheet

Content	Precondition	Test case procedure	Expected output
Check delete timesheet	User is team member or PM	<ol style="list-style-type: none"> 1. Log in 2. Tick at least one timesheet and Click delete button 	1 PM is able to delete all timesheet of that project / team member can delete their own timesheet.

5.4.9 Check approve timesheet

Content	Precondition	Test case procedure	Expected output
Check approve timesheet	User is PM of one project	<ol style="list-style-type: none"> 1 Log in 2 Tick timesheet and click Approve button. 	timesheet approved and status changed.

5.4.10 Check reject timesheet

Content	Precondition	Test case procedure	Expected output
Check reject timesheet	User is PM of one project	<ol style="list-style-type: none"> 3 Log in 4 Tick timesheet and click reject button. 	timesheet rejected and status changed.

5.4.11 Check Search timesheet

Content	Precondition	Test case procedure	Expected output
Check search timesheet	Logged in	<ol style="list-style-type: none"> 1 Log in 2 View list timesheet and type in to search box 	Search action on change of the box.

5.4.12 Check Sort timesheet

Content	Precondition	Test case procedure	Expected output
Check sort timesheet	Logged in	1. Log in 2. View list timesheet and click on any column header	1 timesheet are sorted by clicked column.

5.5 DMS**5.5.1 Check view Defect list**

Content	Precondition	Test case procedure	Expected output
Check view Defect list	Team member of a project	1. Log in 2. Click on project link	1. Able to view list of Defect.

5.5.2 Check create Defect

Content	Precondition	Test case procedure	Expected output
Check create Defect	Team member of a project	3. Log in 4. Click on project link	2. Able to create

5.5.3 Check assign Defect

Content	Precondition	Test case procedure	Expected output
Check assign Defect	Team member of a project	5. Log in 6. Click on project link	3. Able to assign

5.5.4 Check update Defect

Content	Precondition	Test case procedure	Expected output
Check update Defect	Team member of a project	7. Log in 8. Click on project link	4. Able to update

5.5.5 Check delete Defect

Content	Precondition	Test case procedure	Expected output
Check delete Defect	Team member of a project	9. Log in 10. Click on project link	5. Able to delete

5.5.6 Check search Defect

Content	Precondition	Test case procedure	Expected output
Check search Defect	Team member of a project	11. Log in 12. Click on project link	6. Able to search

5.6 Dashboard**5.6.1 Check view project status list**

Content	Precondition	Test case procedure	Expected output
Check view project status list		13. Log in	7. Able to view list status of projects that logged-in user is member.

5.6.2 Check view detail status of a project

Content	Precondition	Test case procedure	Expected output
Check view detail project status	1. Logged in	1. Click on one project link	1. Able to view detail status of that project

5.7 Admin**5.7.1 Create User**

Content	Precondition	Test case procedure	Expected output
Create User	System Admin	1. Log in as System admin. 2. Go to Create User	1. Input information. 2. Submit ok

5.7.1 Update User

Content	Precondition	Test case procedure	Expected output
Update User	System Admin	1 Log in as System admin. 2 Go to Update User	1 Input information. 2 Submit ok

5.7.1 Delete User

Content	Precondition	Test case procedure	Expected output
---------	--------------	---------------------	-----------------

Delete User	System Admin	1. Log in as System admin. 2. Go to Delete User	1. Submit ok
-------------	--------------	--	--------------

5.8 Report

5.8.2 Check Report Project Status

Content	Precondition	Test case procedure	Expected output
Check report project status	N/A	1 Go to report. 2 Choose report project status	1 Get report printed out

5.8.2 Check Report Task Status

Content	Precondition	Test case procedure	Expected output
Check report task status	N/A	1 Go to report. 2 Choose report task status	1 Get report printed out

5.8.3 Check Report Timesheet Status

Content	Precondition	Test case procedure	Expected output
Check report timesheet status	N/A	1 Go to report. 2 Choose report timesheet status	1 Get report printed out

5.8.4 Check Report Requirement Status

Content	Precondition	Test case procedure	Expected output
Check report requirement status	N/A	1 Go to report. 2 Choose report requirement status	1 Get report printed out

5.8.5 Check Report DMS Status

Content	Precondition	Test case procedure	Expected output
Check report DMS status	N/A	1 Go to report. 2 Choose report DMS status	1 Get report printed out

5.9 Android

5.9.1 Check view project status list

Content	Precondition	Test case procedure	Expected output
Check view project status list		14. Log in	8. Able to view list status of projects that logged-in user is member.

5.9.2 Check view detail status of a project

Content	Precondition	Test case procedure	Expected output
Check view detail project status	2. Logged in	2. Click on one project link	2. Able to view detail status of that project

6. Checklists

1.1 Checklist of Validation

Question	Yes	No	N/A
1. Does a failure of validation on every field cause a sensible user error message?	X		
2. Is the user required to fix entries which have failed validation tests?	X		
3. Have any fields got multiple validation rules and if so are all rules being applied?	X		
4. If the user enters an invalid value and clicks on the SAVE button (i.e. does not TAB off the field) is the invalid entry identified and highlighted correctly with an error message?	X		
5. Is validation consistently applied at screen level unless specifically required at field level?	X		
6. For all numeric fields check whether negative numbers can and should be able to be entered.	X		

7. For all numeric fields check the minimum and maximum values and also some mid-range values allowable?	X
8. For all character/alphanumeric fields check the field to ensure that there is a character limit specified and that this limit is exactly correct for the specified database size?	X
9. Do all mandatory fields require user input?	X
10. If any of the database columns don't allow null values then the corresponding screen fields must be mandatory. (If any field which initially was mandatory has become optional then check whether null values are allowed in this field.)	X

1.2 Submission Checklist

Question		Yes	No	N/A
TABLES AND FIGURES				
1	Does every table column, including the stub column, have a heading?	X		
2	Are all tables referred to in text?	X		
3	Are the elements in the figures large enough to remain legible after the figure has been reduced to the width of a journal column or page?	X		
4	Is lettering in a figure no smaller than 8 points and no larger than 14 points?	X		
5	Are the figures being submitted in a file format acceptable to the publisher?	X		
6	Has the figure been prepared at a resolution sufficient to produce a high-quality image?	X		
7	Are all figures numbered consecutively with Arabic numerals?	X		
8	Are all figures and tables mentioned in the text and numbered in the order in which they are mentioned?	X		
REFERENCES				
1	Are references cited both in text and in the reference list?			x
2	Do the text citations and reference list entries agree both in spelling and in date?			x
3	Are journal titles in the reference list spelled out fully?		x	

4	Are the references (both in the parenthetical text citations and in the reference list) ordered alphabetically by the authors' surnames?	x
5	Are inclusive page numbers for all articles or chapters in books provided in the reference list?	x
6	Are references to studies included in your meta-analysis preceded by an asterisk?	x
FORMAT		
1	Have you checked the journal's website for instructions to authors regarding specific formatting requirements for submission?	x
2	Is the entire manuscript—including quotations, references, author note, content footnotes, and figure captions—double-spaced? Is the manuscript neatly prepared?	x
3	Are the margins at least 1 in. (2.54 cm)?	x
4	Are the title pages, abstracts, references, appendices, content footnotes, tables, and figures on separate pages (with only one table or figure per page)? Are the figure captions on the same page as the figures? Are manuscript elements ordered in sequence, with the text pages between the abstract and the references?	x
5	Are all pages numbered in sequence, starting with the title page?	x
PARAGRAPHS AND HEADINGS		
1	Is each paragraph longer than a single sentence but not longer than one manuscript page?	x
2	Do the levels of headings accurately reflect the organization of the paper?	x
3	Do all headings of the same level appear in the same format?	x

7. Defect Log

Refer to OOPMS_Defects.

ID	Type	Status	Priority	Owner	Summary
1	Defect	Fixed	Low	truongmh60003	[TimeSheetPortlet] Import is never used
2	Defect	Accepted	Critical	truongmh60003	[TimeSheetPortlet] Missing important features
3	Defect	New	High	thachln	[TimeSheetPortlet] Not re-use the logon user of
4	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] Java build path of project is
5	Defect	New	High	tocongthanhhai	[ProjectEyePortlet] Done re-use DAO layer in D
6	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] Output file of Log4j is confi
7	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] There is no use CSS of uPor
8	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] Could not make distribution
9	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Unnecessary folder in SVN

10	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Unclear error message
11	Defect	Invalid	Medium	tocongthanhhai	[ProjectEyePortlet] Encapsulate properties of Pr
12	Defect	Fixed	High	tocongthanhhai	[ProjectEyePortlet] No data validation and displ
13	Defect	New	Medium	tocongthanhhai	[ProjectEyePortlet] Error when logon user has n
14	Defect	Fixed	Low	giang.phamnguyen	[Planner] Could not make distribution
15	Defect	Fixed	Medium	giang.phamnguyen	[Planner] Java build path of project is configured
16	Defect	Fixed	Low	giang.phamnguyen	[Planner] Project name/Project folder is not true
17	Defect	Fixed	Medium	giang.phamnguyen	[Planner] Home page of the Planner Portlet is no
18	Defect	Fixed	Medium	giang.phamnguyen	[Planner] Unclear error message
19	Defect	Fixed	Critical	duynd.vn	[RequirementPortlet] Add button doesnot work p
20	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Have not apply validation
21	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] CSS problem
22	Defect	Fixed	Low	duynd.vn	[RequirementPortlet] There are still test button,
23	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Have not validate create proj
24	Defect	Accepted	High	duynd.vn	[RequirementPortlet] Have not use Daocommon
25	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Unable to update project det
26	Defect	Fixed	High	duynd.vn	[RequirementPortlet] Init screen is not right
27	Defect	Fixed	Medium	giang.phamnguyen	[Planner] Do not reuse table Tasks of FMS
28	Defect	New	Medium	giang.phamnguyen	[Planner] Do not use DaoCommon
29	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Initial data for screen "Crea
30	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Java build path of project i
31	Defect	Fixed	Low	duynd.vn	[RequirementPortlet] Folder 'resouce' is placed n
32	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Error occurred but no log f
33	Defect	Duplicate	Medium	duynd.vn	[ProjectEyePortlet] Homepage is not good.
34	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] Validation messages are not
35	Defect	New	Low	tocongthanhhai	[ProjectEyePortlet] Project detail page is not goo
36	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] In screen "Create Project", C
37	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] In screen "Create Project", c
38	Defect	Fixed	Low	tocongthanhhai	[ProjectEyePortlet] In screen "Create Project", n
39	Defect	New	Medium	tocongthanhhai	[ProjectEyePortlet] Existing projects are not disp
40	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] CSS does not fit when dep
41	Defect	Fixed	Low	truongmh60003	[TimesheetPortlet] Not proper default date when
42	Defect	Fixed	Medium	truongmh60003	[TimesheetPortlet] Unable to update Date, Proje
43	Defect	Fixed	High	truongmh60003	[TimesheetPortlet] Add timesheet problem - Un
44	Defect	Fixed	Low	truongmh60003	(tomorrow)
45	Defect	Fixed	Low	truongmh60003	[TimesheetPortlet] Able to update approved tim
46	Defect	Fixed	Low	truongmh60003	[TimesheetPortlet] Unable to view all timesheet
47	Defect	Fixed	Low	truongmh60003	[TimeSheetPortlet] Java build path of project is
48	Review	New	Low	truongmh60003	[TimeSheetPortlet] Folder 'resouce' is placed no
49	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Use menu bar
50	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Layout of screen "Add req
51	Review	Fixed	Medium	giang.phamnguyen	[Planner] Could not click on links of projects
52	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] User can see non-unauthor
53	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] Could not go back the first
54	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Could not compile source co
55	Defect	Fixed	Medium	duynd.vn	[RequirementPortlet] List of requirements of pro

55	Defect	New	Medium	thachln	[ProjectEyePortlet] Click on the item with HAN
56	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] There is no confirmation scr
57	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Size of Project Code is not n
58	Defect	New	Medium	truongmh60003	[TimeSheetPortlet] The error occurred but no lo
59	Defect	New	Medium	tocongthanhhai	[ProjectEyePortlet] Could not perform "Create M
60	Defect	New	Medium	tocongthanhhai	[ProjectEyePortlet] Layout of screen Create Proj
61	Defect	New	Medium	tocongthanhhai	[ProjectEyePortlet] Developer of the project but
62	Defect	New	Medium	giang.phamnguyen	[Planner] Properties in /PlannerPortlet/resource/
63	Defect	New	Medium	giang.phamnguyen	[Planner] Non-unauthenticated projects are displ
64	Defect	New	Low	giang.phamnguyen	[Planner] Naming Controller is not good
65	Defect	New	Low	truongmh60003	[RequirementPortlet] There are two resource me
66	Defect	Fixed	Low	duynd.vn	[RequirementPortlet] Error in JSP
67	Defect	New	Medium	truongmh60003	[TimeSheetPortlet] Could not compile source co
68	Defect	Fixed	Medium	tocongthanhhai	[ProjectEyePortlet] Paging in workOrder, Produ
69	Defect	Started	Medium	duynd.vn	[RequirementPortlet] Portlet is displayed badly c
70	Defect	Accepted	Medium	duynd.vn	[RequirementPortlet] Only PM of a project can v
71	Defect	New	Low	truongmh60003	[TimeSheetPortlet] Duplicated libraries
72	Defect	New	High	truongmh60003	[TimeSheetPortlet] Error in the first screen.
73	Defect	New	High	truongmh60003	[TimeSheetPortlet] Duplicate models with entiti
74	Defect	New	Medium	giang.phamnguyen	[PlannerPortlet] Dialog box with unfriendly mes

8. Test Log

Module code	Pass	Fail	Untested	N/A	Number of test cases
Total					76
Project Eye	28				28
Planner	10				10
Requirement	8				8
Timesheet	12				12
DMS	4				6
Dashboard					2
Admin					3
Report					5
Android					2

F. User Manual

I. Installation Guide

Refer Installation Guide Document

System requirement before install OOPMS

1. Oracle 9i Database Server.
2. uPortal.
3. Java 6 (All package were built by java 6)

Step for install:

1. Run script SQL to create system OOPMS database.

- Run sql\OOPMS_All.sql to create database schema.
- Run sql\OOPMS_Fix.sql to update structure database.

2. Deploy OOPMS

- \SourceCode\OOPMS-Quickstart

1. Run Stop.bat in folder OOPMS-Quickstart\OOPMS-4.0.5-quick-start
2. Run cmd: ant clean in folder OOPMS-Quickstart\OOPMS-4.0.5-quick-start\uPortal-4.0.5
3. Run deploy-war.bat in OOPMS-Quickstart\OOPMS-4.0.5-quick-start\uPortal-4.0.5
4. Run Start.bat in folder OOPMS-Quickstart\OOPMS-4.0.5-quick-start

3. Deploy Portlet

- \SourceCode\RequirementPortlet

1. Run dish.bat (config version in file build.xml)
2. Copy file RequirementPortlet.war in folder SourceCode\RequirementPortlet\dist\RequirementPortlet-0.0.1 to \OOPMS-Quickstart\OOPMS-4.0.5-quick-start\uPortal-4.0.5\DeployPortlet.
3. Run deploy script DeployRequirementPortlet.bat in folder \OOPMS-Quickstart\OOPMS-4.0.5-quick-start\uPortal-4.0.5\DeployPortlet

4. Android version

- Copy file xxx.apk to memory card.
- Install apps.

5. Guide for Developer

1. Glashfish + Open Portlet Container are server for development environment.
2. Eclipse
3. Notepad++

Source: oopms\Trunk\SourceCode

Document: oopms\Trunk\Document

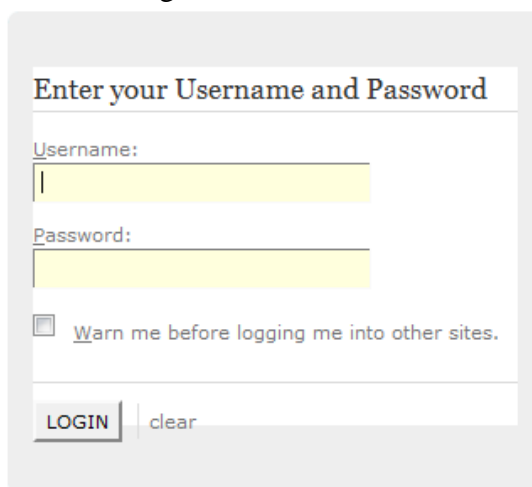
II. Users' Guide

Refer Users' Guide Document

1. General Guide

1.1 Log in

Screen to log – in Portal:

A screenshot of a web portal login interface. The title is "Enter your Username and Password". It features two input fields: "Username:" and "Password:", both with yellow highlights. Below the password field is a checkbox labeled "Warn me before logging me into other sites." At the bottom, there is a "LOGIN" button and a "clear" link.

Enter your Username and Password

Username:
|

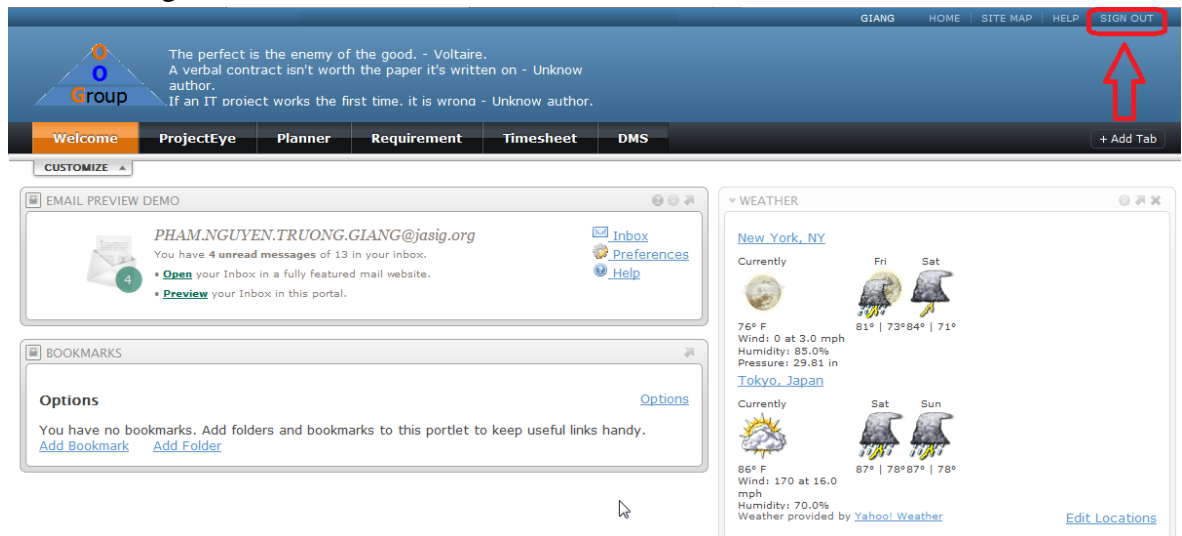
Password:
|

☐ Warn me before logging me into other sites.

LOGIN | clear

1.2 Log out

Button to log – out Portal:



2. User Guide (PM/Developer/Tester/QA)

2.1 View Projects

Go to ProjectEye Portlet, User see list of projects:

Create New Project				
Show 10 entries		Search: <input type="text"/>		
No	Project Name	Project Code	Your role in project	Action
1	Triple H Can	HHH	Project Manager	
2	PMSTEST2	TET	Developer	Leave this project
3	Phần Mềm Việt Nam	VNS	Developer	Leave this project
4	Project Management System	PMS	Project Manager	
5	SIM Schrodgers	SIM	Developer	Leave this project
Showing 1 to 5 of 5 entries				First Previous 1 Next Last

2.1.1 Create Project

Screen to create new project:

Create Project

Project Manager	PHAM.NGUYEN.TRUONG.GIANG
Project Code*	<input type="text"/>
Project Name*	<input type="text"/>
Project Status	<div>▼</div>
Project Category	<div>▼</div>
Direct Customer	<input type="text"/>
End Customer	<input type="text"/>
Business Domain	<div>▼</div>
Planned Start Date*	<input type="text"/> (mm/dd/yyyy)
Planned End Date*	<input type="text"/> (mm/dd/yyyy)
Scope and Objective	<div></div>

Create

Reset

Cancel

2.1.2 Update Project Information

Screen to update new information of a project:

Project Manager	Giang Pham
Project Code*	DND
Project Name*	<input type="text" value="DND Project"/>
Project Status	On-going ▼
Project Category	Development ▼
Direct Customer	<input type="text" value="Jason"/>
End Customer	<input type="text" value="Julian"/>
Business Domain	 ▼
Planned Start Date*	<input type="text" value="08/11/2012"/> (mm/dd/yyyy)
Planned End Date*	<input type="text" value="08/22/2012"/> (mm/dd/yyyy)
Scope and Objective	<div>Update information</div> <div></div>

2.1.3 Delete project

Button to delete project (Only Project Owner is able to delete project):

Create New Project				
Show 10 entries		Search: <input type="text"/>		
No	Project Name	Project Code	Your role in project	Action
1	Triple H Can	HHH	Project Manager	
2	PMSTEST2	TET	Developer	<input type="button" value="Leave this project"/>
3	Phần Mềm Việt Nam	VNS	Developer	<input type="button" value="Leave this project"/>
4	Project Management System	PMS	Project Manager	
5	SIM Schrodgers	SIM	Developer	<input type="button" value="Leave this project"/>
6	DND Project	DND	Project Owner and Project Manager	<input type="button" value="Delete this project"/>
Showing 1 to 6 of 6 entries				
First Previous 1 Next Last				

2.1.4 Assign PM

Button to Assign PM (Project Owner promote a team member to become Project Manager):

[ProjectEye Home](#)
[Project Detail](#)
[Risk, Issue](#)
[Change Request](#)
[Product](#)
[Work Order](#)
[Cost Management](#)

Assign Project Manager

No	Name	Account	Member Role	Action
1	dev3	dev3	Developer	Set This User To Project Manager
2	Giang Pham	PHAM.NGUYEN.TRUONG.GIANG	Project Owner and Project Manager	This user is already Project Manager
3	dev1	dev1	Developer	Set This User To Project Manager
4	test1	test1	Developer	Set This User To Project Manager

[Back](#)

2.2 Join Project

In each project, feature “Team Management” allow PM to allocate resource for the project.

[ProjectEye Home](#)
[Project Detail](#)
[Risk, Issue](#)
[Change Request](#)
[Product](#)
[Work Order](#)
[Cost Management](#)

Team Management

No	Name	Account	Member Role	Action
1	Ngo Duc Duy	DUYND	Project Manager	
2	dev2	dev2	Customer	Remove From This Project

[Save](#)
[Back](#)

Search User [Search](#)

☒ By Name
 ☐ by Account

2.3 View Product

List of products of a project:

2.3.1 Add Product

Screen to create new product:

2.3.2 Update Product

Screen to update product:

2.3.3 Delete Product

Delete product:

2.4 View Requirement

Go to Requirement Portlet, user can see list of joined project, click on project links, list of requirements of that project display:

User: [DUYND](#)
 Joined Projects: [11](#)
 Requirements: [Lists](#)
 Projects: [Lists](#)

Showing 1 to 10 of 11 entries

No.	Project Code	Project Name
1	PMS	Project Management System
2	SIM	SIM Schrodgers
3	TET	PMSTEST2
4	VNS	Phần Mềm Việt Nam
5	COR	Phần Mềm Việt
6	HHH	Triple H Can
7	HHH	Triple H Can
8	DUY	Mock Project New
9	FMS	Fsoft Management System
10	CEN	Center Environment New

First Previous 1 2 Next Last

DMS Group

User: [DUYND](#)
 Joined Projects: [11](#)
 Requirements: [Lists](#)
 Projects: [Lists](#)

Requirement Management

Showing 1 to 7 of 7 entries

No	Requirement Name	Project Name	Type	Size	Effort	SRS	Created Date	Designed Date
1	Timesheet	Project Management System	1	1	20	PMS_SRS_v1.0	2012-08-01	2012-08-01
2	Requirement	Project Management System	1	1	30	PMS_SRS_v1.0	2012-08-01	2012-08-01
3	Project Status	Project Management System	5	2	15	PMS_SRS_v1.0	2012-08-01	2012-08-01
4	Planner	Project Management System	1	1	10	PMS_SRS_v1.0	2012-08-01	2012-08-01
5	Defect Management	Project Management System	1	1	25	PMS_SRS_v1.0	2012-08-01	2012-08-01
6	Android	Project Management System	1	1	35	PMS_SRS_v1.0	2012-08-01	2012-08-01
7	reallyNew	Project Management System	3	2	7	PMS_SRS_v1.0	2012-08-01	2012-08-02

First Previous 1 Next Last

[Back](#) [Export](#)

2.4.1 Remove Requirement

Remove requirement:

User: [DUYND](#)
 Joined Projects: [11](#)
 Requirements: [Lists](#)
 Projects: [Lists](#)

Requirement Management

Showing 1 to 1 of 1 entries

No	Requirement Name	Project Name	Type	Size	Effort	SRS	Created Date	Designed Date
<input checked="" type="checkbox"/> 1	name	Mock Project New	3	2		srs		










First Previous 1 Next Last

[Add New](#) [Update](#) [Remove](#) [Back](#) [Export](#)

2.4.2 Update Requirement

Screen to update requirement.

User: [DUYND](#)
Joined Projects: 0
Requirements: [Lists](#)
Projects: [Lists](#)

Project Name*	<div>Project ▼</div>
Requirement Name*	<input type="text" value="name"/>
Requirement Size	<div>1 ▼</div>
Requirement Type	<div>1 ▼</div>
SRS Document*	<input type="text" value="srs"/>
Release Note*	<input type="text" value="note"/>
Design Document	<input type="text" value="doc"/>
Effort	<input type="text"/>
Elapsed Day	<input type="text"/>
Test Case	<input type="text"/>
Code Module	<input type="text"/>
Created Date	<input type="text"/>  (mm-dd-yyyy)
Designed Date	<input type="text"/>  (mm-dd-yyyy)
Coded Date	<input type="text"/>  (mm-dd-yyyy)
Tested Date	<input type="text"/>  (mm-dd-yyyy)
Deployed Date	<input type="text"/>  (mm-dd-yyyy)
Accepted Date	<input type="text"/>  (mm-dd-yyyy)
Response Date	<input type="text"/>  (mm-dd-yyyy)
Committed Date	<input type="text"/>  (mm-dd-yyyy)
Cancelled Date	<input type="text"/>  (mm-dd-yyyy)

[Save](#) [Requirement List](#)

2.4.3 Add Requirement

Screen to add new requirement to a project:

User: **DUYND**
 Joined Projects: **0**
 Requirements: [Lists](#)
 Projects: [Lists](#)

Project Name*	Project Management ▼
Requirement Name*	<input type="text"/>
Requirement Size	1 ▼
Requirement Type	1 ▼
SRS Document*	<input type="text"/>
Release Note*	<input type="text"/>
Design Document	<input type="text"/>
Effort	<input type="text"/>
Created Date	<input type="text"/> (mm-dd-yyyy)
Designed Date	<input type="text"/> (mm-dd-yyyy)
Coded Date	<input type="text"/> (mm-dd-yyyy)
Tested Date	<input type="text"/> (mm-dd-yyyy)
Deployed Date	<input type="text"/> (mm-dd-yyyy)
Accepted Date	<input type="text"/> (mm-dd-yyyy)

[Save](#) [Requirement List](#)

2.5 View Planner

Go to Planner Portlet, user can see list of joined project, click on project links, list of tasks of that project display:

User: **PHAM.NGUYEN.TRUONG.GIANG**
 Joined Projects: **6**

No. ▲	Project Code ◆	Project Name ◆
1	PMS	Project Management System
2	SIM	SIM Schrodgers
3	TET	PMSTEST2
4	VNS	Phần Mềm Việt Nam
5	HHH	Triple H Can
6	CEN	Center Environment New

Showing 1 to 6 of 6 entries [First](#) [Previous](#) [1](#) [Next](#) [Last](#)

Software Project Management Plan

No.	Project Code	Task Name	Stage	Process	Assigned To	Remaining Effort	Completeness Rate	Start Date	Finish Date	Actual Effort	Update	Delete
1	PMS	Task of OOPMS 01	1-Initiation	Document Control	Ngo Duc Duy	0H		08/01/2012	08/06/2012	0H		
2	PMS	Task of OOPMS "02"	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012			
3	PMS	Task of OOPMS 03	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012			
4	PMS	Task of OOPMS 04	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012	2H		
5	PMS	Task of OOPMS 05	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012	2H		
6	PMS	Task of OOPMS 06	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012	2H		
7	PMS	Task of OOPMS 07	3-Solution	Training	Ngo Duc Duy	33H	0.00%	07/02/2012	07/04/2012	2H		
8	PMS	Task of OOPMS 08	2-Definition	Document Control	Ngo Duc Duy	0H		07/02/2012	09/13/2012			

2.5.1 Add/ Update task

User **PHAM.NGUYEN.TRUONG.GIANG**

Role **Project Manager**

Add

Title*

Start Date*

(MM-DD-YYYY)

Finish Date*

(MM-DD-YYYY)

Planned Effort*

0

(Hours)

Current Effort*

0

(Hours)

Description*

Stage*

Product*

Process*

Product Size Unit*

Assigned To*

Product Size*

0

Status*

Completed Size

OK

Cancel

2.6 View Timesheet

Go to Timesheet Portlet, user can see list of joined project, click on project links, and list of timesheets display (can be sort, search by project):

Software Project Management Plan

User **DUYND** Project **SIM Schroders** From Date To Date

Role **Project Manager** Status **All**

Search

Add

Show **10** entries Search:

<input type="checkbox"/>	Date	Project	Work	Process	Time	Description	Status
<input type="checkbox"/>	08/04/2012	Fsoft Management System	Review	Customer Support	4	5	UnApproved
<input type="checkbox"/>	08/03/2012	SIM Schroders	Review	Coding	3	rt	UnApproved
<input type="checkbox"/>	07/26/2012	SIM Schroders	Correct	IS Management	6	abc update 12345	UnApproved
<input type="checkbox"/>	07/24/2012	Fsoft Management System	Review	Management Review	4	test tiếng việt update	UnApproved
<input type="checkbox"/>	07/24/2012	Fsoft Management System	Review	Requirement	3	test 3 update update	Approved

Showing 1 to 5 of 5 entries First Previous 1 Next Last

Update **Delete** **Approve** **Reject**

2.6.1 Add Timesheet

TimesheetPortlet

Show **10** entries Search:

Date	Project	Work	Process	Time	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Showing 1 to 10 of 19 entries First Previous 1 2 Next Last

Submit **Back**

2.6.2 Update Timesheet

Show **10** entries Search:

Date	Project	Work	Process	Time	Description
<input type="text"/>	Fsoft Management System	Review	Customer Support	<input type="text"/>	<input type="text"/>
<input type="text"/>	SIM Schroders	Review	Coding	<input type="text"/>	<input type="text"/>
<input type="text"/>	SIM Schroders	Correct	IS Management	<input type="text"/>	<input type="text"/>
<input type="text"/>	Fsoft Management System	Review	Management Review	<input type="text"/>	<input type="text"/>
<input type="text"/>	Fsoft Management System	Review	Requirement	<input type="text"/>	<input type="text"/>

Showing 1 to 5 of 5 entries First Previous 1 Next Last

Update **Back**

26.3 Delete/ Approve/ Reject Timesheet

User **DUYND** Project **SIM Schrodgers** From Date To Date

Role **Project Manager** Status **All**

Search

Add

Show **10** entries Search:

	Date	Project	Work	Process	Time	Description	Status
<input type="checkbox"/>	08/04/2012	Fsoft Management System	Review	Customer Support	4	5	UnApproved
<input checked="" type="checkbox"/>	08/03/2012	SIM Schrodgers	Review	Coding	3	rt	UnApproved
<input type="checkbox"/>	07/28/2012	SIM Schrodgers	Correct	IS Management	6	abc update 12345	UnApproved
<input checked="" type="checkbox"/>	07/24/2012	Fsoft Management System	Review	Management Review	4	test tiếng việt update	UnApproved
<input checked="" type="checkbox"/>	07/24/2012	Fsoft Management System	Review	Requirement	3	test 3 update update	Approved

Showing 1 to 5 of 5 entries First Previous 1 Next Last

Update **Delete** **Approve** **Reject**

2.7 View Defect

2.7.1 Log Defect

2.7.2 Assign Defect

3. Admin Guide

3.1 Create User

3.2 Update User

3.3 Delete User

4. Android Guide

4.1 Copy .apk install file

4.2 Install app

4.3 View Projects' status

4.4 View project's detail status

