

SOFTWARE REQUIREMENT SPECIFICATIONS FOR STOCK INVENTORY MANAGEMENT SYSTEM(PS-2)

Version 1.0

TEAM MEMBERS:-

VIDIT JAIN(20BCS243)

RISHAV KUMAR(20bcs182)

AKHIL BABU(20bcsI01)

MERAVATH DILIP KUMAR(20bcs129)

ATUL MACHAL(20bcs045)

GAGAN MEENA(20bcs085)

PULKIT BHARGAVA(20bec078)

AVINASH SOY(20bcs047)

INDEX

1.	Problem Analysis and Project Planning.....	2
2.	Problem Statement.....	3
3.	USE CASE DIAGRAM.....	4
4.	USE CASE DESCRIPTION.....	5
5.	DATABASE TABLE DESCRIPTION.....	9

Problem analysis and project planning

1.1 Introduction

The stock maintenance system is basically for the administrators who access the information about the stock (non consumable items in the department) and retrieve the information.

1.2 Objectives

The purpose of the document is to define the requirements of the stock maintenance and verification system. This supplementary specification lists the requirements that are not readily captured in the use cases of the use case model. The supplementary specification & the use case model together capture a complete set of requirements on the system.

1.3 Scope

This supplementary specification applies to the stock maintenance system. This specification defines the non-functional requirements of the system, such as reliability, usability, performance and supportability as well as functional requirements that are common across a number of use cases.

1.4 Problem Statement

A new stock maintenance system for the institute is to replace the existing maintenance system which is inefficient. The new stock maintenance system will allow the administrators to record information of the non consumable items available in their respective department and generate reports based on the availability and its condition.

The new system will have a web and app interface to allow admin to enter the information of items, create reports, and request for an item. Department admin can only access the information of their respective department while Academics admin can access the information of non-consumable items in the institute. The system retains the records of the current condition, quantity, remarks of each item.

PROBLEM STATEMENT(USE CASE ANALYSIS)

1.5 Identified Use case

- ✧ **View Global Stock** :- It is a transaction performed by the PS2 admin when he/she wishes to view the stocks available in the stock maintenance system.
- ✧ **Add Global Stock** :- It is a transaction performed by the PS2 admin when he wishes to add, modify and/or delete stock information from the system.
- ✧ **Generate Global Report**:- It is a transaction performed by the PS2 administrator when he wishes to view the report of all departments generated after all the stock updates.
- ✧ **Create Global Transfer Request** : It is a transaction performed by the PS2 administrator when he wishes to transfer any item to any other department.
- ✧ **View Global Transfer Execution** :- It is a transaction performed by the PS2 administrator when he wishes to view the data that has been transferred from one department to another, administration to another department, department to administration.

- ✧ **View Dept Stock** :- It is a transaction performed by the Dept.admin when he/she wishes to view the stocks available in the stock maintenance system.
- ✧ **Add Dept. Stock** :- It is a transaction performed by the Dept. admin when he wishes to add, modify and/or delete stock information from the system.
- ✧ **Generate Dept. Report**:- It is a transaction performed by the Dept. administrator when he wishes to view the report of their department generated after all the stock updates.
- ✧ **Create Dept. Transfer Request** : It is a transaction performed by the Dept. administrator when he wishes to transfer any item to any other department or to Global administrator.
- ✧ **View Dept. Transfer Execution** :- It is a transaction performed by the Dept. administrator when he wishes to view the data that has been transferred from their department to another department/ Global administration, Global administration/ Other department to thier department.

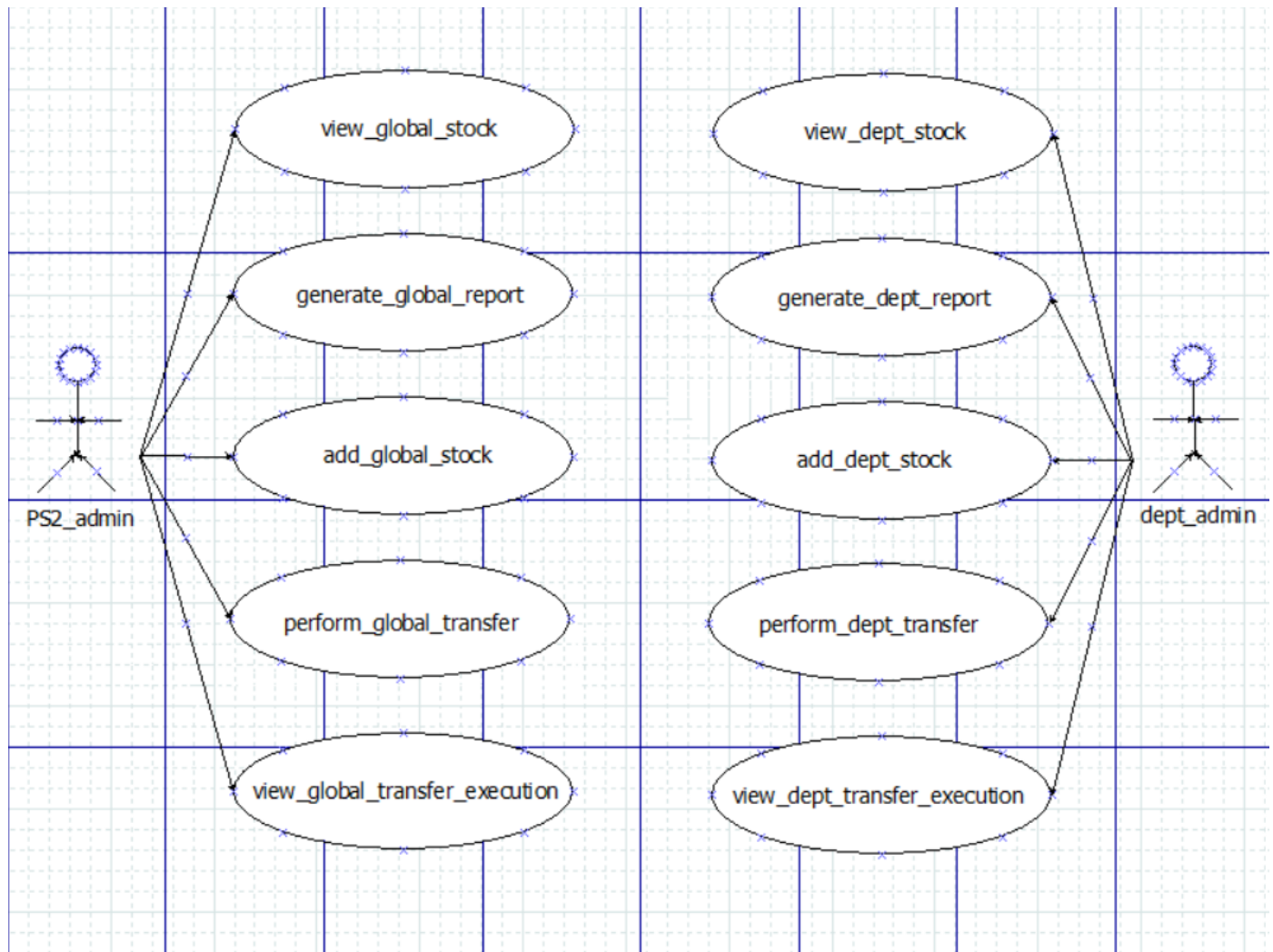
1.6 Identified Actors

- ✧ Department (dept) Admin:- He/She can maintain the data and reports of his department's non consumable items. He/She is responsible for modifying the information in his department's database.
- ✧ There are sixteen Department/Section admin :-
 1. CSE Admin
 2. ECE Admin
 3. ME Admin
 4. Design Admin
 5. Natural Science Admin
 6. Liberal Arts Admin
 7. Mess admin
 8. PHC Admin

9. Visitor Hostel Admin
10. Hostel Admin
11. Academics Admin
12. innovation and incubation admin
13. Sports Admin
14. Library admin
15. RSPC admin
16. unknown admin

✧ PS2 Admin:- The administrator maintains all the database and reports. He is responsible for changing the information of the database and takes care of the payment and administrative reports.

USE CASE DIAGRAM



USE CASE DESCRIPTION

1. *view_global_stock*

Description:- The global stock admin In-charge or PS2 admin is responsible for checking all the stocks belonging to all the mentioned departments/sections.

Actor:- PS2_Admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin go to his/her Dashboard, and click the Purchase and Store section.

- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the View Stock Section.
- The system displays the stock information for all the mentioned department/sections, such as Stock name, quantity, department/section it belongs to, etc.

Alternative Flow:-

- If no stock is available for the mentioned departments/sections, the system displays an empty table indicating no stock information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the stock information for all the mentioned departments/sections.
- If the use case was unsuccessful, the system state remains unchanged.

2. generate_global_report

Description:- The global stock admin In-charge or PS2 admin is responsible for generating reports of all the stocks belonging to all mentioned departments/sections.

Actor:- PS2_Admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin go to his/her Dashboard, and click the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.

- The admin locates and selects the Generate Report Section.
- The system generates a report containing the stock information for all the mentioned departments/sections.
- In the generated report, Admin can view details such as Stock name, quantity, department/section it belongs to, etc.

Alternative Flow:-

- If no stock is available for the mentioned departments/sections, the system generates an empty report indicating no stock information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the generated stock information report for all the mentioned departments/sections.
- If the use case was unsuccessful, the system state remains unchanged.

3. view_global_transfer_execution

Description:- The global stock admin In-charge or PS2 admin is responsible for overseeing global stock transfers.

Actor:- PS2_Admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.

- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the View Transfer Execution section.
- The system retrieves and displays all the stock transfer information.
- Admin can view details such as current location of the stocks, from which location they have been transferred and the quantity of stocks transferred.

Alternative Flow:-

- If no stock transfer has been executed, then the system displays an empty table indicating that no transfer information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the stock transfer information.
- If the use case was unsuccessful, the system state remains unchanged.

4. *add_global_stock*

Description:- The global stock admin In-charge or PS2 admin will be able add stocks to all the mentioned departments/sections.

Actor:- PS2_Admin

Precondition:- The admin must be logged in to the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.

- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the Add Stock section.
- The system displays a form to the admin for adding stock details.
- The system validates the entered data and confirms if all the required fields are filled.
- If the form is valid, the system adds the stocks.
- The system generates a confirmation pop-up indicating that the stocks have been added successfully.
- Once he/she clicks, the system displays the stock information.

Alternative Flow:-

- If the form submitted by the admin is invalid, the system displays an error message indicating the reason for the invalid form and the admin may need to correct the errors and resubmit the form.

Post-Condition:-

- If the use case was successful, the stocks would be added as per the details entered by the admin. The stock information is updated in the system and the admin can view the updated information.
- If the use case was unsuccessful, the system state remains unchanged.

5. perform_global_transfer

Description:- It allows PS2 admin to transfer stock from any department/section to another department/section within the organization.

Actor:- PS2_Admin

Precondition:- The admin must be logged in to the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the Perform Transfer section.
- The system displays a form to the admin to fill in the details.
- The system validates the entered data and confirm if all the required fields are filled.
- If the form is valid, the system transfers the specified quantity of stock from current department/section to transfer department/section.
- The system updates the stock records in both the current department/section and the transfer department/section.
- The system generates a confirmation pop-up indicating a successful stock transfer.

Alternative Flow:-

- If the form submitted by the admin is invalid, the system displays an error message indicating the reason for the invalid form and the admin may need to correct the errors and resubmit the form.

Post-Condition:-

- If the use case was successful, the specified quantity of stocks would be transferred from current

department/section to transfer department/section. The stock records in both the current department/section and the transfer department/section are updated.

- If the use case was unsuccessful, the system state remains unchanged.

6. *view_dept_stock*

Description:- The dept stock admin In-charge is responsible for checking all the stocks belonging to his/her dept.

Actor:- dept_admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin go to his/her Dashboard, and click the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the View Stock Section.
- The system displays the stock information for his dept/section, such as stock name, quantity, etc.

Alternative Flow:-

- If no stock is available in his dept/section, the system displays an empty table indicating no stock information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the stock information for his dept/section.

- If the use case was unsuccessful, the system state remains unchanged.

7. generate_dept_report

Description:- The dept. admin is responsible for generating reports of all the stocks belonging to his dept/section.

Actor:- dept_admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin go to his/her Dashboard, and click the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the Generate Report Section.
- The system generates a report containing the stock information for his dept/section.
- In the generated report, Admin can view details such as Stock name, quantity, etc.

Alternative Flow:-

- If no stock is available in his dept/section, the system generates an empty report indicating no stock information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the generated stock information report for his dept/section.

- If the use case was unsuccessful, the system state remains unchanged.

8. view_dept_transfer_execution

Description:- The dept. admin is responsible for overseeing his dept/section stock transfers.

Actor: -dept_admin

Precondition:- actor must be logged into the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the View Transfer Execution section.
- The system retrieves and displays all the stock transfer information from/to his dept/section.
- Admin can view details such as current location of the stocks, from which dept/section they have been transferred and the quantity of stocks transferred.

Alternative Flow:-

- If no stock transfer has been executed in his dept/section, then the system displays an empty table indicating that no transfer information is available.

Post-Condition:-

- If the use case was successful, the admin is provided with the stock transfer information.

- If the use case was unsuccessful, the system state remains unchanged.

9. *add_dept_stock*

Description:- The dept. admin will be able to add stocks in his dept/section.

Actor:- dept_admin

Precondition:- The admin must be logged in to the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the Add Stock section.
- The system displays a form to the admin for adding stock details.
- The system validates the entered data and confirms if all the required fields are filled.
- If the form is valid, the system adds the stocks.
- The system generates a confirmation pop-up indicating that the stocks have been added successfully.
- Once he/she clicks, the system displays the stock information.

Alternative Flow:-

- If the form submitted by the admin is invalid, the system displays an error message indicating the reason for the invalid form and the admin may need to correct the errors and resubmit the form.

Post-Condition:-

- If the use case was successful, the stocks would be added as per the details entered by the admin. The stock information is updated in the system and the admin can view the updated information.
- If the use case was unsuccessful, the system state remains unchanged.

10. perform_dept_transfer

Description:- It allows dept admin to transfer stock from his dept/section to another dept/section within the organization.

Actor:- dept_admin

Precondition:- The admin must be logged in to the system.

Flow of Events:-

- The admin navigates to the dashboard after successful login and selects the Purchase and Store section.
- The admin is redirected to a new page related to Purchase and Store Section.
- The admin locates and selects the Perform Transfer section.
- The system displays a form to the admin to fill in the details.
- The system validates the entered data and confirm if all the required fields are filled.
- If the form is valid, the system transfers the specified quantity of stock from his dept/section to transfer dept/section.
- The system updates the stock records in his dept/section and the transfer dept/section.

- The system generates a confirmation pop-up indicating a successful stock transfer.

Alternative Flow:-

- If the form submitted by the admin is invalid, the system displays an error message indicating the reason for the invalid form and the admin may need to correct the errors and resubmit the form.

Post-Condition:-

- If the use case was successful, the specified quantity of stocks would be transferred from his dept/section to transfer dept/section. The stock records in his dept/section and the transfer dept/section are updated.
- If the use case was unsuccessful, the system state remains unchanged.