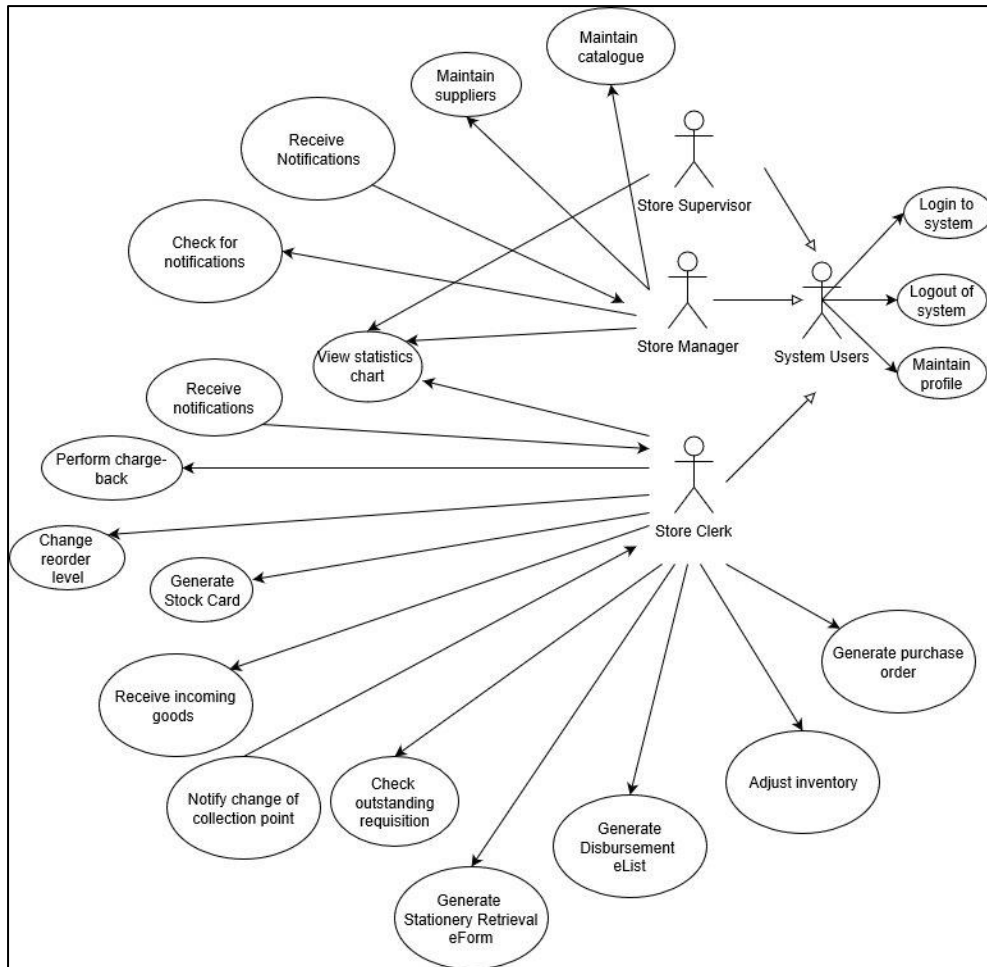
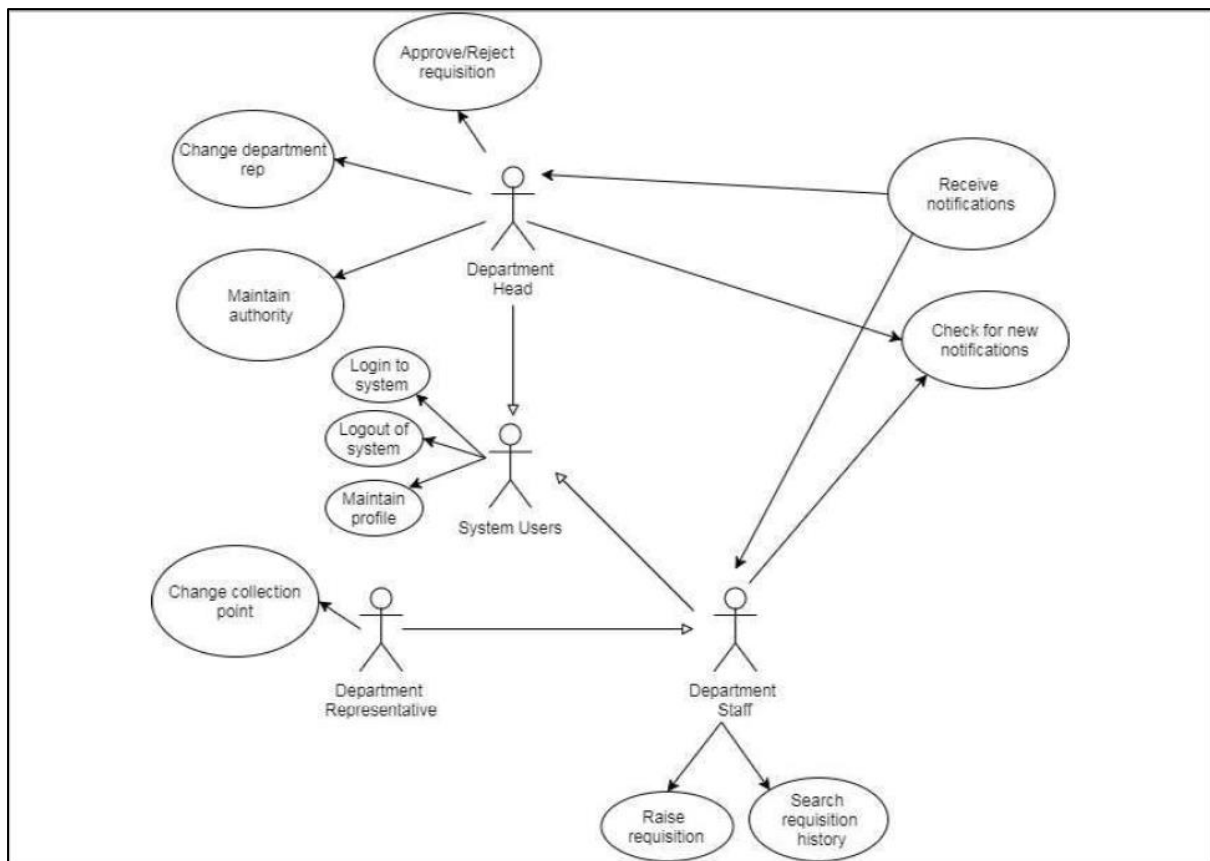


## Requirement Specifications (Functional)

### Use Case Model - Store



## Use Case Model - Department



### Actors & Corresponding Use Cases

1. Store Clerk
  - a. Retrieval of requested items
  - b. Disbursement of stationery to respective departments
  - c. Monitoring of inventory stock levels
  - d. Making purchase orders
  - e. Performing monthly stock checks
  - f. Inputting inventory adjustments with reasons after stock checks
  - g. Observe requisition/order trends
2. Store Supervisor
  - a. Approve/Reject adjustments < \$250
  - b. Observe requisition/order trends
3. Store Manager
  - a. Approve/Reject adjustments >= \$250
  - b. Maintain suppliers
  - c. Maintain catalog items
  - d. Observe requisition/order trends
4. Department Staff
  - a. Raise requisitions
  - b. View requisition history
5. Department Representative
  - a. Change collection point
  - b. Raise requisitions

- c. View requisition history
- 6. Department Head
  - a. Delegate representative
  - b. Delegate authority
  - c. Approve/Reject requisitions

#### Requirement Specifications (Non-functional)

User Volume Table				
User Group	Country/Location/Count	Remarks	User Volume	
Department Head	Singapore/Logic University Department Admin Office 1flr/1	The department head accesses the system daily in the admin office. He uses the system to check for new requisition requests from his staff and approves/rejects them. He may use the system to delegate a department representative. He may use the system to allow a selected reportee to temporarily gain his rights.	The Department Head uses 1 PC himself to access the system.	(1)10 departments;(2)50 employees in each department (including department head);(3)each employee is provided with a PC;(4) A printer will be shared among every 4 to 5 employees;(5)All the servers, including printer server and database server, are located in a secured computer room within the campus.
Department Representative	Singapore/Logic University Department Office 2flr/20	The department representative may use the system to change the department's collection point. The department representative may use the system to request requisitions and view his own requisition history.	The Department Representative uses 1 PC himself to access the system.	
Department Staff	Singapore/Logic University certain department Office 3fr/4	The department staff may use the system to request requisitions and view his own requisition history.	The Department Staff uses 1 PC himself to access the system.	
Store Manager	Singapore/Logic University Stationery Store Admin Office 1fr/1	All store personnel are able to view the trending charts for requisitions/purchase orders. All store personnel are able to add, edit and delete suppliers and items in the catalog list. All store personnel can check for approved requisitions that have not been disbursed. All store personnel can generate a stock retrieval form and disbursement list based on summing the approved requisitions and grouping them by item description and department respectively. All store personnel can generate purchase orders, change reorder levels, receive incoming goods and send invoices to requesting departments. In addition, the store manager is able to approve inventory adjustments made by clerks with value greater than \$250.	The Store Manager uses 1 PC himself to access the system.	

Store Supervisor	Singapore/Logic University Stationery Store Office 2fr/4	<p>All store personnel are able to view the trending charts for requisitions/purchase orders.</p> <p>All store personnel are able to add, edit and delete suppliers and items in the catalog list.</p> <p>All store personnel can check for approved requisitions that have not been disbursed.</p> <p>All store personnel can generate a stock retrieval form and disbursement list based on summing the approved requisitions and grouping them by item description and department respectively.</p> <p>All store personnel can generate purchase orders, change reorder levels, receive incoming goods and send invoices to requesting departments.</p> <p>In addition, the store manager is able to approve inventory adjustments made by clerks with value greater than &lt;=\$250.</p>	The Store Supervisor uses 1 PC himself to access the system.	
Store Clerk	Singapore/Logic University Stationery Store Office 3fr/6	<p>All store personnel are able to view the trending charts for requisitions/purchase orders.</p> <p>All store personnel are able to add, edit and delete suppliers and items in the catalog list.</p> <p>All store personnel can check for approved requisitions that have not been disbursed.</p> <p>All store personnel can generate a stock retrieval form and disbursement list based on summing the approved requisitions and grouping them by item description and department respectively.</p> <p>All store personnel can generate purchase orders, change reorder levels, receive incoming goods and send invoices to requesting departments.</p> <p>All clerks are able to perform a stock check of the inventory and perform the necessary inventory adjustment to address discrepancies in the existing stock.</p>	The Store Clerk uses 1 PC himself to access the system.	

Business Transaction Volume Table			
Biz Transaction(Use Case)	Business Criticality	No of User	Transaction information
Change department representative	critical	10 users. Once a month.	10 changes per month
Notify assign of department rep	critical	10 users. 5 times a month.	60 notifications per year
Notify collection	critical	10 users. 1-2 times week.	80 notifications per month
Change collection point	critical	10 users. 5 times a month.	60 changes per year
Maintain authority/Delegate	critical	10 users. Once a month.	10 changes per month
Notify delegation	critical	500 users. 5 times a month.	10 notifications per month
Notify change of catalogue	moderate	500 users. 5 times a month.	2,500 notifications per month
Search requisitions history	moderate	500 users. 3 searches per user per week.	600 searches per month
Raise requisition	critical	500 users. 50 requisitions per week.	200 requests per month
Approve/Reject requisition	critical	10 users. 1-2 times per week.	80 checks per month
Notify new requests	critical	500 users. 50 transactions per week.	200 notifications per month
Notify requisition status	moderate	500 users. 50 notifications per week.	200 notifications per month
Perform charge-back	critical	5 users. Once per week per department.	40 charge-backs per month
View transaction history	critical	5 users. Once per week per department.	40 charge-backs per month
Approve Disbursement	critical	5 users. Once per week per department.	40 charge-backs per month
Adjust Inventory	critical	5 users. Once a week.	5 adjustments per month
Notify approve inventory	critical	1 user. Once a week.	5 notifications per month
Approve adjust inventory>\$250	critical	1 user. Once a week.	5 approvals per month
Approve adjust inventory<=\$250	critical	1 user. Once a week.	5 approvals per month
Notify change of collection point	critical	5 users. Once a month per department.	10 notifications per month
Notify change of department rep	critical	10 users. Once a month per department.	10 notifications per month
Stock Retrieval	critical	5 users. Once a week.	5 retrievals per month
Stock Check	critical	5 users. Once a month.	1 check per month
Generate disbursement list	critical	5 users. Once per week.	5 lists per month
Generate purchase order	critical	5 users. Once per week.	5 purchase orders per month
Receive incoming goods	critical	5 users. Once per week.	5 incoming goods per month
Change reorder level	moderate	5 users. Once per month.	1 change per month
View statistics chart	low	5 users. Once a month.	5 checks per month
Maintain suppliers	moderate	5 users. Once a month.	12 updates per year
Maintain catalogue	moderate	5 users. Once per year.	1 updates per year

Date Volume Table			
Business Entity Class	Source Document	Retention Period	Target Volume
Transactions	Transactions	2 years	Approx.1 transaction per purchase order, 5,200 transactions
Requisitions	Requisitions	2 years	1 week 50 requisitions, $50 \times 52 \times 2 = 5,200$ requisitions
Requisition Details	Requisition Details	2 years	Approx. 3 requisitions details per requisition, $3 \times 5,200 = 15,600$ requisitions details
Department Requisitions	Department Requisitions	2 years	1 week 10 dept requisitions, $10 \times 52 \times 2 = 1,040$ dept requisitions
Employee	Employee	2 years	1 month 1 update, $1 \times 12 \times 2 = 24$ employee updates
Department List	Department List	2 years	1 month 1 department list, $1 \times 12 \times 2 = 24$ department list updates
Suppliers	Suppliers	2 years	1 year 5 supplier updates, $5 \times 12 \times 2 = 120$ supplier changes
Purchase Orders	Purchase Orders	2 years	100 purchase orders biweekly $100 \times 26 \times 2 = 5,200$ purchase orders
Purchase Orders Details	Purchase Orders Details	2 years	Approx. 3 purchase order details per purchase order, $3 \times 5,200 = 15,600$ purchase order details
Price List	Price List	2 years	1 month 5 price list changes, $5 \times 12 \times 2 = 120$ price list changes
Items	Items	2 years	1 month 5 item changes, $5 \times 12 \times 2 = 120$ item changes
Notifications	Notifications	2 years	1 month 5 item changes, $5 \times 12 \times 2 = 120$ item changes

Security Requirement (From data point of view)						
Date(entity class) User Role(actor)	Department Head	Department Rep	Department Staff	Store Manager	Store Supervisor	Store Clerk
Transactions				c,r,u,d	r	
Requisitions	c,r,u,d	r		r	r	
Requisition Details	c,r,u,d	r		r	r	
Department Requisitions	r			c,r,u,d	r	
Department List	c,r,u,d	r	r	r	r	r
Suppliers				c,r,u,d	r	r
Purchase Orders				c,r,u,d	r	r
Purchase Order Details				c,r,u,d	r	r
Price List				c,r,u,d	r	r
Items	r	r	r	c,r,u,d	r	r

Security Requirement(From use case point of view)						
Biz Transaction(Use Case) User Role(actor)	Department Head	Department Rep	Department Staff	Store Manager	Store Supervisor	Store Clerk
Read Notifications	X	X	X	X	X	X
Approve/Reject Requisition	X					
Change department representative	X					
Delegate authority	X					
Change collection point		X				
Search requisitions history		X	X			
Raise requisition		X	X			
View Trend Analysis Report				X(main user)	X	X
Maintain suppliers				X	X	X(main user)
Maintain catalogue				X	X	X(main user)
Check for new requisitions				X	X	X(main user)

Generate Disbursement List				X	X	X(main user)
Stock Check						X
Stock Retrieval				X	X	X(main user)
Adjust Inventory					X	X(main user)
Generate purchase order				X	X	X(main user)
Receive Incoming goods				X	X	X(main user)
Change reorder level				X	X	X(main user)
Perform charge-back				X	X	X(main user)
Approve Adjust Inventory > \$250				X		
Approve Adjust Inventory <= \$250					X	

Response Time: 2s/screen during non-peak periods, 4s/screen during peak periods

Maximum 24 hours down time (non-critical function)

Data currency – 1 day back