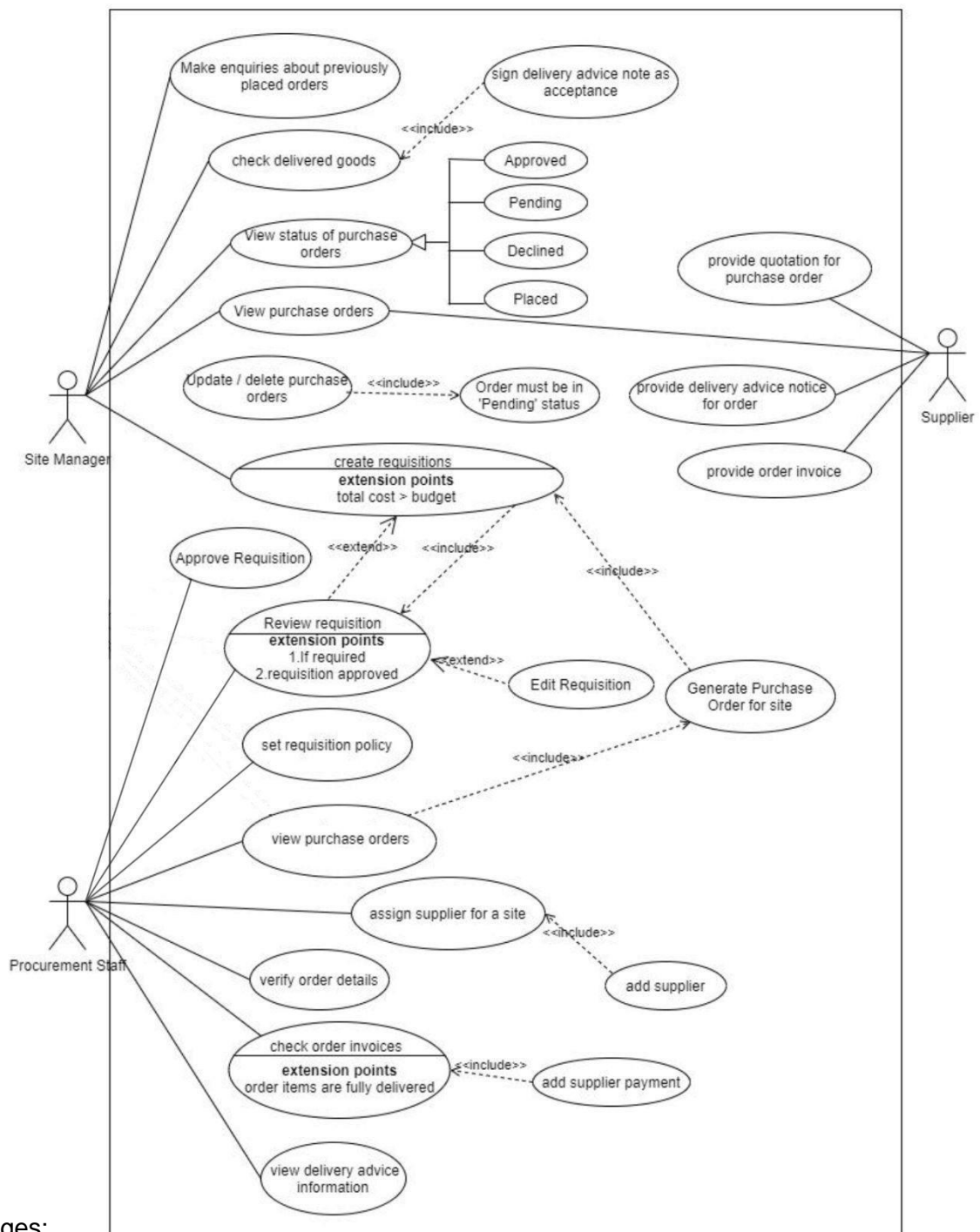


Procurement Construction Industry
By
2021S2_REG_WE_09

Use Case Diagram

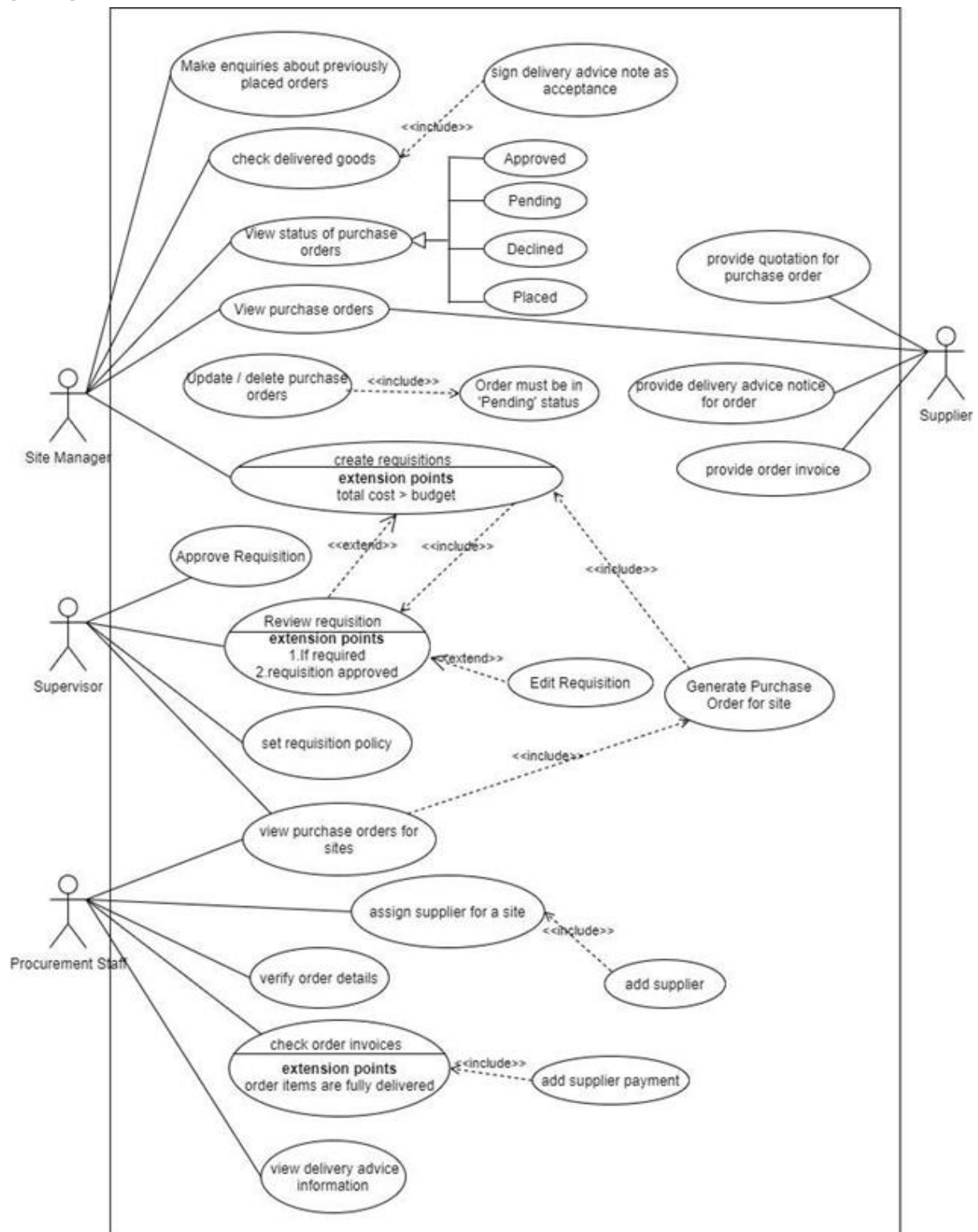
Reflected:



Changes:

- The responsibilities of the supervisor have been combined with the functionalities of the procurement staff.
- Change the use case “view purchase orders for sites” to “View purchase orders” from all orders.

proposed:



Proposed Use Case Scenarios & reflected Use case scenarios

Reflected - create Requisition

Use Case Id:	01	
Use Case Name:	Create Requisition	
Pre-conditions:	1) User has to log in as a site manager through the mobile browser	
Primary Actors:	Site Manager	
Secondary Actors:	Supervisor, Procurement Staff	
Main Flow:	Step	Action
	1	Site manager clicks on 'Create Requisition' button in the application.
	2	System prompts the requisition form.
	3	Site manager fills the form.
	4	Site manager selects the item and the quantity desired and clicks on the 'Add item' button one by one to complete the requisition.
Post Condition:	System stores the created requisition details.	

Changes :

Every purchase order has to be approved by the procurement staff, there is no budget comparison mechanism

Proposed - Create Requisition

Use Case Id:	01	
Use Case Name:	Create Requisition	
Pre-conditions:	1) Mobile application is installed. 2) User has logged into the application.	
Primary Actors:	Site Manager	
Secondary Actors:	Supervisor, Procurement Staff	
Main Flow:	Step	Action
	1	Site manager clicks on 'Create Requisition' button in the application.
	2	System prompts the requisition form.
	3	Site manager fills the form.
	4	Site manager selects the item and the quantity desired and clicks on the 'Add item' button one by one to complete the requisition.
	5	System calculates the total price.
	6	Order confirmation process is generated by the system.
	7	System prompts the order confirmation
Extensions:	6) <ul style="list-style-type: none"> I) If the total price is less than the budget, it will be approved automatically. The order can be confirmed by that. II) If the total price is greater than the budget, supervisor's approval will be needed. III) If a past order is done by the management, and the price of the order is greater than the actual budget limit, the order must be approved by the procurement staff. 	
Post Condition:	System stores the created requisition details.	

Reflected - Check Goods Delivery

Use Case Id:	02	
Use Case Name:	Check goods delivery	
Goal in Context:	The site Manager checks the delivered goods and updates one by one for each item to complete the status of the order after completing the checking.	
Pre-conditions:	1) User has to logged in to the system using mobile browser, 2) Particular goods are delivered	
Post-condition:	Check delivery page is used to check about received orders by a user.	
Primary Actors:	Site Manager	
Secondary Actors:	-	
Main Flow:	Step	Action
	1	The site manager clicks on check delivery in the application.
	2	System shows a data table that contains item id, item name, ordered quantity, arrived quantity, shortage and approve status.
	3	Site manager approves or disapproves the delivered goods after checking the goods.
Extensions:	5a I) The item is approved by the site manager II) The system highlights the tick with green color. 5b I) The item is disapproved by the site manager II) The system highlights the cross with red color and display a pop up a text box to enter a comment for the reject reasons.	
Post Condition:	If all the items have been approved an invoice is generated. If all the items are not approved supplier should be contacted to come to a decision in regard to the purchase order.	

Changes :

The site manager approves each item one by one by checking and add the final result to the notice.

Proposed - Check Goods Delivery

Use Case Id:	02	
Use Case Name:	Check goods delivery	
Goal in Context:	The site Manager checks the delivered goods and updates one by one for each item to complete the status of the order after completing the checking.	
Pre-conditions:	3) User has to logged in to the system using mobile browser, 4) Particular goods are delivered a user.	
Primary Actors:	Site Manager	
Secondary Actors:	-	
Main Flow:	Step	Action
	1	Site manager clicks on check delivery in the application.
	2	System allows site manager to select an order id, supplier name from a dropdown menu and a date picker to select a particular order date.
	3	Site manager chooses an order id, a supplier name, and a date to proceed with the checking process.
	4	System shows a data table that contains item id, item name, ordered quantity, arrived quantity, shortage and approve status.
	5	Site manager approves or disapproves the delivered goods after checking the goods.
Extensions:	5a I) The item is approved by the site manager II) The system highlights the tick with green color. 5b I) The item is disapproved by the site manager II) The system highlights the cross with red color and display a pop up a text box to enter a comment for the reject reasons.	
Post Condition:	If all the items are approved an invoice is generated. If all the items are not approved supplier should be contacted to come to a decision in regarded to the purchase order.	

Proposed - Approvement of Purchase Requisition

Use Case Id:	03	
Use Case Name:	Approvement of Purchase Requisition	
Goal in Context:	According to the supervisor, requisition forms should be approved by completing the given conditions.	
Pre-conditions:	User should be authorized to approve a Purchase Requisition and it should be in "To be Approved" state.	
Primary Actors:	Procurement supervisor	
Secondary Actors:	-	
Main Flow:	1	Procurement supervisor clicks on the purchase requisition form records.
	2	System shows the unauthorized purchase requisition forms.
	3	Supervisor selects on the approved button.
	4	System changes the purchase requisition form's state to "Approved".
	5	Approved order message is sent by the system to the site manager.
Extensions:	5) a. Supervisor needs to reject the purchase requisition. <ul style="list-style-type: none"> i. Supervisor clicks on the reject button. ii. System prompts the supervisor to enter the Rejected Reason. iii. Supervisor enters the rejected reason. iv. System changes the purchase requisition status to "Rejected." v. System sends the purchase declined message to the supervisor. 	
Post Condition:	System generates the purchase order, and it is sent to the supplier.	

Changes:

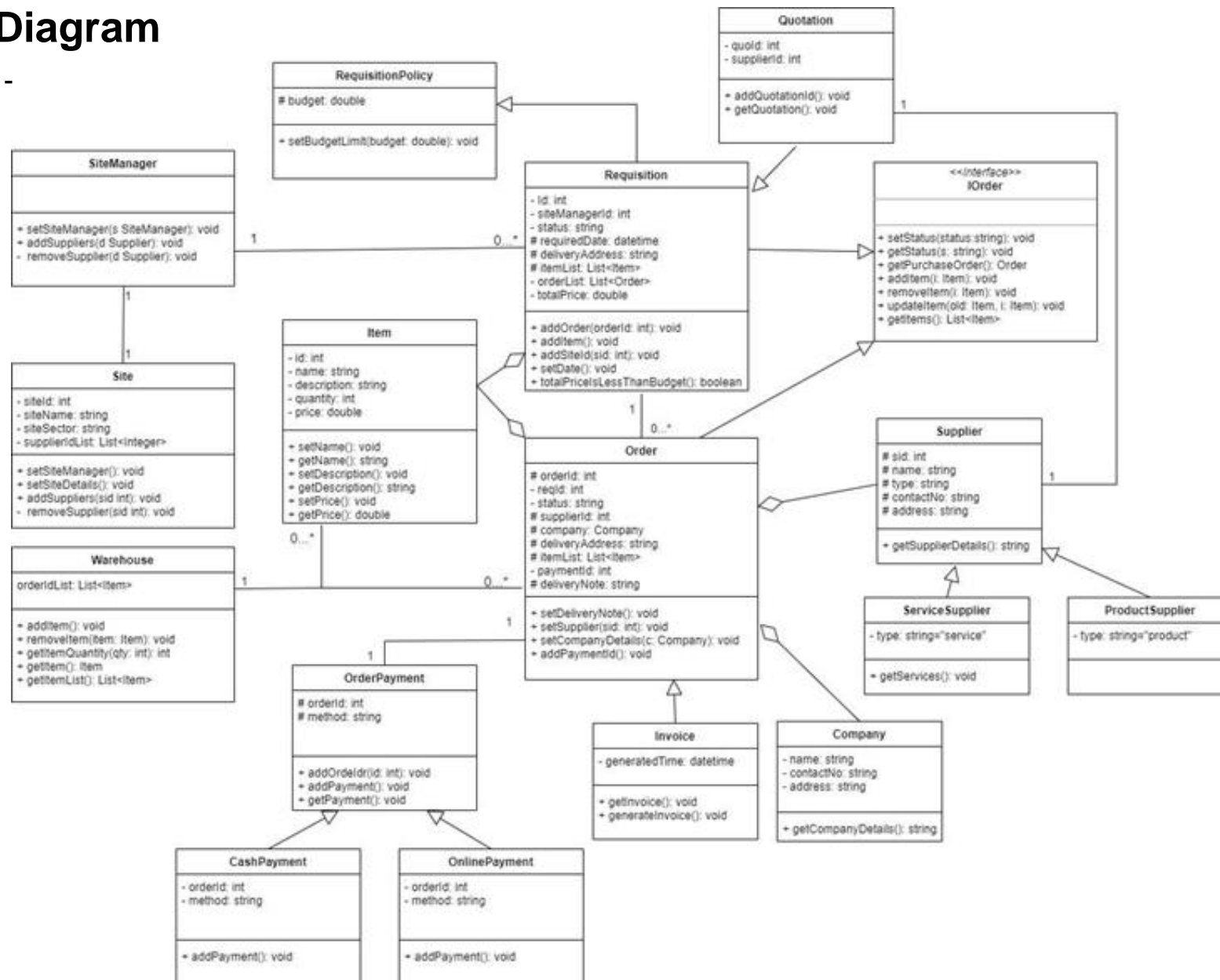
The supervisor role responsibilities has been assigned to the procurement staff

Reflected - Approvement of Purchase Requisition

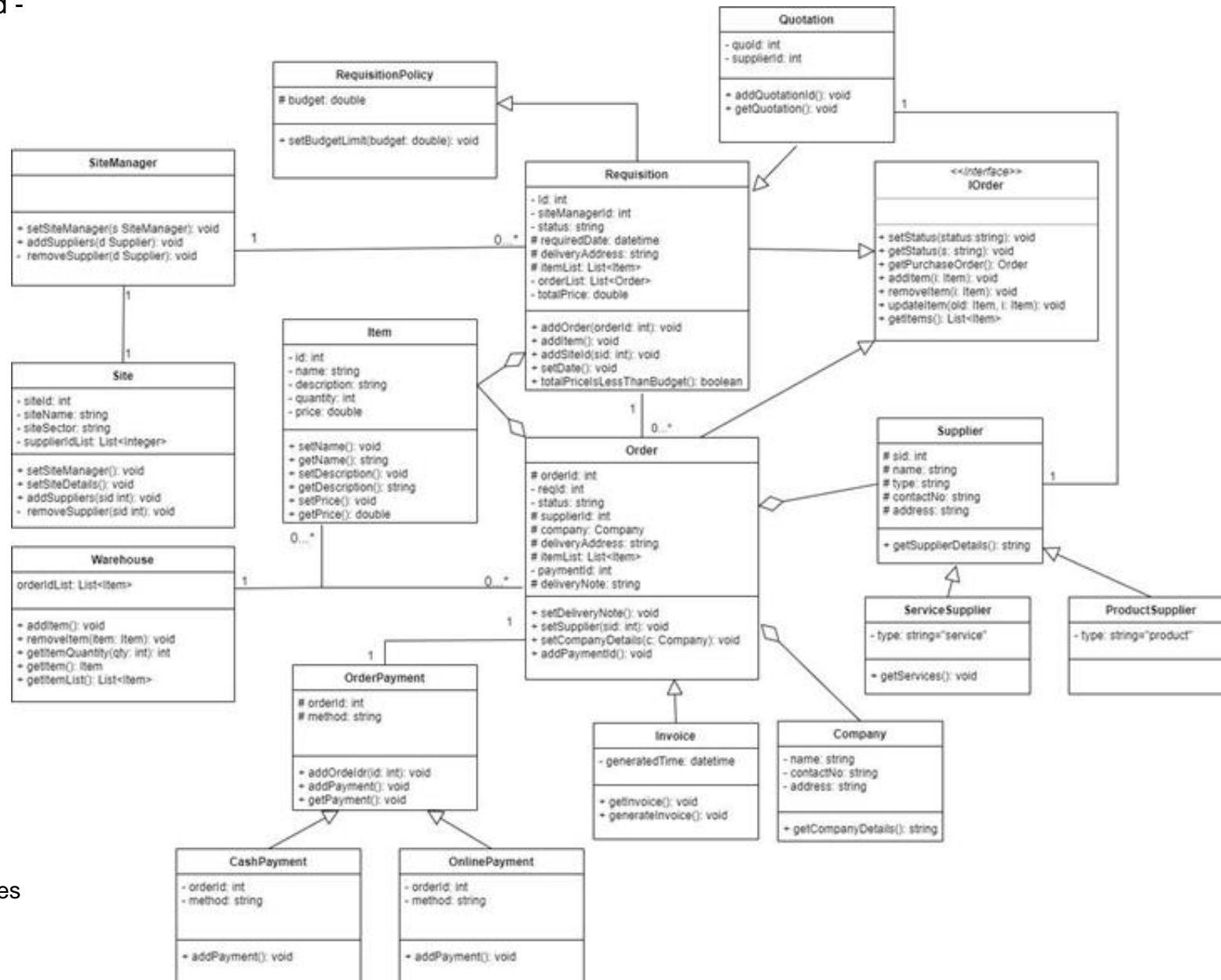
Use Case Id:	03	
Use Case Name:	Approvement of Purchase Requisition	
Goal in Context:	According to the procurement staff member, requisition forms should be approved by completing the given conditions.	
Pre-conditions:	User should be authorized to approve a Purchase Requisition and it should be in the "To be Approved" state.	
Primary Actors:	Procurement staff	
Secondary Actors:	-	
Main Flow:	1	Procurement staff member clicks on the purchase requisition form records.
	2	The system shows the purchase requisition forms to be authorized.
	3	The procurement staff member clicks on the Approve button.
	4	System changes the purchase requisition form's state to "Approved".
	5	Approved order message is sent by the system to the site manager
Extensions:	5) a. procurement staff members need to reject the purchase requisition. <ul style="list-style-type: none"> i. procurement staff member clicks on the reject button. ii. The system prompts the supervisor to enter the Rejected reason. iii. procurement staff member enters the rejected reason. iv. System changes the purchase requisition status to "Rejected." v. The system sends the purchase declined message to the procurement staff member. 	
Post Condition:	System generates the purchase order, and it is sent to the supplier.	

Class Diagram

Proposed -



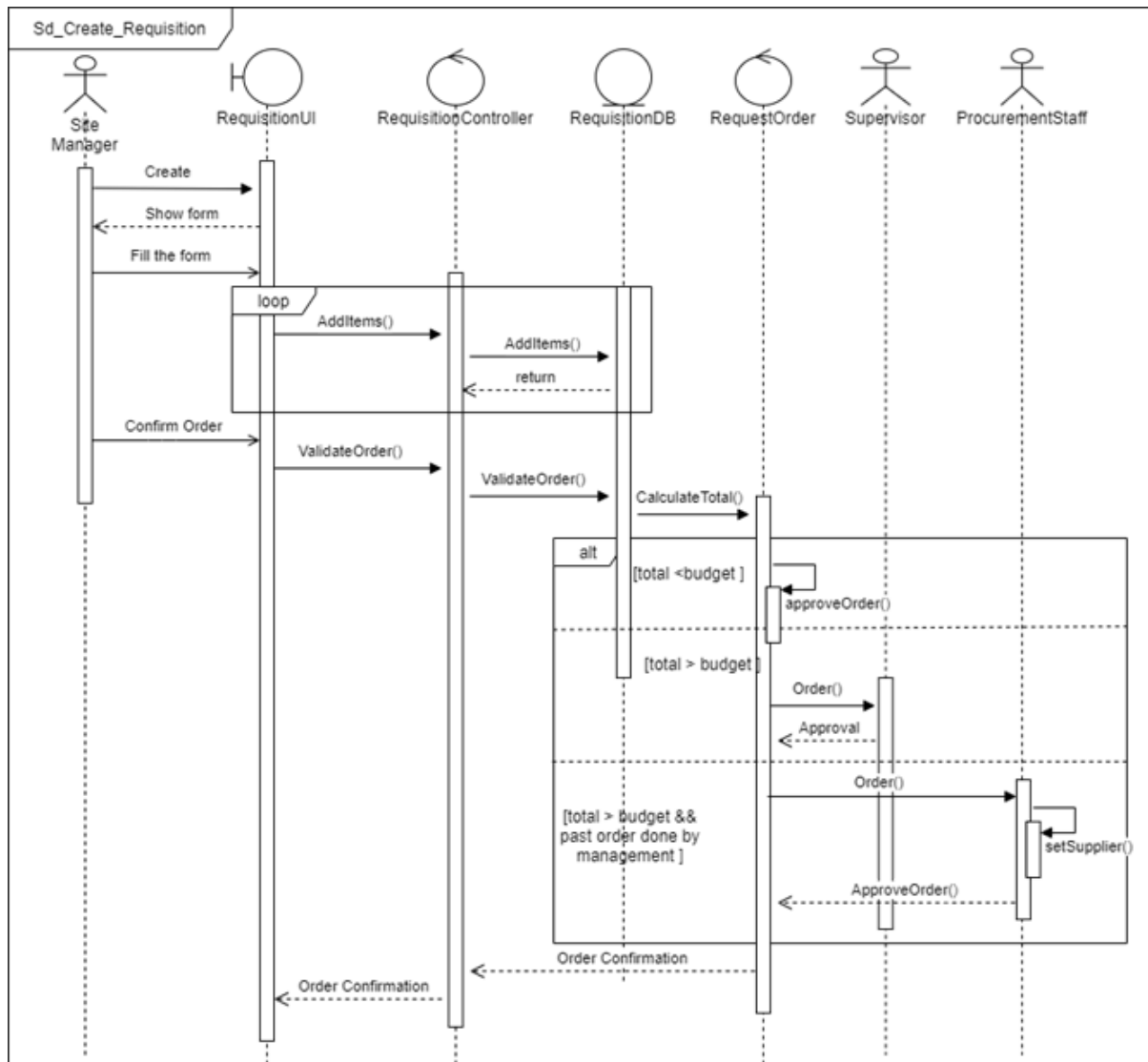
Reflected -



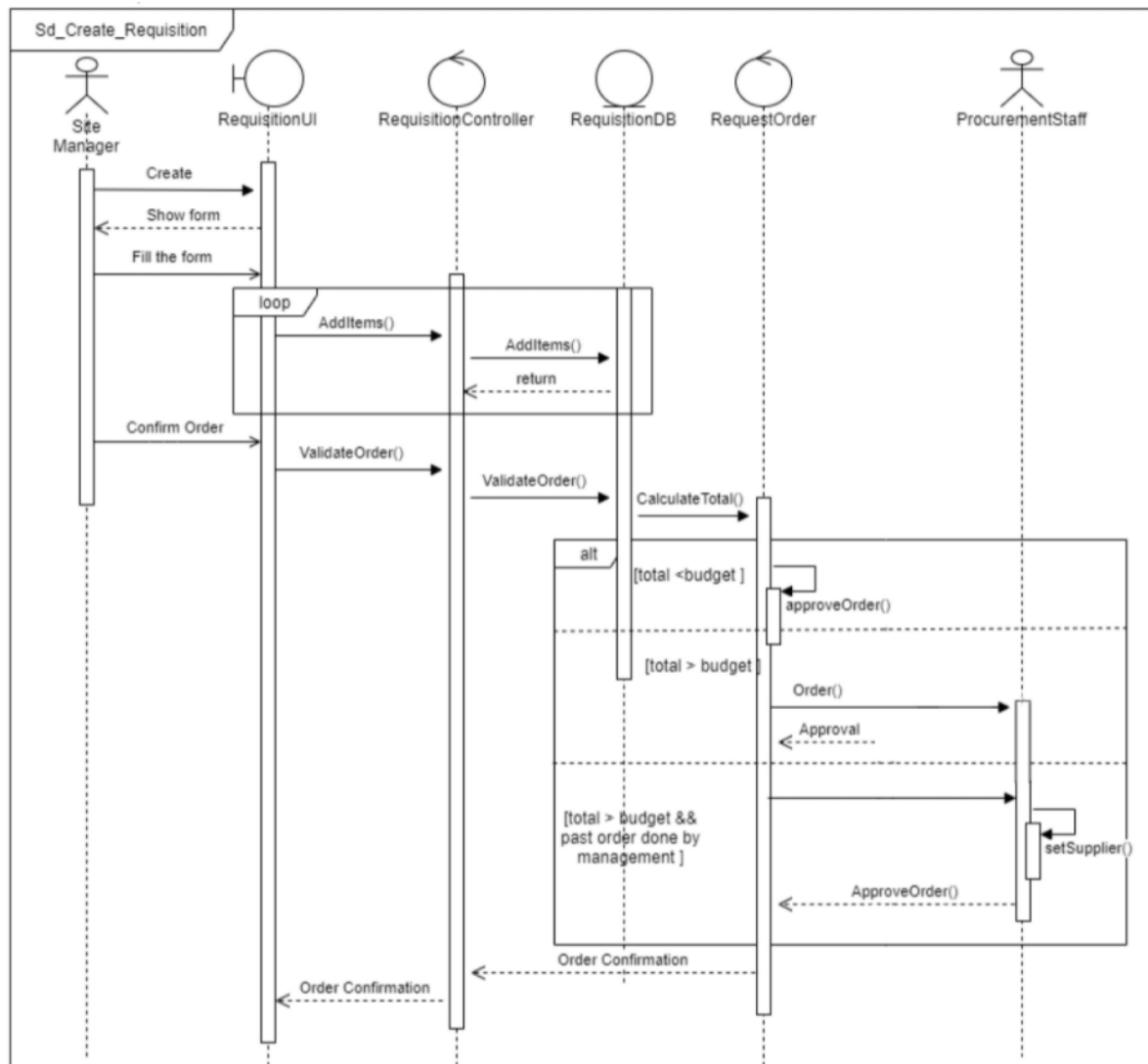
*no changes

sequence Diagrams

Proposed - Create Requisition



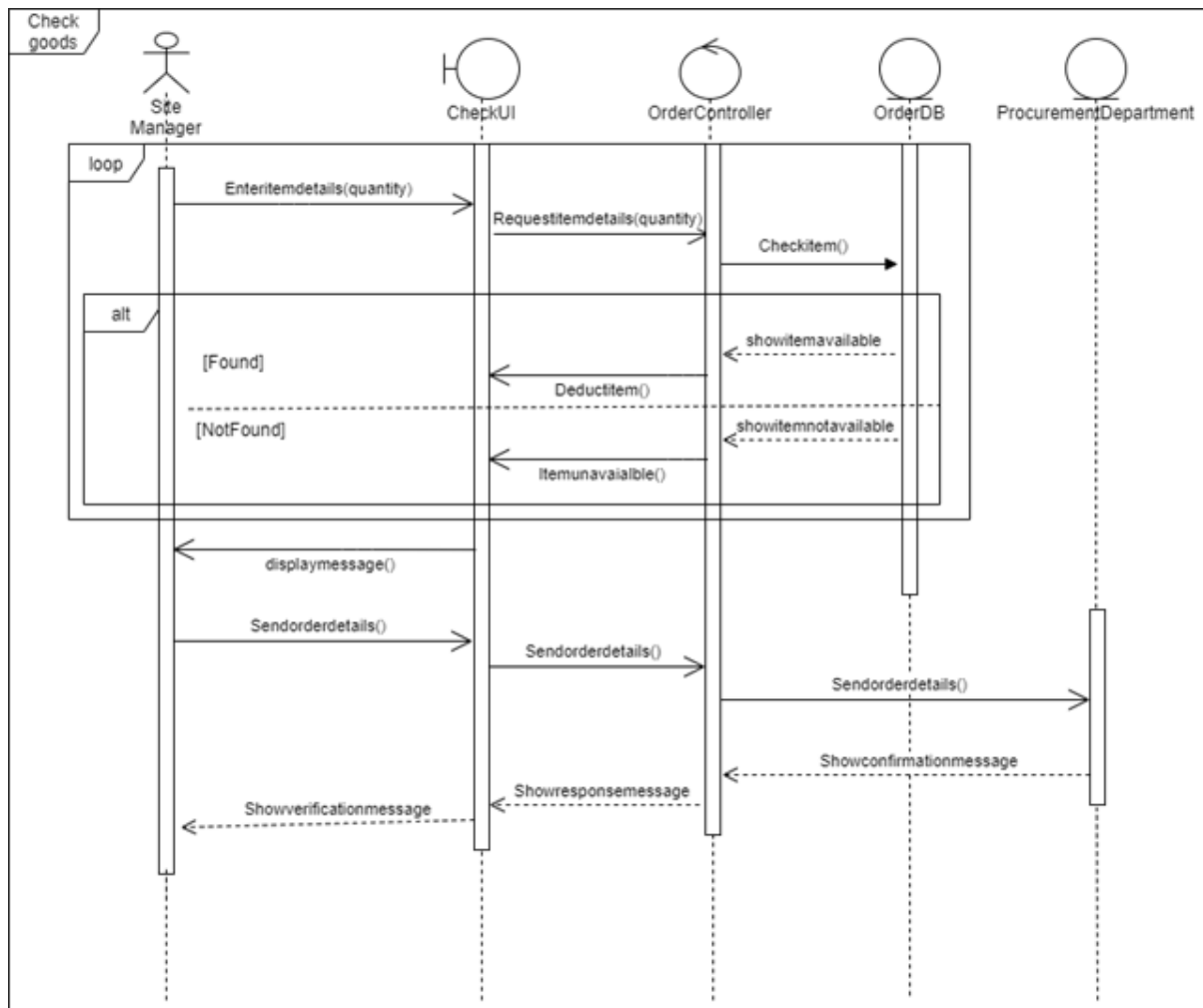
Reflected- Create Requisition



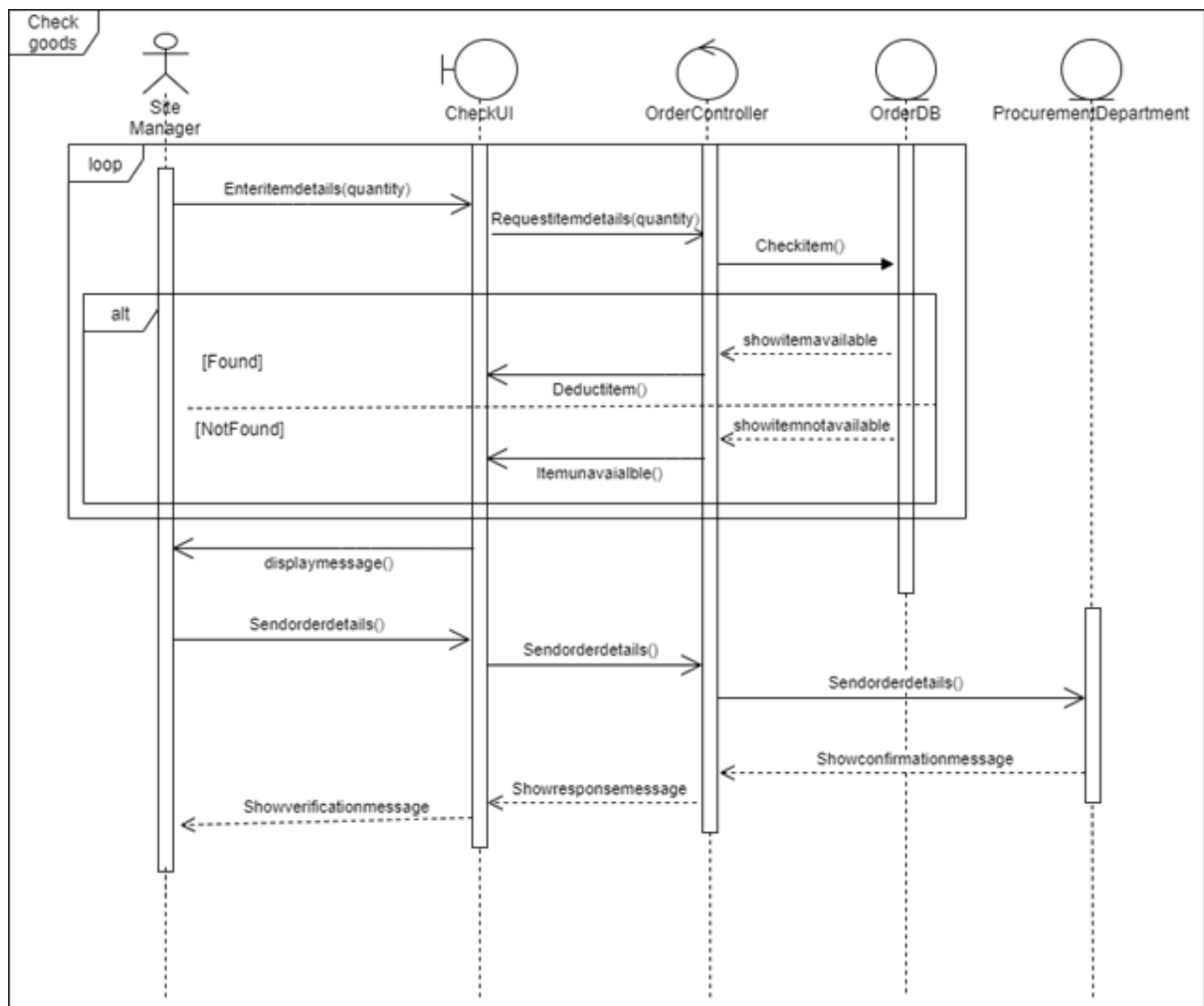
Changes:

The supervisor role responsibilities has been assigned to the procurement staff

Proposed - Check Goods Delivery

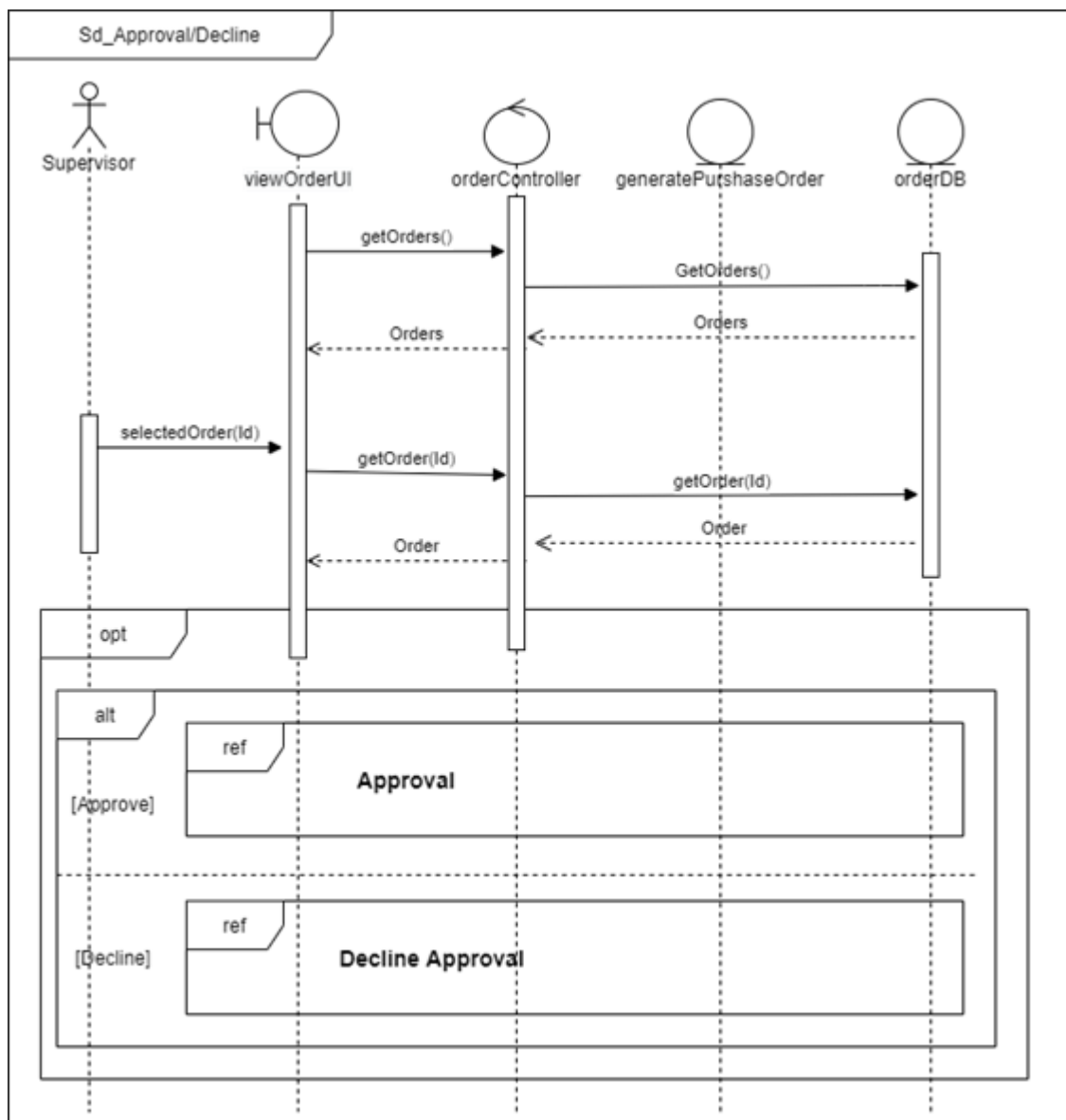


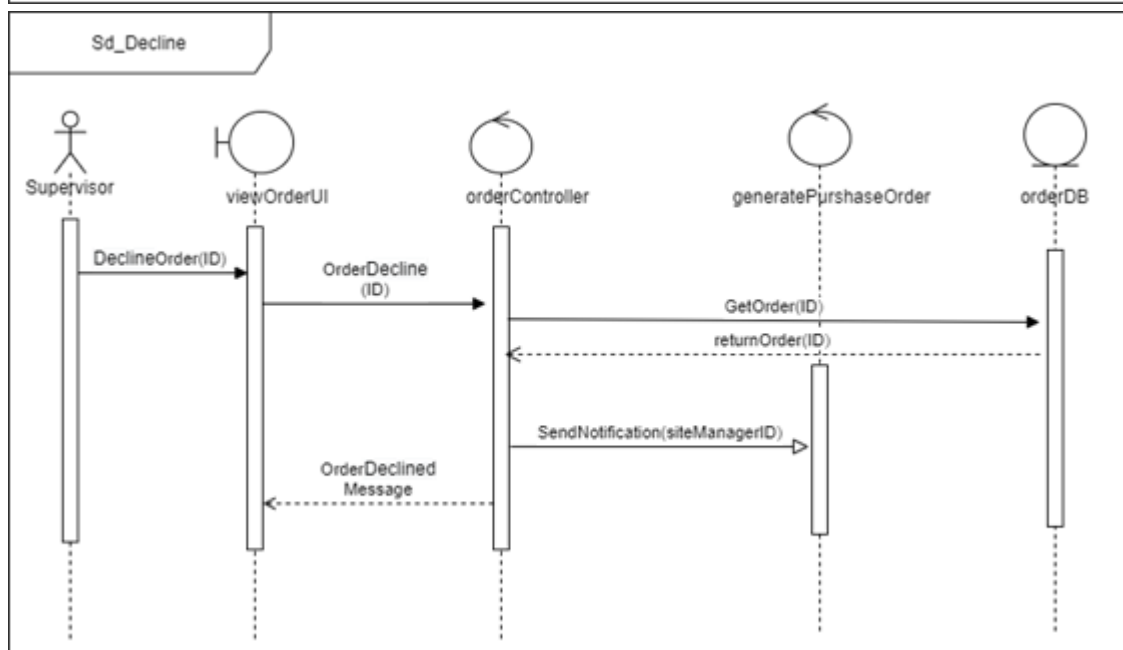
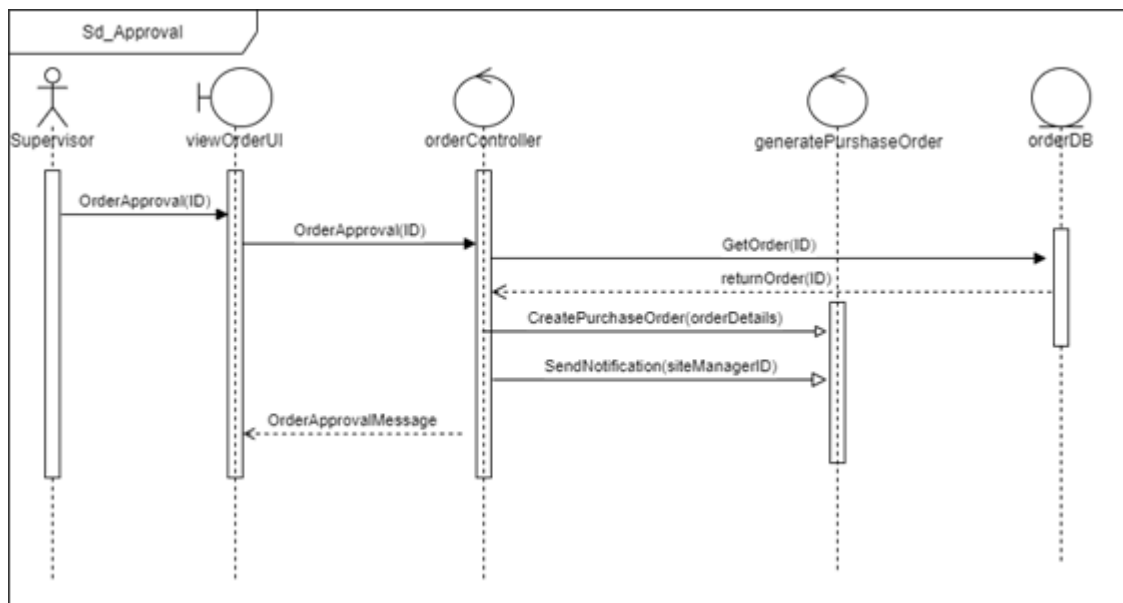
Reflected - Check Goods Delivery



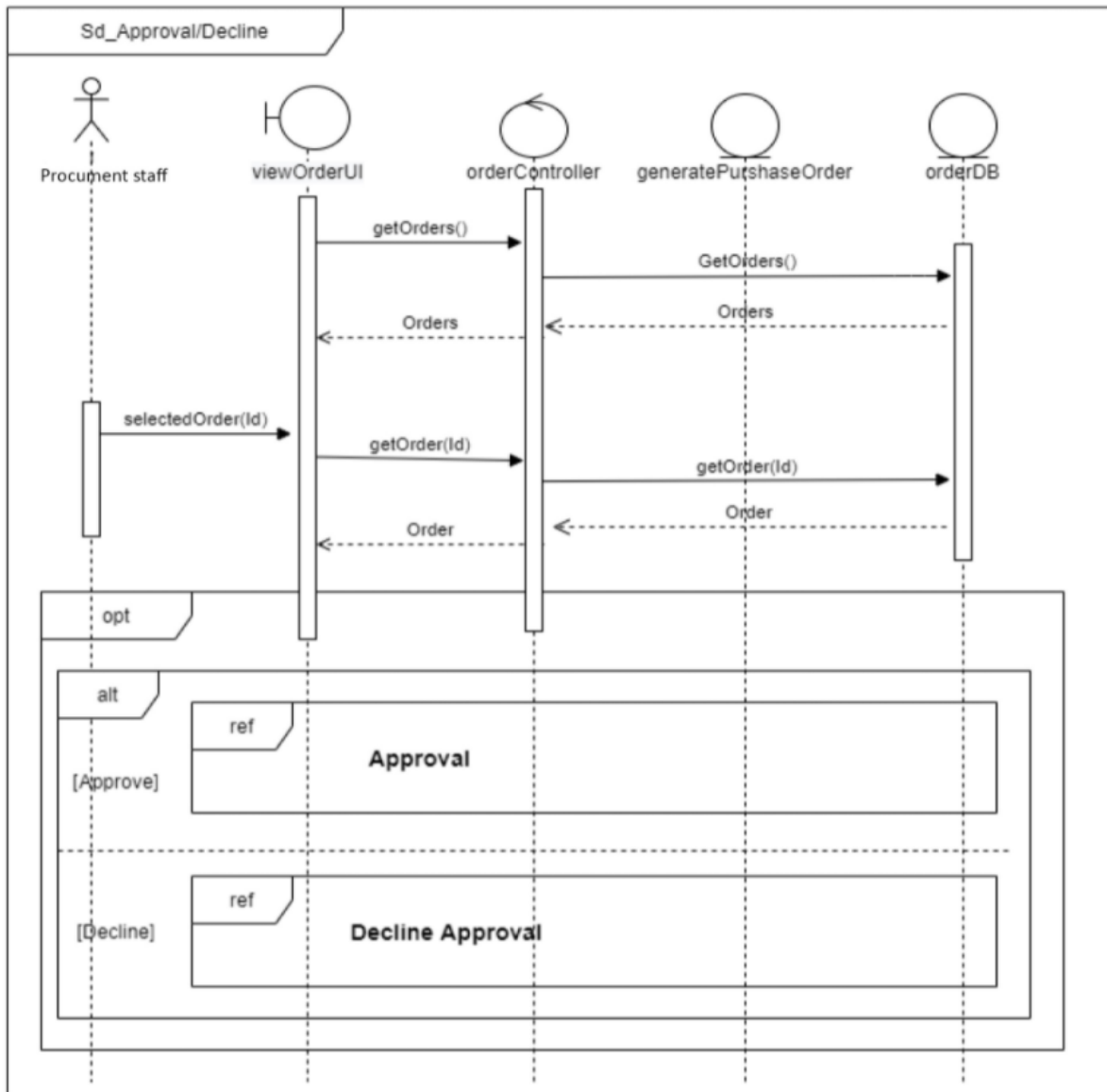
* No changes

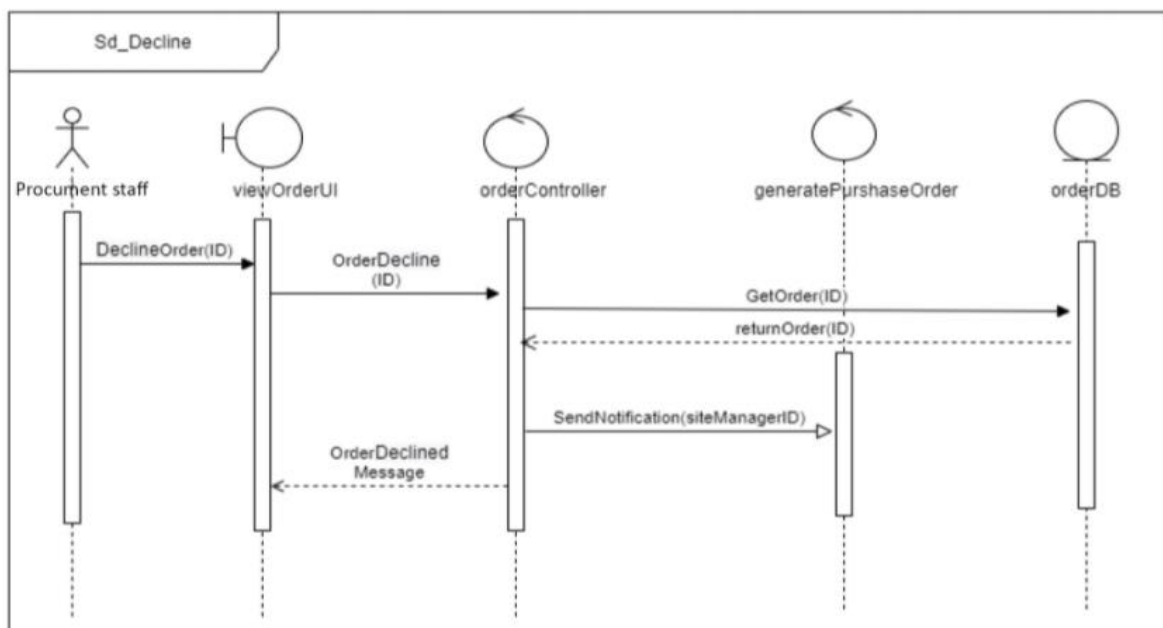
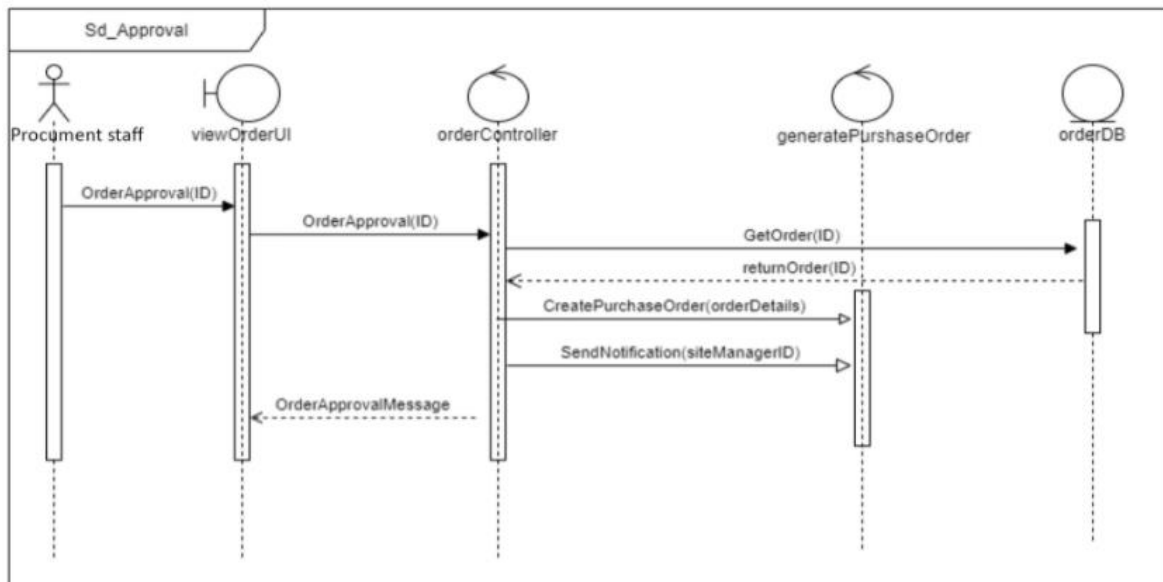
Proposed - Approvement/ Decline of Purchase Requisition





Reflected - Approvement/ Decline of Purchase Requisition





Changes:

The supervisor role responsibilities have been assigned to the procurement staff

Wireframes – Mobile

Proposed new requisition

Two mobile app wireframes for a 'New Requisition' screen. The left wireframe shows the 'Add New Item' form, and the right wireframe shows the 'View Items' table.

Left Wireframe (Add New Item):

- Header: New Requisition
- Due Date: Select date
- Buttons: Add new item, View items
- Form Fields:
 - Item Name:
 - Item Description:
 - Quantity:
- Buttons: Clear, Add

Right Wireframe (View Items):

- Header: New Requisition
- Due Date: Select date
- Buttons: Add new item, View items
- Table:

Item Id	Item Name	Item Description	Quantity
1	Iron bars	For roof	2
2	Cement	1st floor concrete	0

Reflected new requisition

Procurement Management

Add / Modify Requisition Data

Item Name : ENGINEERING BRICKS (SMALL)
Item Brand : B N S HARDWARE
Item Category : Building Material

Quantity Measurement Unit

Quantity

Confirm **Cancel**

Accounting

Home

Sites

Orders

Suppliers

Logout

Site Name

Site Name or Location

Status

Select Status

Search

Orders

Order ID	Site Name/ Location	Site Manager	Required By Date	Status	Operations
OH00011	California, LA, Sector 02A	SM0193281	July-2021	Pending Approval	
OL00012	California, San Jose, Sector 112	SM0193111	June-2021	Approved - Awaiting Supplier	Assign Supplier
OL00013	California, Redding, Hat Creek, no 5/1 Bidwell road	SM0192192	May-2022	Pending Approval	

Management

Dashboard

Items Management

New Item

All Items



















Site Management

Orders

Users

Hi Super Admin

All Items

Name	Brand	Category	Created Time	Updated Time	Action
ENGINEERING BRICKS (SM ALL)	B N S HARDWARE	Building Material	2021-10-02	2021-10-02	  
PURIFIED SEA SAND	B N S HARDWARE	Building Material	2021-10-02	2021-10-02	  
Nipolack White	B N S HARDWARE	Paints	2021-10-04	2021-10-04	  
INSEE CEMENT	B N S HARDWARE	Building Material	2021-10-04	2021-10-04	  
Orange CFL	Orange	Electrical	2021-10-04	2021-10-04	  
Metal- Chips	B N S HARDWARE	Building Material	2021-10-04	2021-10-04	  

Rows per page: 10 1-6 of 6

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Hello
Lorem

Home

Sites

Orders

Suppliers

Logout

Assign Supplier

Order Id

OD12345

Order Date

04/08/2021

Product Suppliers

Cement bags

select supplier

Add

Metal Bars

select supplier

Add

Service Suppliers

No any added services!

Add New

Done

Management

Dashboard

Items Management

Site Management

Orders

Users

Hi Super Admin

Requisition Order

Site Details

Requisition Title

Order 1

Site Name

Site Area 01

Site Contact Number

0515151515

Site Address

sample address

Requisition Status

Completed Requisition

Requested Date

2021-10-05

Site Manager

Sandun Lakshitha

Ordered Item Details

Item Name	Price	Ordered Qty	Units	Received Qty	Checked
INSEE CEMENT	Rs 0	5	Unit 1	0	Not Checked
Metal- Chips	Rs 10500	5	Cube 1	0	Not Checked

Ordered Item Approval

Select Status

Approved

Select Supplier

Before approve/reject check all items in requisition.

Approved Order

Comments

Comment

Post

Sandun Lakshitha

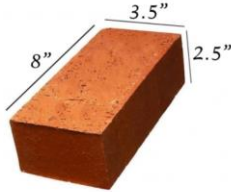
Procurement Management


Worksite - All Purchase Orders / Requisitions

Requisition Title	Site Name
Order 1	A.B.B Brothers
Order 2	Cecilia Chapman
Order 1	Site Area 51 Cor
Order 3	Cecilia Chapman Cor
Order 2	Site Area 51 Cor
Order 3	A.B.B Brothers



Rows per page: 10 1-6 of 6

Procurement Management





Size : 8" x 3.5" x 2.5"

ENGINEERING BRICKS (SMALL)


CATEGORY: Building Material

BRAND: B N S HARDWARE

Price: Rs.32

Unit(Price Measurement Unit): 1PC

Item Added By

 Super Admin

Item Updated By

None

Check Goods

Check Goods

Item Name

Order Id

Supplier Name

Supplier Name

Order Date

Select date

Item Id	Item Name	Ordered quantity	Arrived quantity	Shortage	Approve status
1	Iron bars	10	8	2	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
2	Cement	15	15	0	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Bricks	400	250	150	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

View Purchase Orders

Purchase Orders

	Order Id	Date	Total	Order Status
<input checked="" type="checkbox"/>	1	21/05/2021	40000	Approved
<input checked="" type="checkbox"/>	2	21/07/2021	20000	Pending

Purchase Order Details

Order Id : 1

Supplier : K.D. Perera

Order Date : 21/05/2021

Item Id	Item Name	Quantity	Price
1	Iron bars	10	15000
2	Cement	25	25000

Total :

40000