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[7] Sommerville , Ian , (2006), Software Engineering , ISBN 81-7758-530-4,7th Edition , Chapter 4 , Page 90-91

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Appendix A

Feasibility study

A.1. Economic Feasibility

When discussing with the management about the requirements, they showed their interest on hiring database space at the initial stage from a database service provider but having evaluated the system against objectives they'll decide whether to buy an own server with required resources. But for the time being the management agreed to hire server space from an outside service provider.

Management agreed to provide cost of the training without any concern as they expect developer to train their users to perform intended activities without any interruption to their day-to-day operations.

A.1.1. Risks to the ABC Supermarket

Since the management is fully agreed to provide financial support for the development and implementation, there is no risk of either reducing or loosing financial support.

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A.2. Technical Feasibility

A.2.1. Resource Availability

A.2.1.1. Hardware & Software

Since the database server, web server and application server will be hired from a service provider; there is no need of acquiring any hardware. The existing hardware can be used at this phase of the project. The annual rental & the cost of the internet domain name is Rs. 5750.00.

There is no need of acquiring any new software as available EPOS data as well as SCP data can be converted in to CSV format and upload.

Therefore "ABC" Supermarket does not have to spend additional cost to acquire hardware or software

A.2.2. Technology Use

The proposed system will be developed by using following technologies which are freely available and widely used in software industry around the world. Those technologies are free of charge and all supporting documents, manuals are freely available to download from the internet with no cost.

Operating System	Windows 2000 , Windows XP
Programming Languages	PHP , MySQL
HTTP Server	Apache HTTP Server
Web Browser	Fire Fox , Internet Explorer
Designing Tool	Adobe Dream Weaver 8.0

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Since a leading Fast Moving Consumer Goods company in Sri Lanka is being used a similar system, the knowledge on that system can be used at the development stage.

A.2.3. Risks

A.2.3.1. Development Risk

A.2.3.1.1. Technical Know-how

- Developer is familiar with PHP and Apache Server technologies.
- Developer is familiar with MySQL.
- Developer has to improve little Knowledge about designing GUI s.
- Developer is familiar with Software project management methods.

Due to the rapid changes happening in the IT industry globally, there can be changes in the technologies used to develop.

Since the developer is with non-IT domain and new to the industry soon after the theoretical sessions, lack of experience may have a major impact on the development of the project and the proposed technologies are new to the developer. Therefore, the developer has to acquire expertise knowledge from technically sound and experience developers which will need some time to be fully familiar with.

However, the developer has taken this as a challenge and try his best to deliver the project on-time-in full.

A.2.3.2. Project Risk

System Development Goals and schedule may not be achieved on-time-in-full due to;

a. Lack of technical know how which is going to be used to develop the project

b. Developer may get sick

c. Developer may have other implications such as family commitments

d. Prevailing security situation in the country may effect on the development as a terrorist attack may cripple the whole day-to-day life

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While developing the system, there could be a management change happened and their priorities will be different than earlier management's priorities. The interest on the proposed system would be in danger.

A.2.3.3. Product Risk

While developing the product, there will be changes in the requirements. Initial requirements could be either changed or modified according to the business needs. Users will expect more than what they express at the requirements gathering. The size of the system could be either over estimated or under estimated by the users.

To avoid above mentioned risks, an agreement of business requirements should be in place signed by relevant authorities.

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A.3. Organizational Feasibility

A.3.1. Organization Risk

By implementing proposed replenishment system, there is no risk of loosing jobs of present employees as the employees who are directly involved in ordering system of branches as well as CPU can save their time. Management can effectively use that time for another productive activity which needs human interaction very badly.

Employees of the ABC Supermarket showed a considerable interest over the proposed system as they are looking forward to get rid of manual work. When discussing about the proposed system, employees showed their keenness over the proposed system and that reflects there is no threat of refusing the product.

The management is fully impressed after educating them on the benefits of this kind of system such as accurate sales forecasting. Management of "ABC" Supermarket is expressed their concerns over stagnation of un-necessary products at the CPU and also branches are running short of fast moving products due to inaccurate forecasting. Since EPOS data is already available with "ABC" Supermarket, management was fully agreed to utilize available asset for the accurate sales forecasting. By implementing this kind of system, management is planning to reduce their operational costs such as warehouse cost, Bank interests etc. and at the same time they are planning to increase their profit margins by making available all fast moving products at every branch which increase "ABC" supermarket's cash flow.

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A.4. Legal Feasibility

A.4.1 License

For the existing windows operating system and stock control package, "ABC" Supermarket has already purchased licenses.

For the proposed system, there is no need of licenses as the system will be developed by using open source software.

A.4.2. Agreement

The proposed system will be developed as per the mutual understanding between developer and "ABC" Supermarket

A.4.3. Confidential Documents & Data

The developer will be fully responsible for the documents and data took over from "ABC" Supermarket until the end of the project and are bound to hand over all the confidential documents and data back-ups obtained for the testing at the movement of sign-off of the project.

A.5. Cost Benefit Analysis

A.5.1. Tangible Costs

A.5.1.1.Annual Cost

Server Rent = Rs.5000.00

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A.5.1.2. Monthly Cost

Cost of ADSL Connection = Rs.45500.00 (Rs.6500.00 Per Connection x 7)

This cost is already been built in to ABC Supermarket's budget as it already uses these connections

A.5.1.3. One Time Cost

Internet Domain name = Rs.750.00

Cost for Training = Rs.18000.00

Total one time cost = Rs.18750.00

Use case, activity diagrams and use case descriptions for the existing system

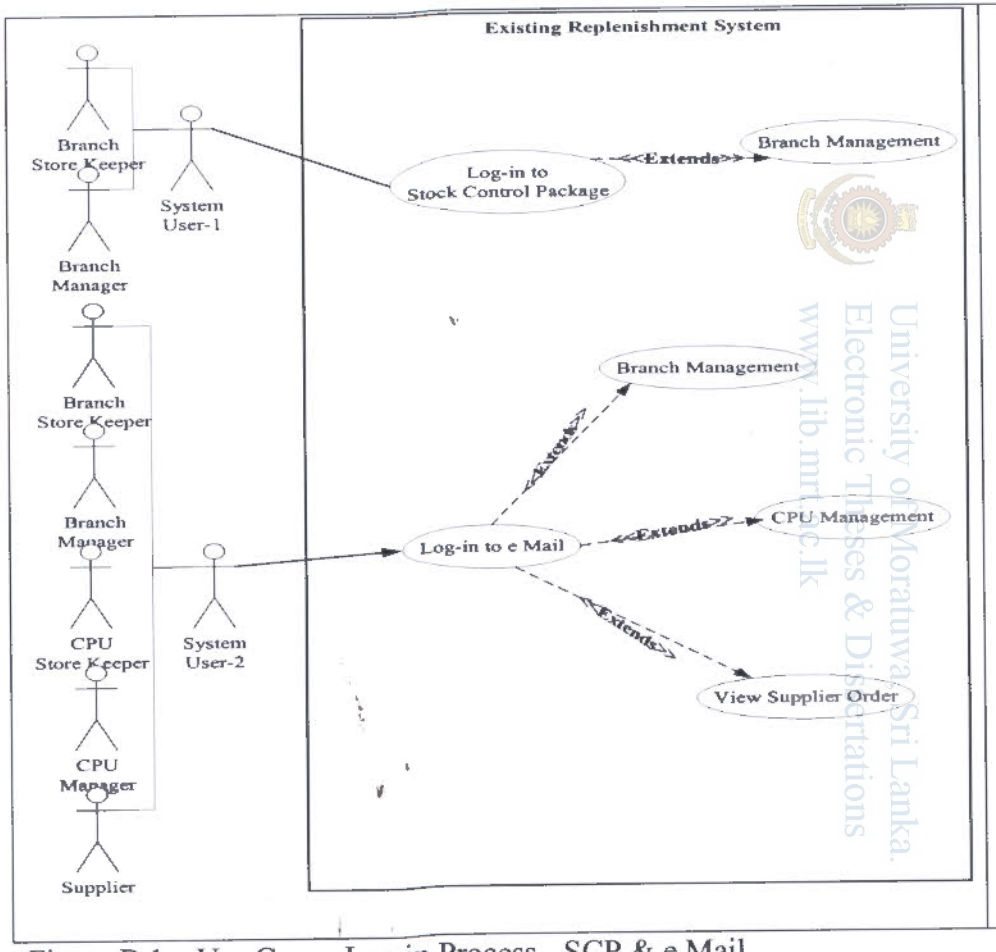

Figure B.1 – Use Case - Log in Process - SCP & e Mail

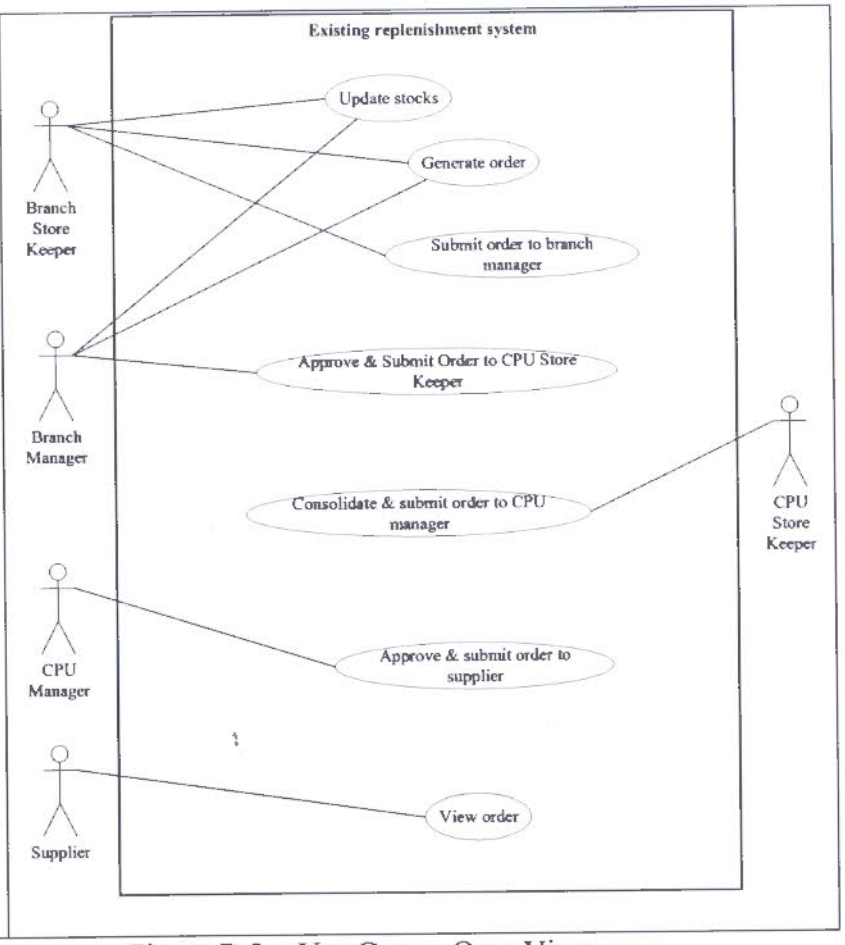

Figure B.2 – Use Case – Over View

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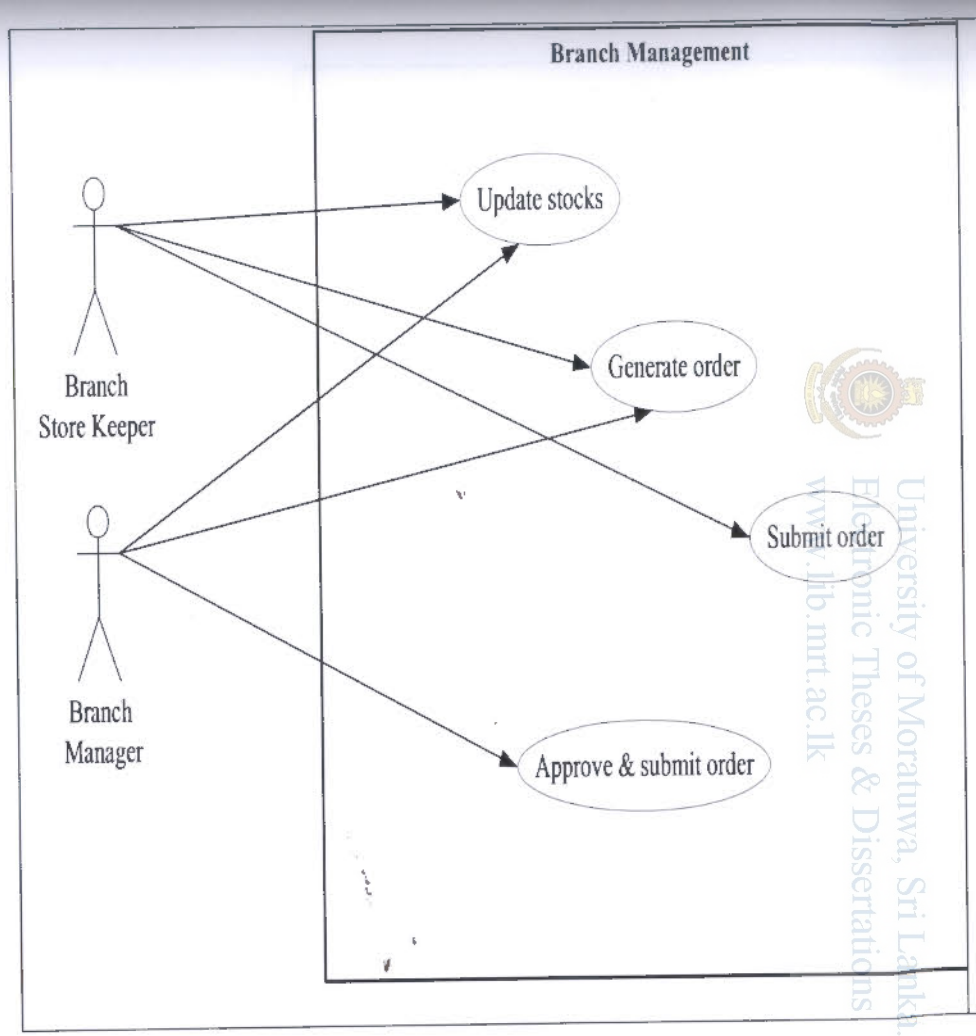

Figure B.3 – Use Case - Branch Management

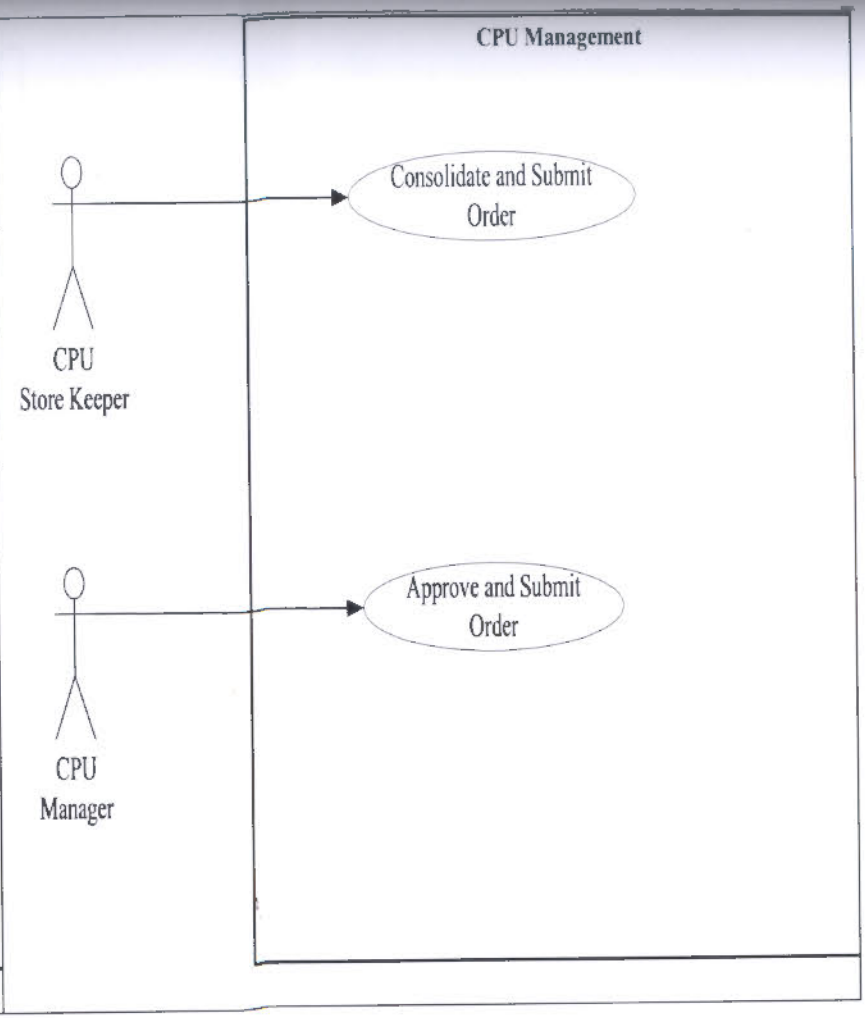

Figure B.4 – Use Case - CPU Management

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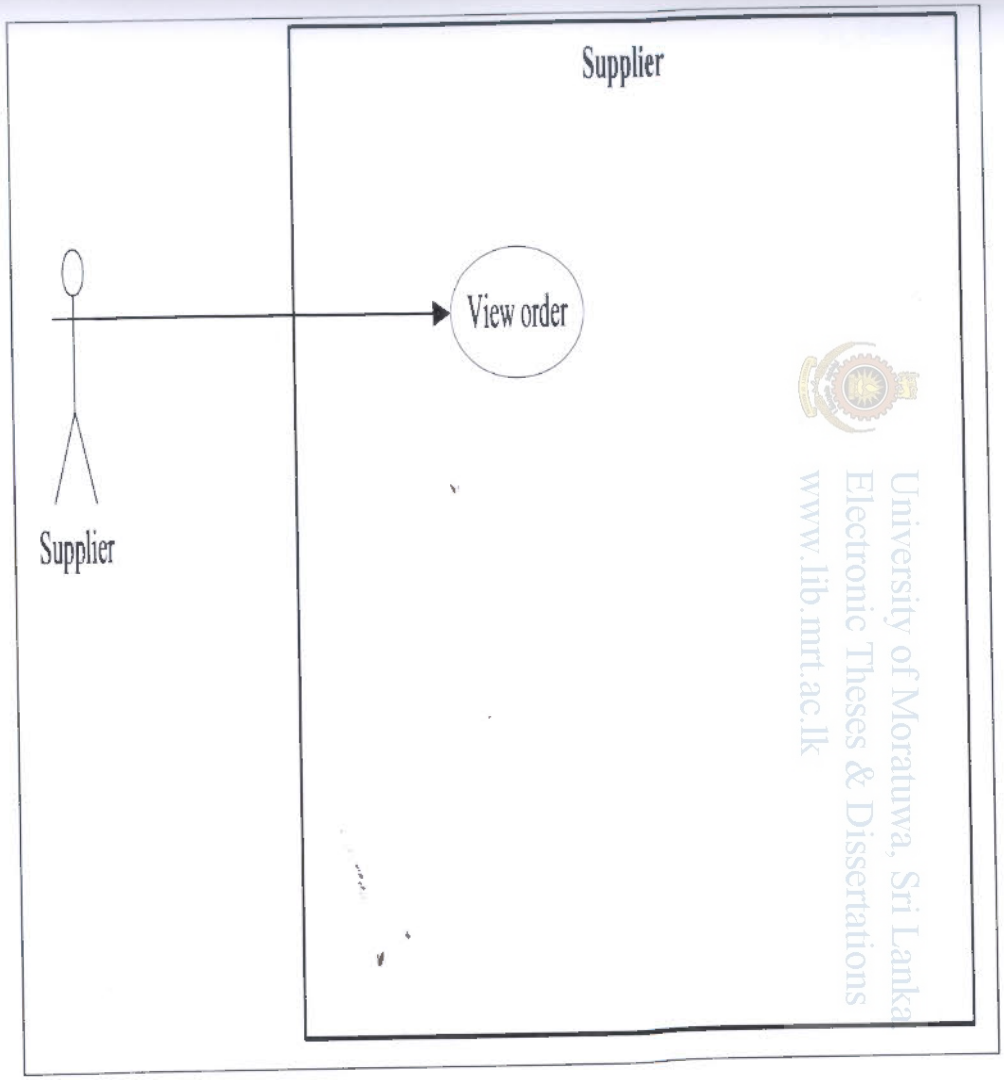

Figure B.5 – Use Case – Supplier

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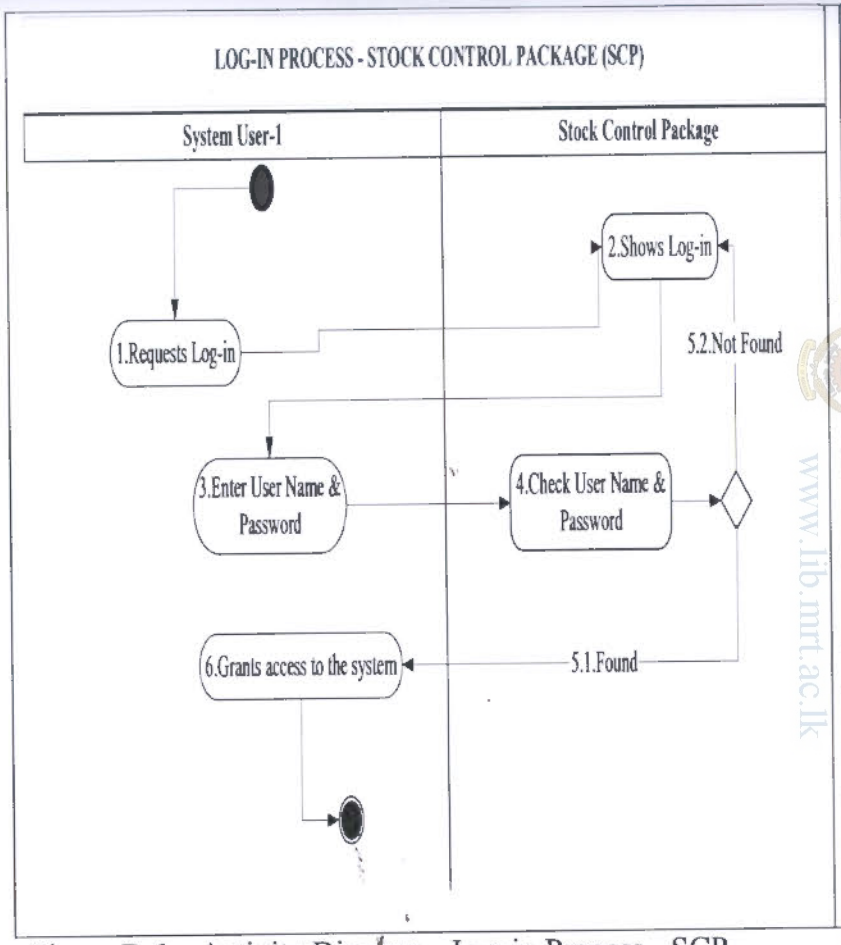

Figure B.6 – Activity Diagram - Log in Process - SCP

Name	Log in Process - SCP
Description	
Actor	System User-1
Pre-Conditions	System user must have a user name & password to log-in to the system
Post Condition	System user should be able to access the system
Flow	1. System user requests log-in to the SCP 2. SCP shows log-in 3. System user enters username & password 4. SCP verifies username & password 5.1. If User name & password found 6. SCP grants accesses the system
Exception	5.2. Else User name & password not found 2. SCP shows log-in interface

Figure B.7 – Use Case Description - Log in Process - SCP

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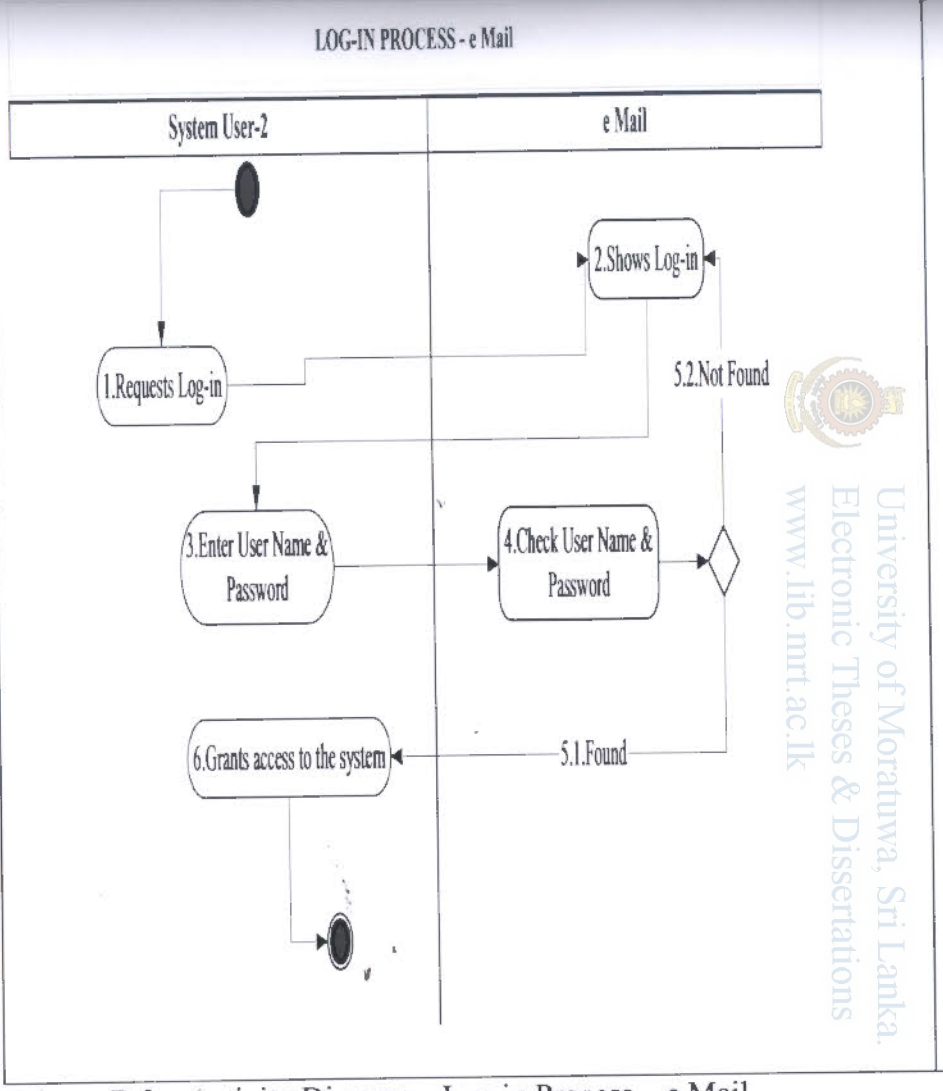

Figure B.8 – Activity Diagram - Log in Process – e Mail

Name	Log in Process – e Mail
Description	
Actor	System User-2
Pre-Conditions	System User-2 must have a user name & password to log-in to the e Mail
Post Condition	System User-2 should be able to access the e Mail
Flow	1. System User-1 requests log-in to the e Mail 2. e Mail shows log-in 3. System user-2 enters username & password 4. e Mail checks username & password 5.1. if user name & password found 6. e Mail user-2 accesses the e Mail
Exception	5.2.Else user name & password not found 2. e Mail shows log-in interface

Figure B.9 – Use Case Description - Log in Process – e Mail

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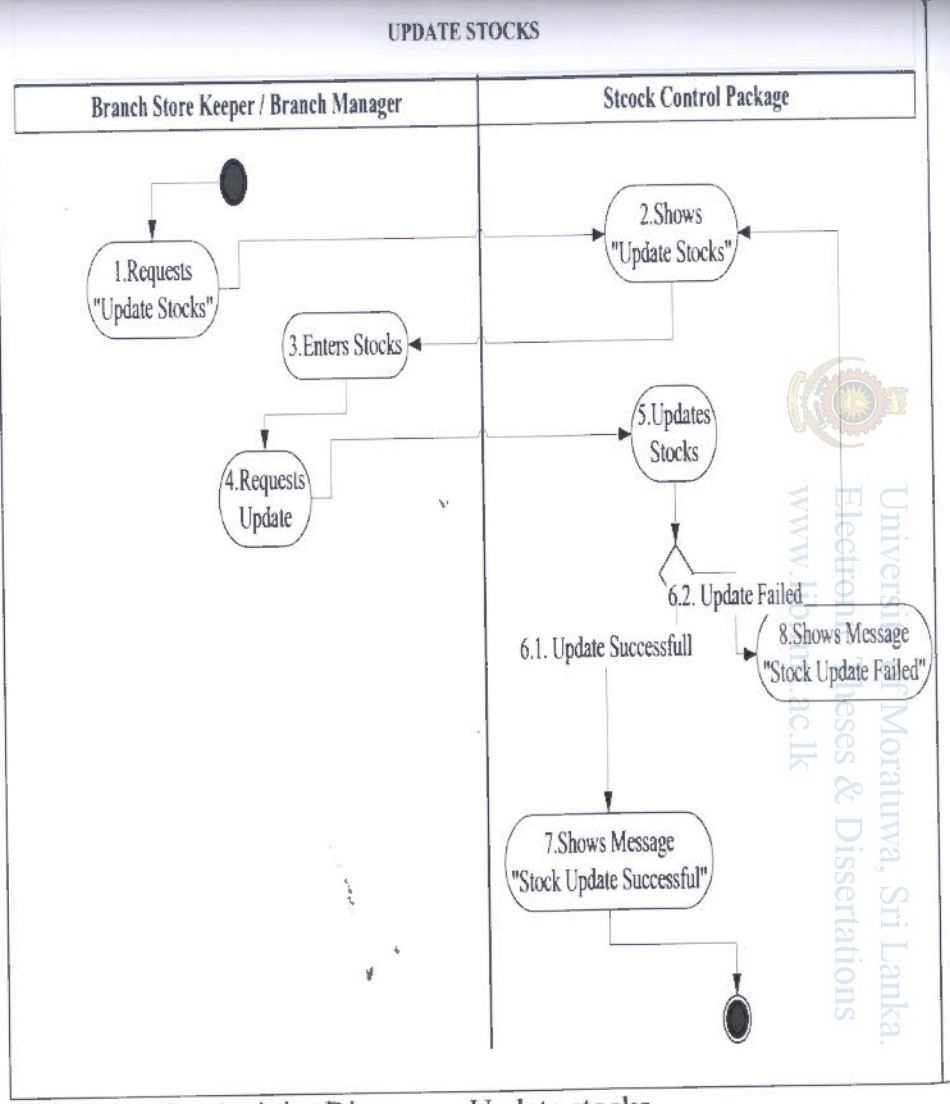

Figure B.10 – Activity Diagram – Update stocks

Description	
Actor	Branch Store Keeper / Branch Manager
Pre-Conditions	1. Store Assistant should manually check products at the warehouse 2. Store Assistant should submit stocks in a document to update the (SCP)
Post Condition	SCP must be updated with latest Stock Data
Flow	1. Branch Store Keeper / Branch Manager requests update stocks 2. SCP shows update stocks 3. Branch Store Keeper / Branch Manager enters stocks 4. Branch Store Keeper / Branch Manager requests update 5. SCP updates stocks 6.1. If update successful 7. SCP shows message "Stock update successful"
Exception	5.2. Else update failed 8. SCP shows message "Stock update failed" 8. SCP shows update stocks

Figure B.11 – Use Case Description – Update stocks

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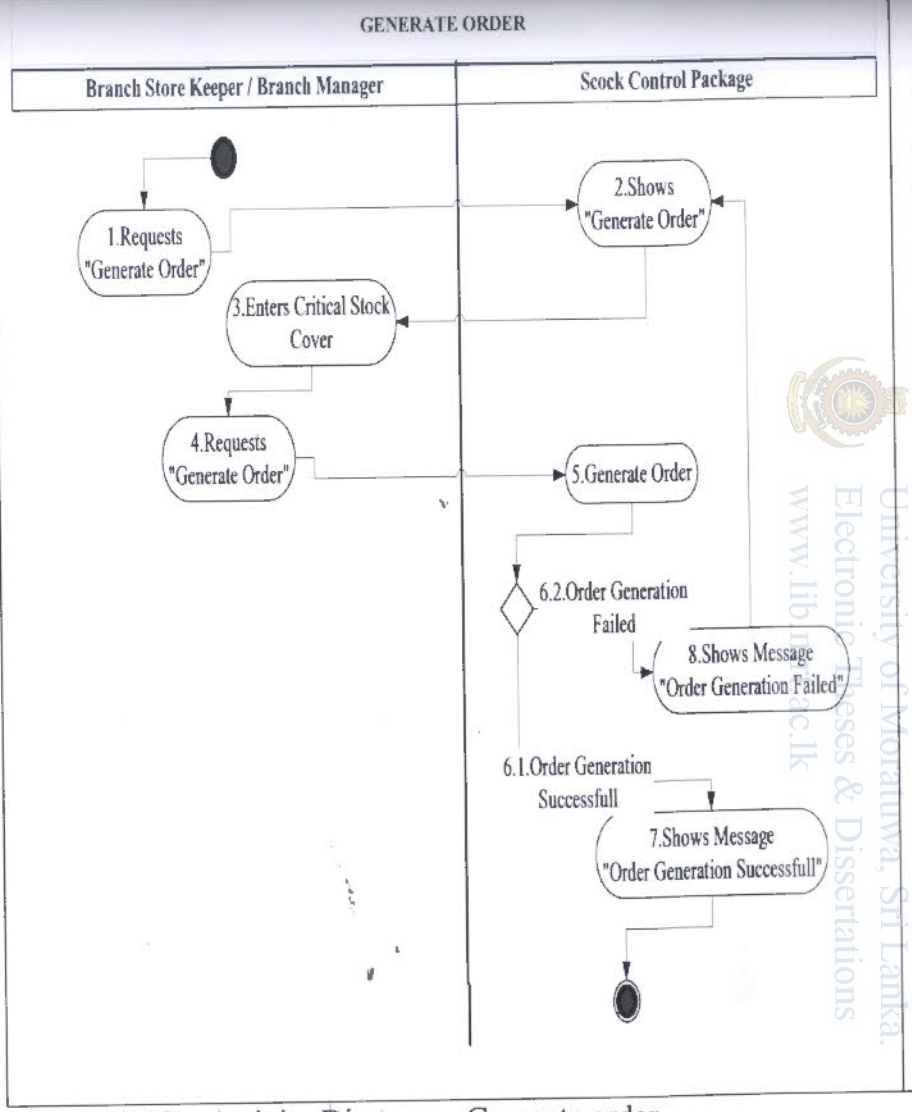

Figure B.12 – Activity Diagram – Generate order

Name	Generate Order
Description	
Actor	Branch Store Keeper / Branch Manager
Pre-Conditions	Stock Control Package (SCP) must be updated with latest stock data
Post Condition	An order must be available to view
Flow	1. Branch Store Keeper / Branch Manager requests Generate order 2. SCP shows Generate order 3. Branch Store Keeper / Branch Manager Enters Critical Stock Cover 4. Branch Store Keeper / Branch Manager requests Generate order 5. SCP Generates order 6.1. If order generation successful 7. SCP shows message "Order generation successful"
Exception	5.2. Else order generation failed 8. SCP shows message "Order generation failed" 2. SCP shows Generate order

Figure B.13 – Use Case Description – Generate order

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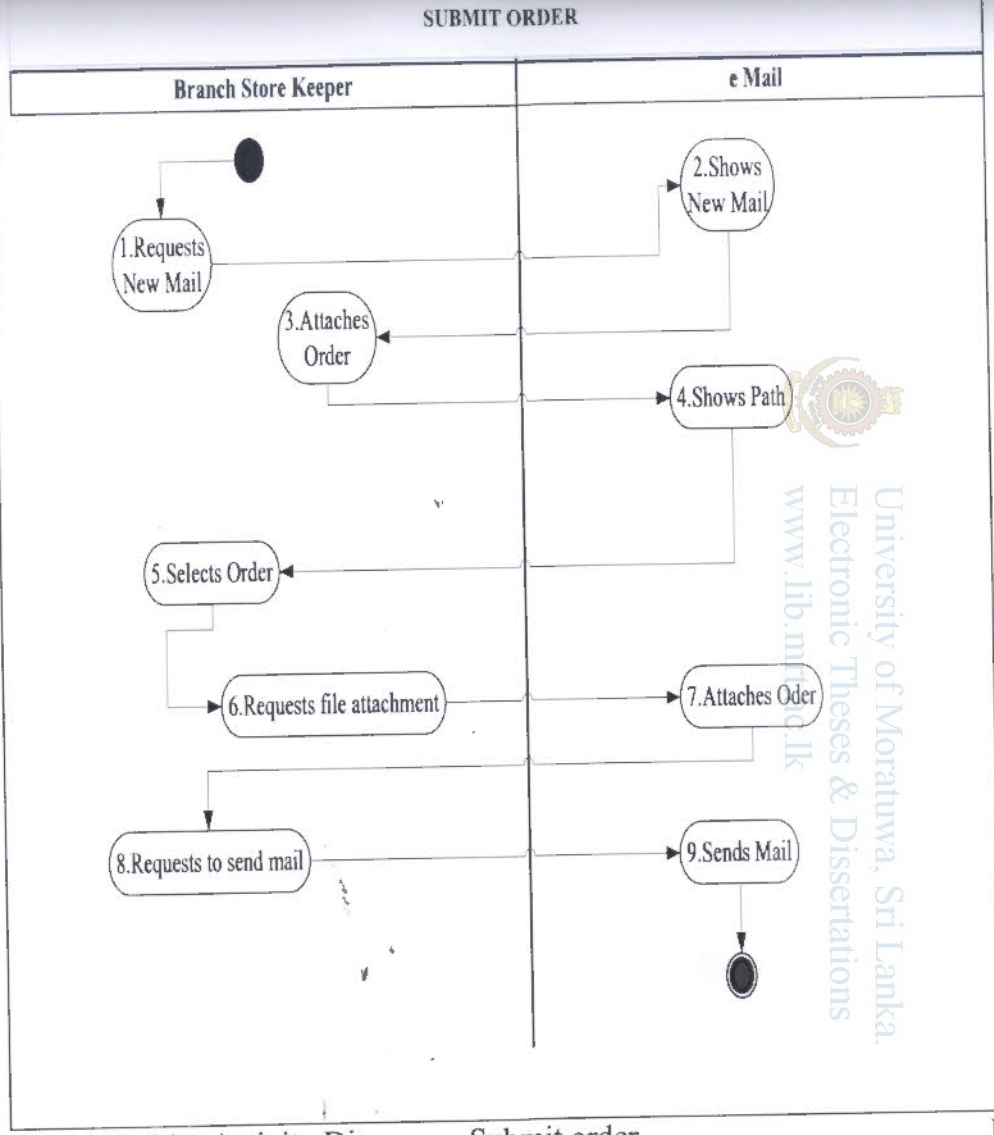

Figure B.14 – Activity Diagram – Submit order

Description	
Actor	Branch Store Keeper
Pre-Conditions	An order must be available to submit for approval
Post Condition	Branch Manager should receive an order for his approval
Flow	1. Branch Store Keeper requests new mail 2. e Mail shows new mail 3. Branch Store Keeper attaches order to e Mail 4. e Mail shows path 5. Branch Store Keeper selects order 6. Branch Store Keeper requests for attachment 7. e Mail attaches order 8. Branch Store Keeper requests to send mail 9. e Mail sends mail
Exception	

Figure B.15 – Use Case Description – Submit order

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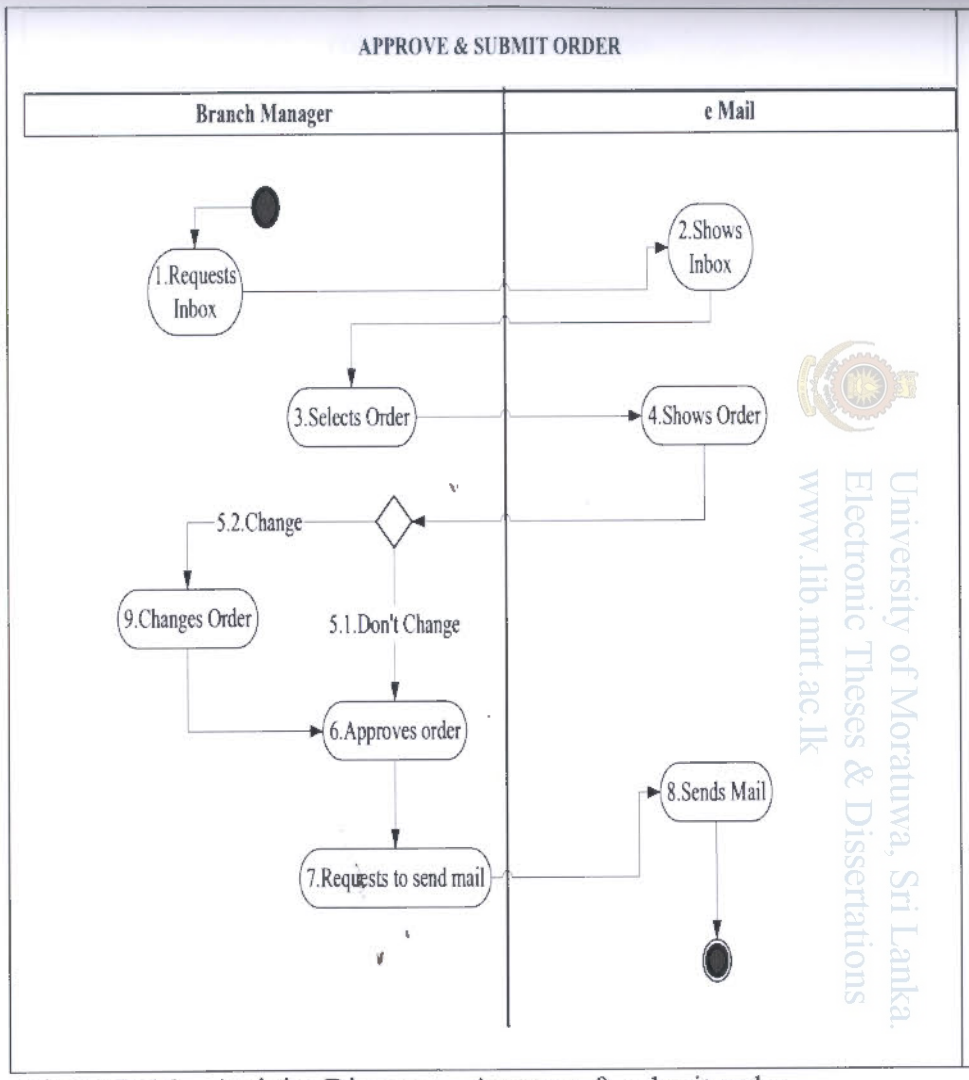

Figure B.16 – Activity Diagram – Approve & submit order

Name	Approve & Submit Order
Description	
Actor	Branch Manager
Pre-Conditions	Order sent by Branch Store Keeper must be available in Branch Manager's Inbox
Post Condition	Approved order must be submitted to CPU Store Keeper
Flow	1. Branch Manager requests Inbox 2. e Mail shows inbox 3. Branch Manager selects order 4. e Mail shows order If order not to change 6. Branch Manager approves order 7. Branch Manager requests to send mail 8. e Mail sends mail
Exception	5.2. Else order to change 9. Branch Manager changes order 6. Branch Manager approves order 7. Branch Manager requests to send mail 8. e Mail sends mail

Figure B.17 – Use Case Description – Approve & submit order

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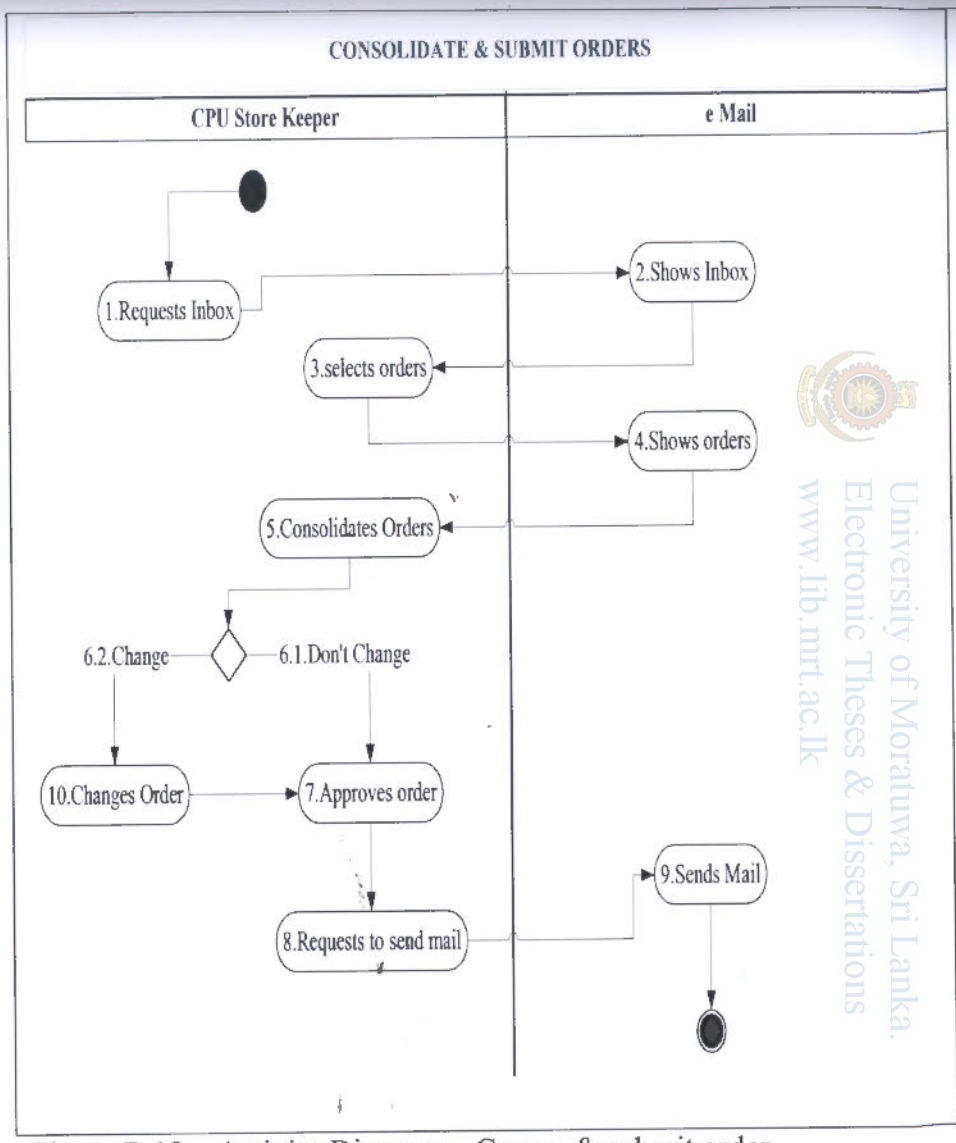

Figure B.18 – Activity Diagram – Conso. & submit order

Name	Consolidate & Submit Order
Description	
Actor	CPU Store Keeper
Pre-Conditions	Orders sent by Branch Managers must be available in CPU Store Keeper's Inbox
Post Condition	Consolidated order must be submitted to CPU Manager
Flow	1. CPU Store Keeper requests inbox 2. e Mail shows inbox 3. CPU Store Keeper selects orders 4. e Mail shows orders 5. CPU Store Keeper consolidates orders 6.1. If order not to change 7. CPU Store Keeper approves order 8. CPU Store Keeper requests to send mail 9. e Mail sends mail
Exception	5.2. Else order to change 10. CPU Store Keeper changes order 7. CPU Store Keeper approves order 8. CPU Store Keeper requests to send mail 9. e Mail sends mail

Figure B.19 – Use Case Description – Conso. & submit order

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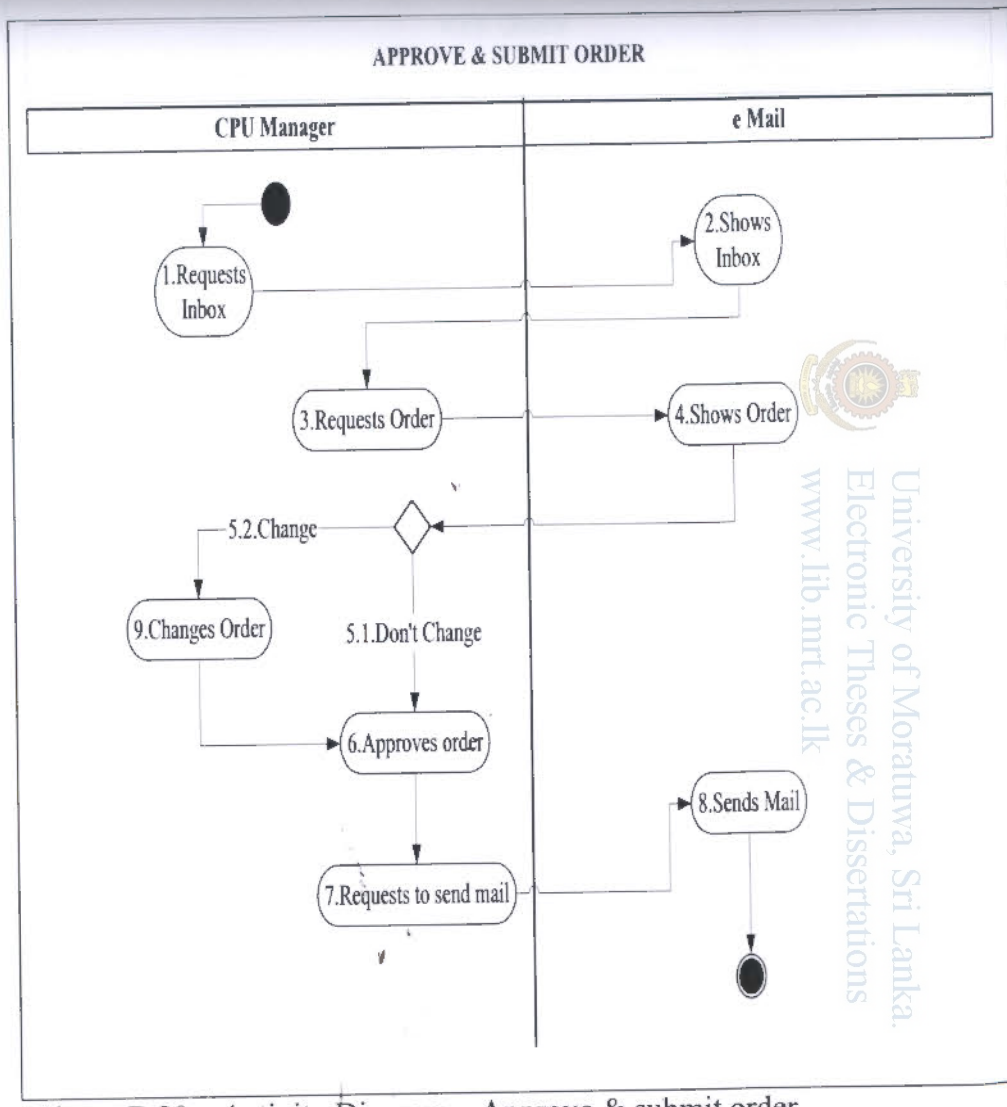

Figure B.20 – Activity Diagram – Approve & submit order

Name	Approve & Submit Order
Description	
Actor	CPU Manager
Pre-Conditions	Order sent by CPU Store Keeper must be available in CPU Manager's Inbox to view
Post Condition	Approved order must be available in Supplier's inbox to view
Flow	1. CPU Manager requests Inbox 2. e Mail shows inbox 3. CPU Manager requests order 4. e Mail shows order 5.1. If order not to change 6. CPU Manager approves order 7. CPU Manager requests to send mail 8. e Mail sends mail
Exception	5.2. Else order to change 9. CPU Manager changes order 7. CPU Manager approves order 8. CPU Manager requests to send mail 9. e Mail sends mail

Figure B.21 – Use Case Description – Approve & submit order

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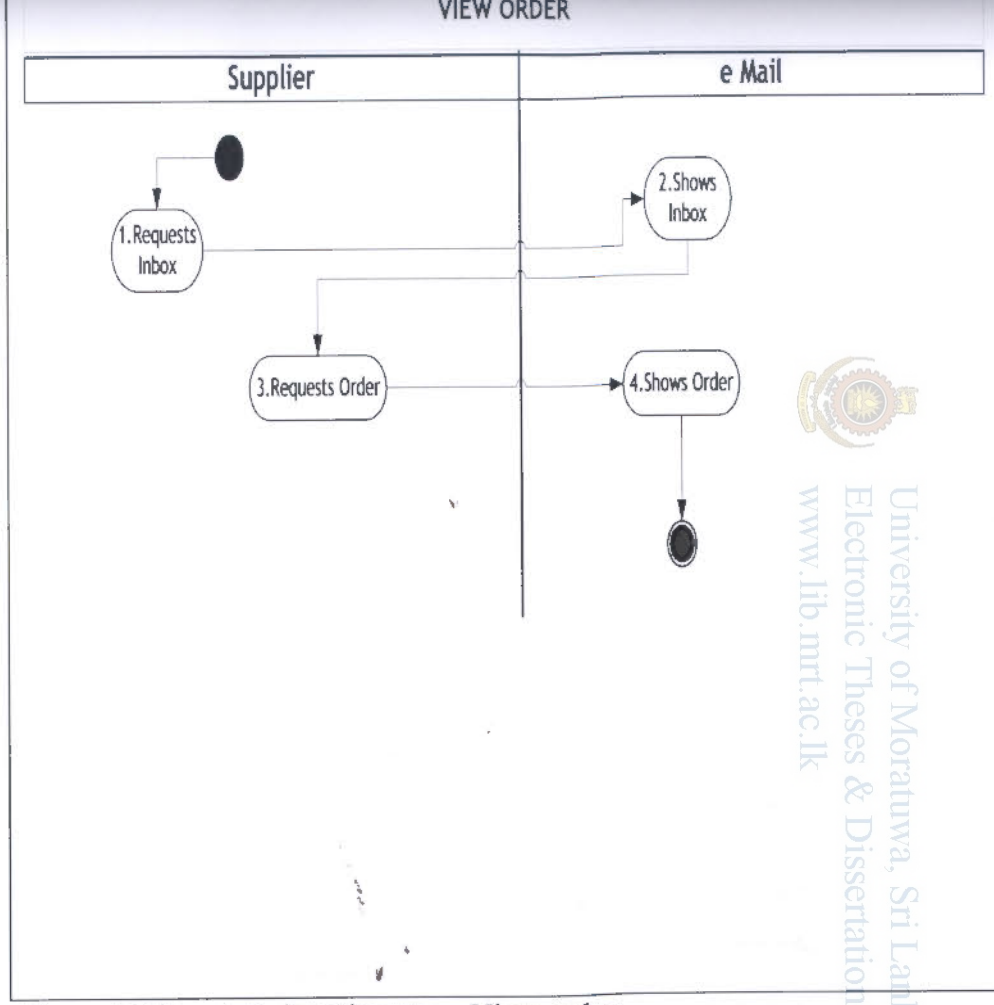

Figure B.22 – Activity Diagram – View order

Description	
Actor	Supplier
Pre-Conditions	Order sent by CPU Manager must be available in Supplier's Inbox to view
Post Condition	Supplier should be able to view order
Flow	1. Supplier requests Inbox 2. e Mail shows inbox 3. Supplier selects order 4. e Mail shows order
Exception	

Figure B.23 – Use Case Description – View order

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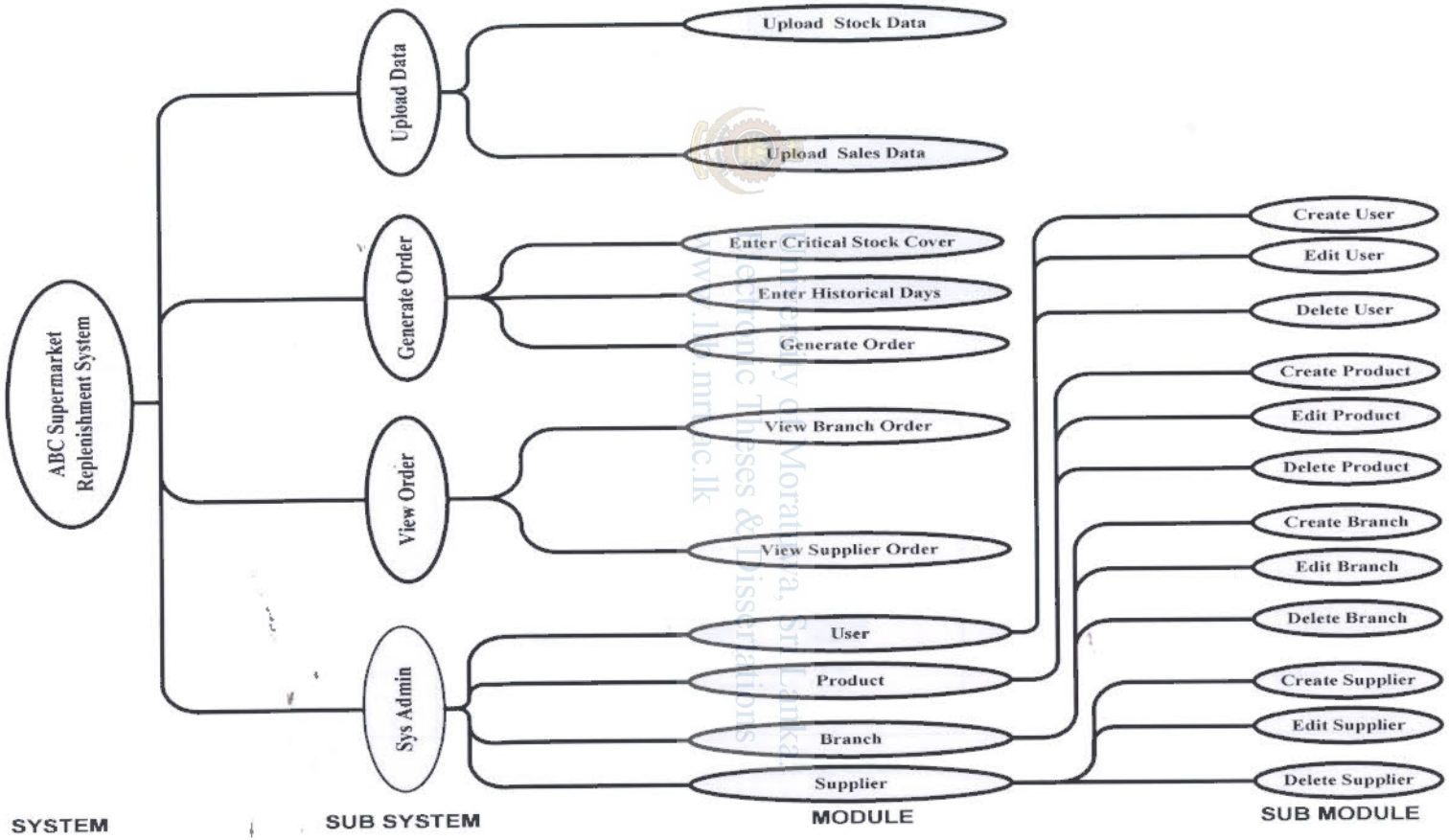
System architectural diagram



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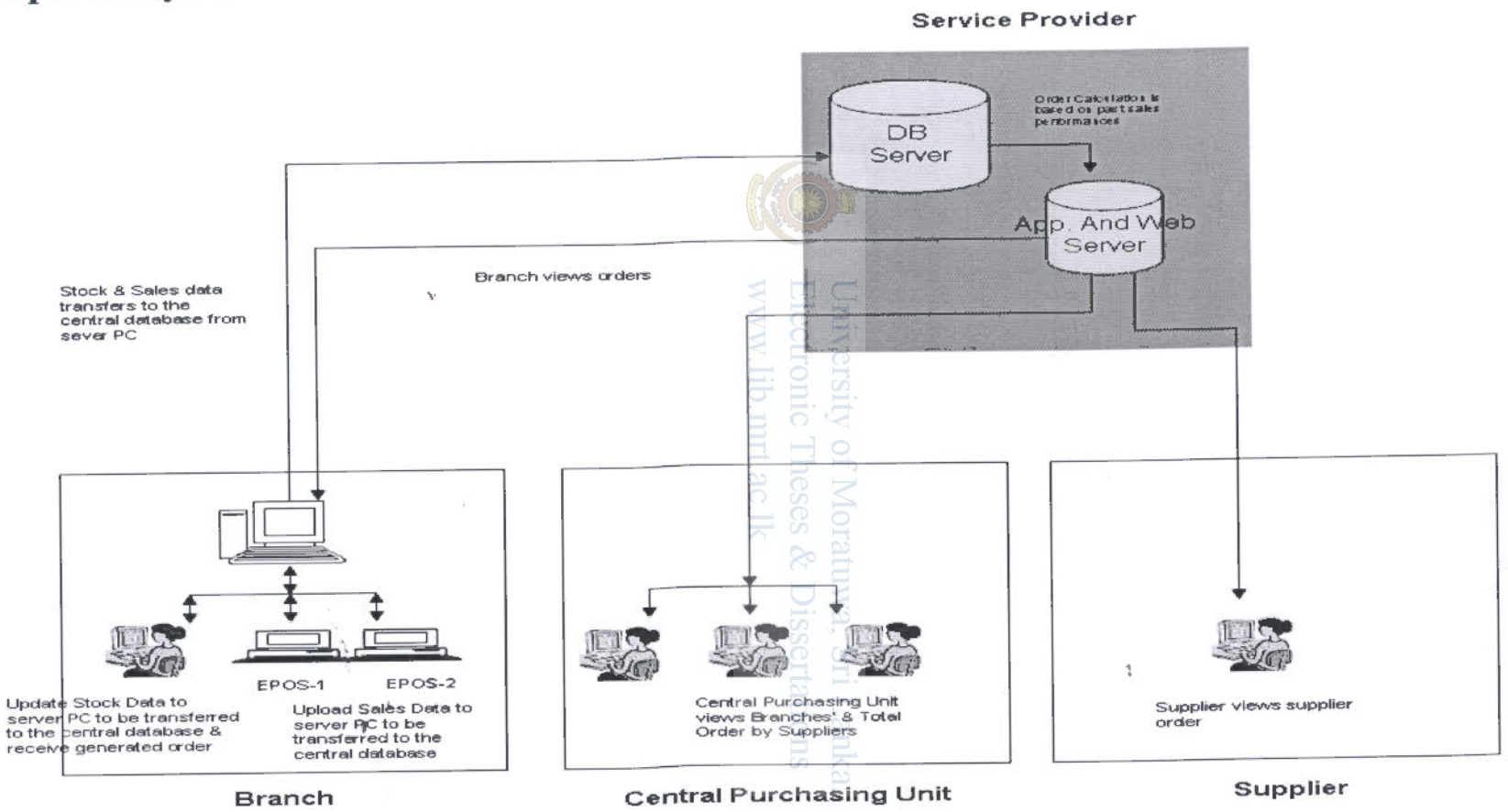
Proposed system overview



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Use case, activity diagrams and use case descriptions for the proposed system

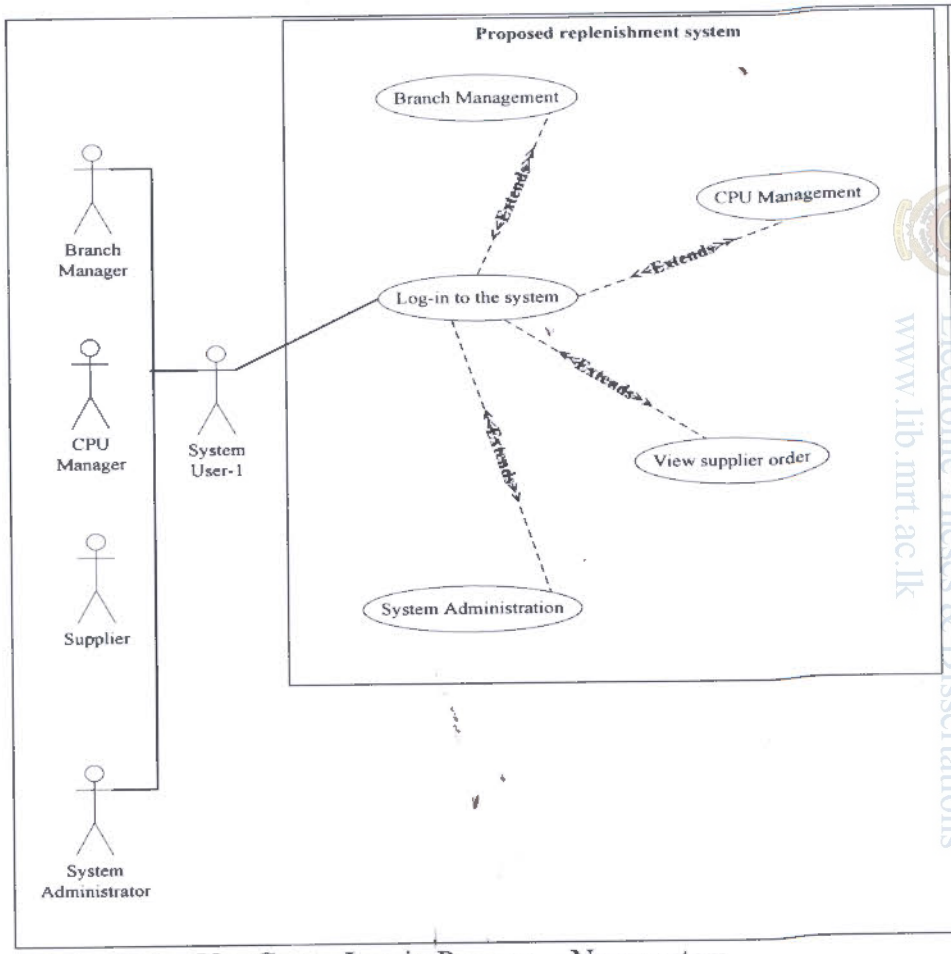

Figure E.1 – Use Case - Log in Process - New system

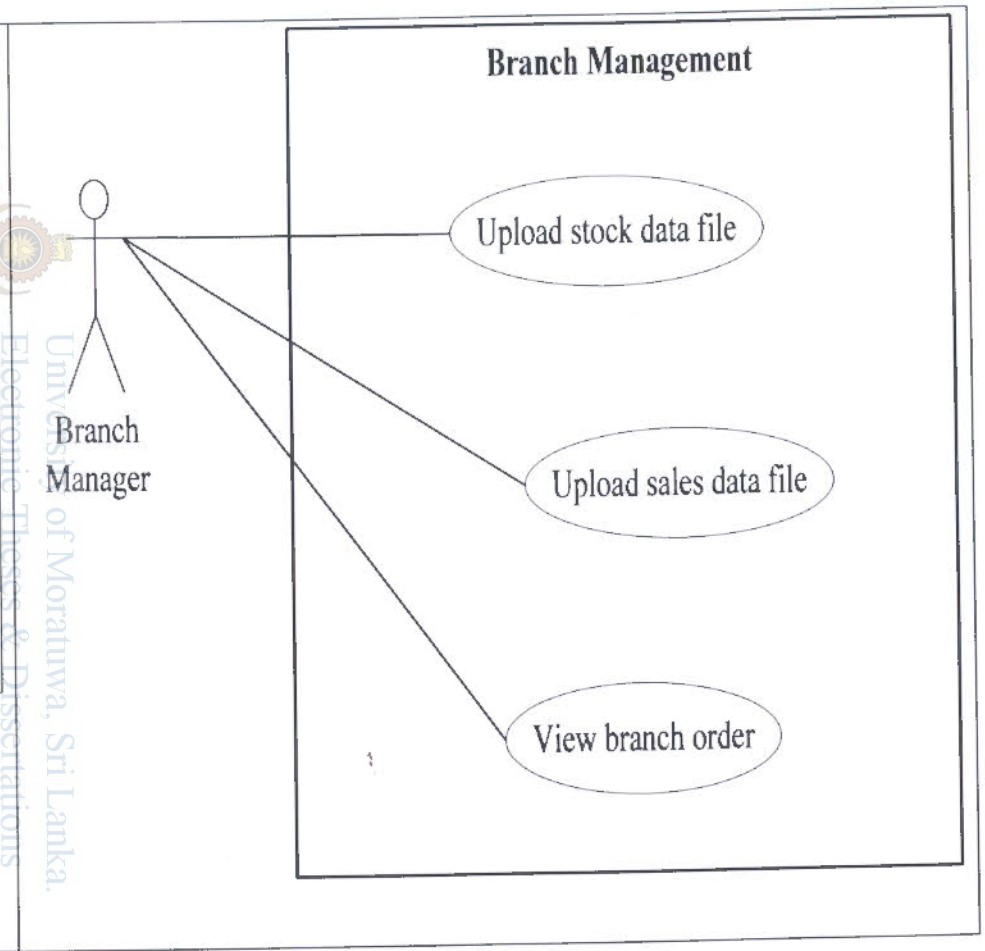

Figure E.2 – Use Case – Branch Management

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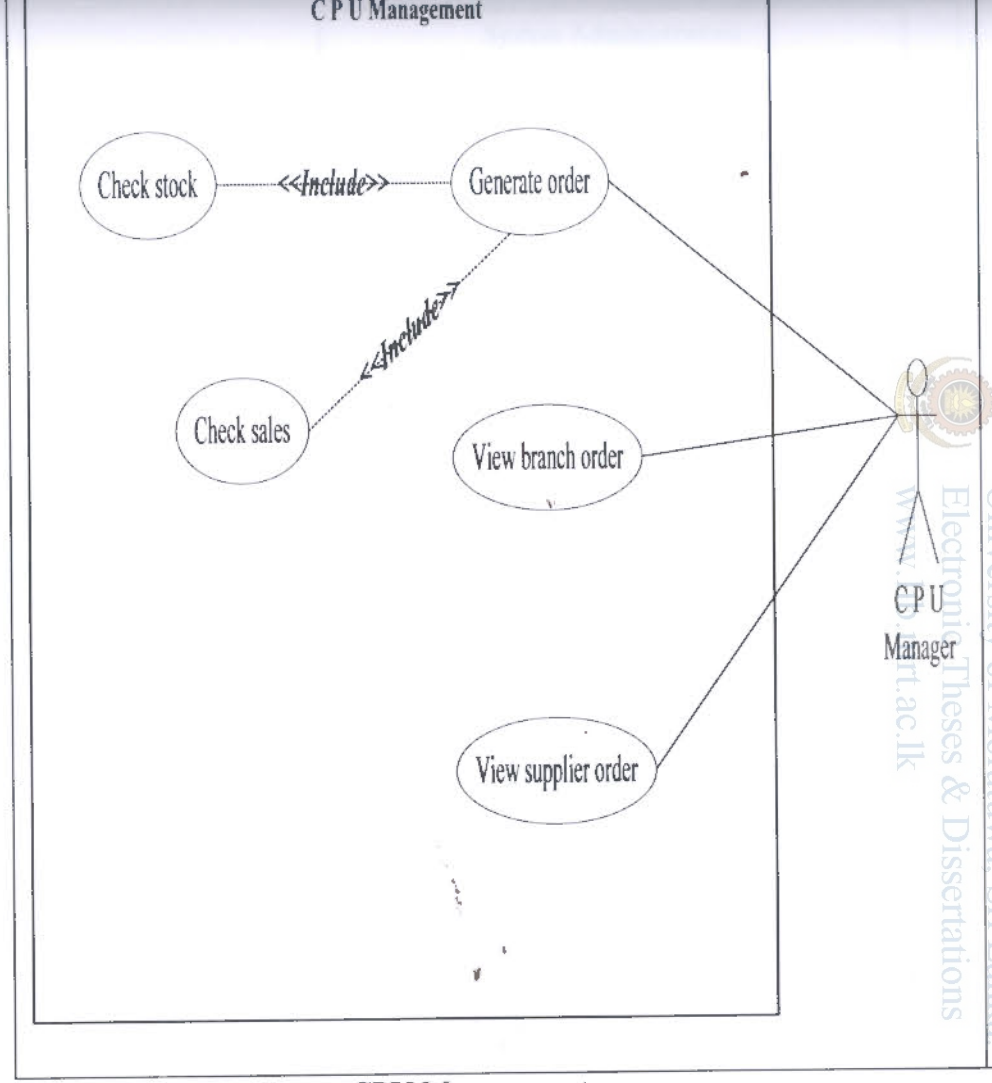

Figure E.3 – Use Case – CPU Management

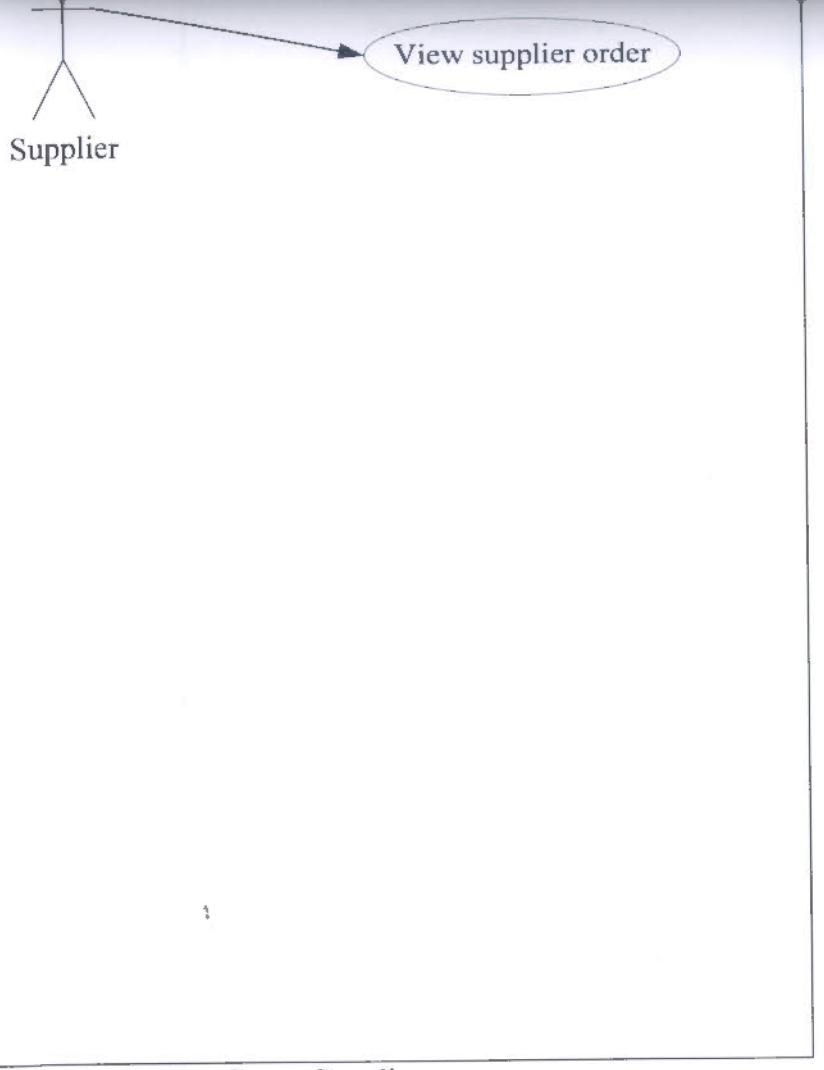

Figure E.4 – Use Case - Supplier

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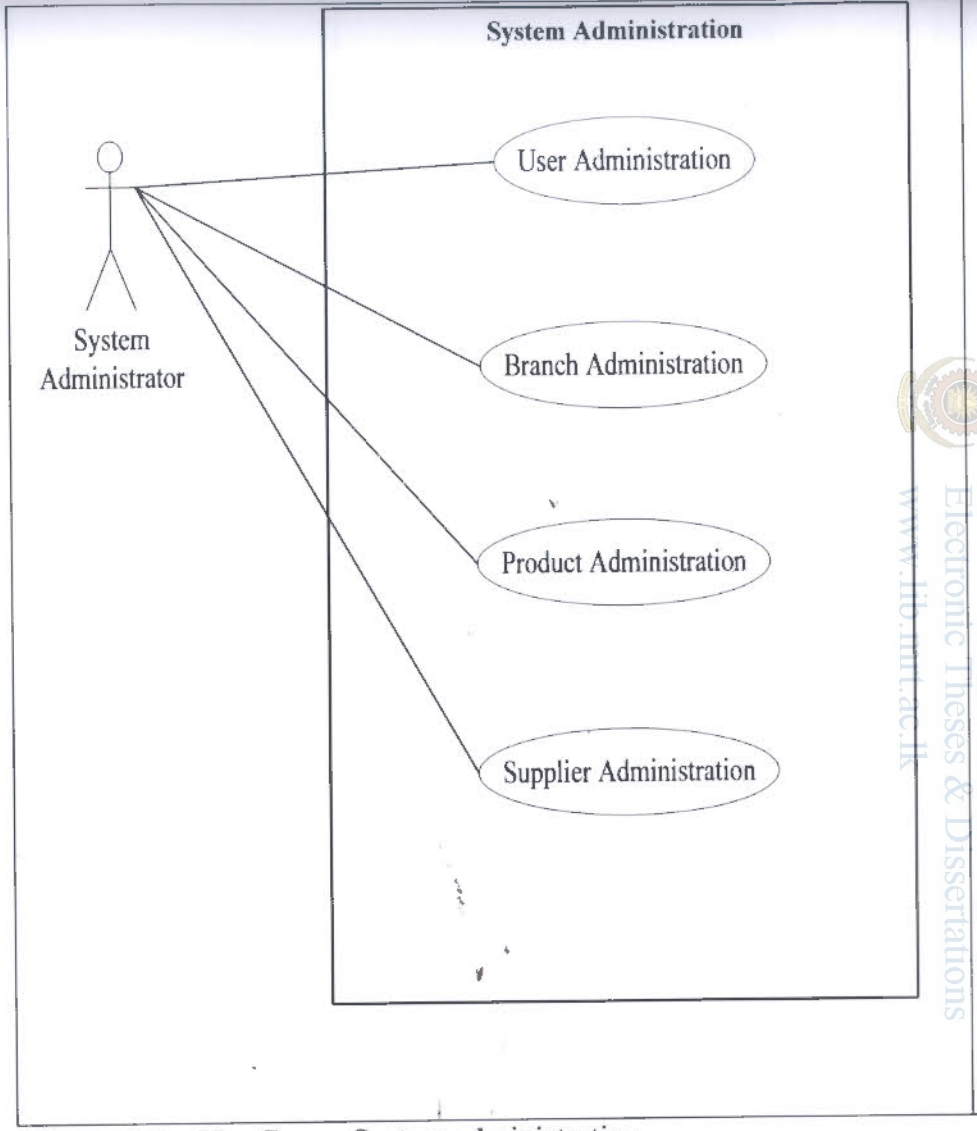

Figure E.5 – Use Case – System administration

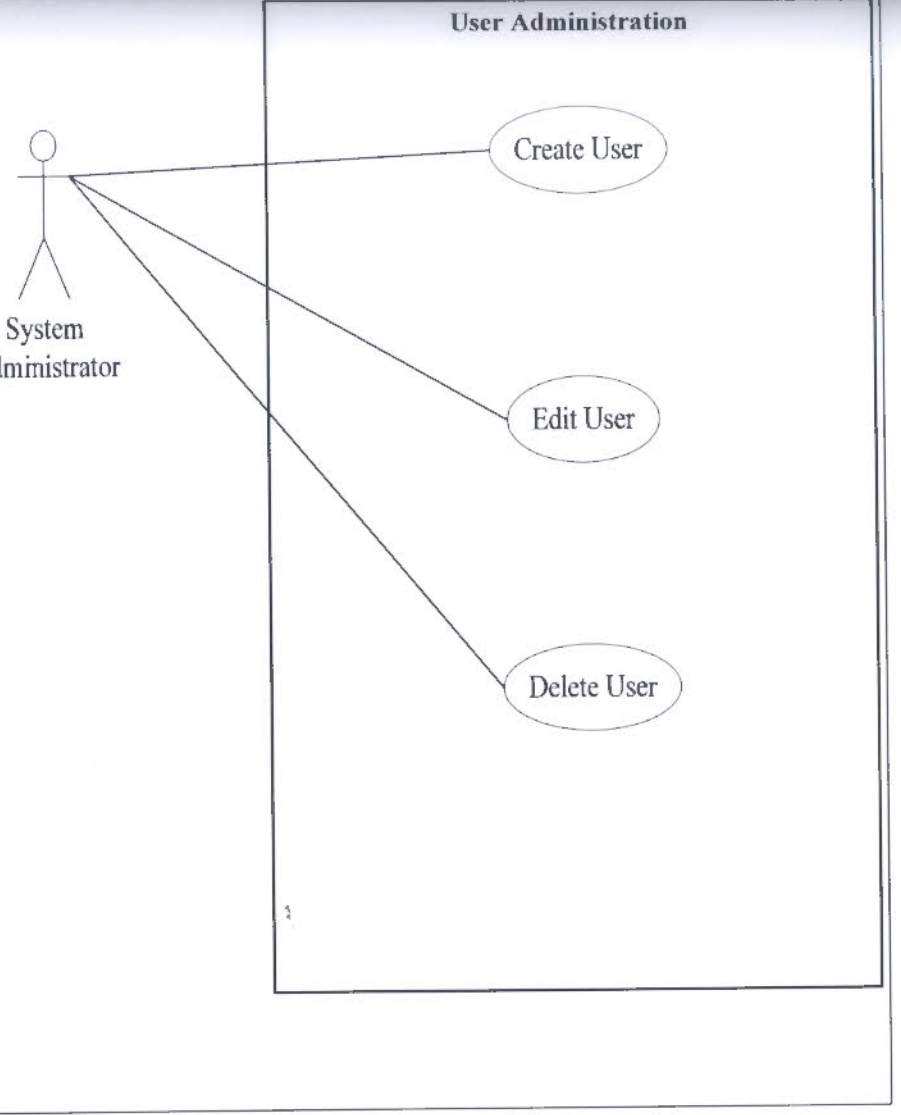

Figure E.6 – Use Case – User administration

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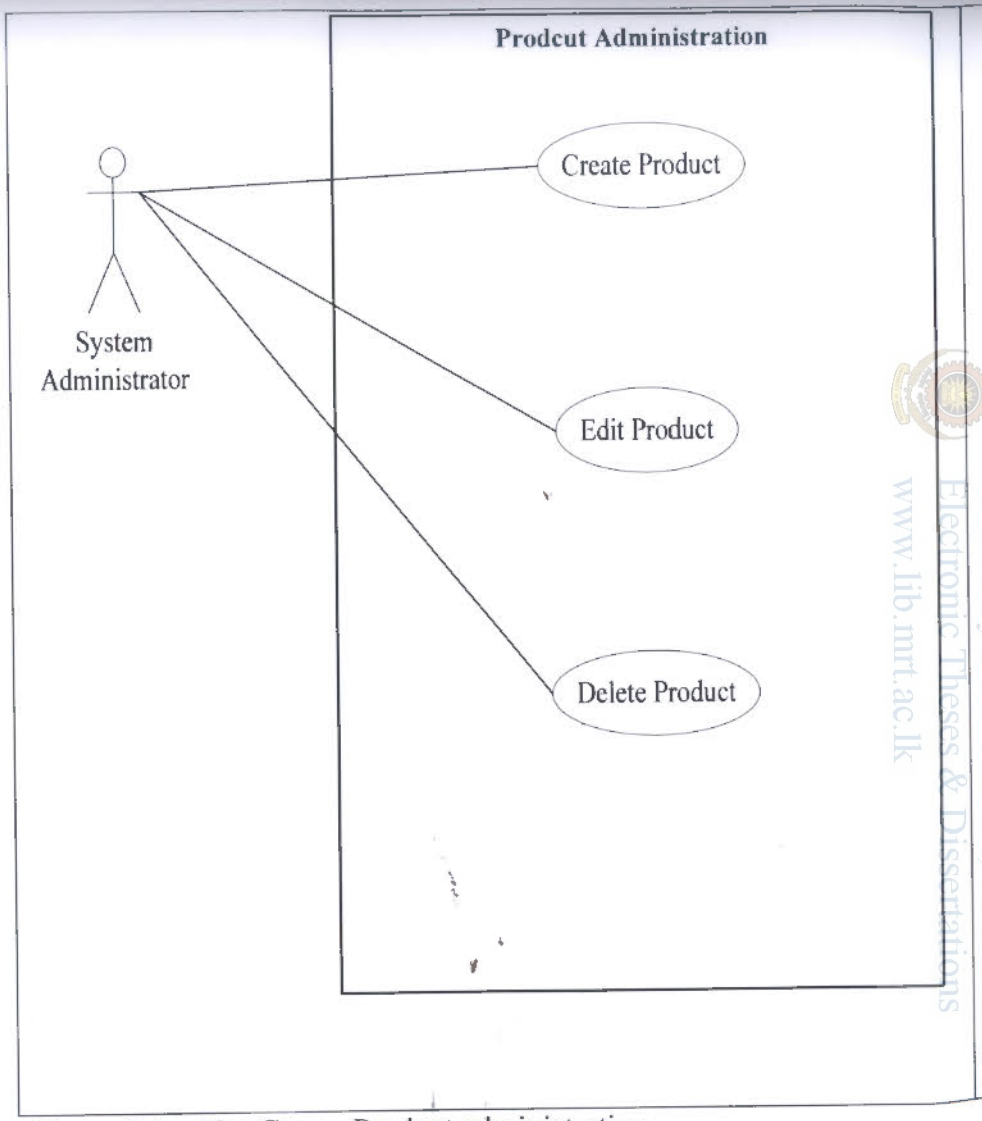

Figure E.7 – Use Case – Product administration

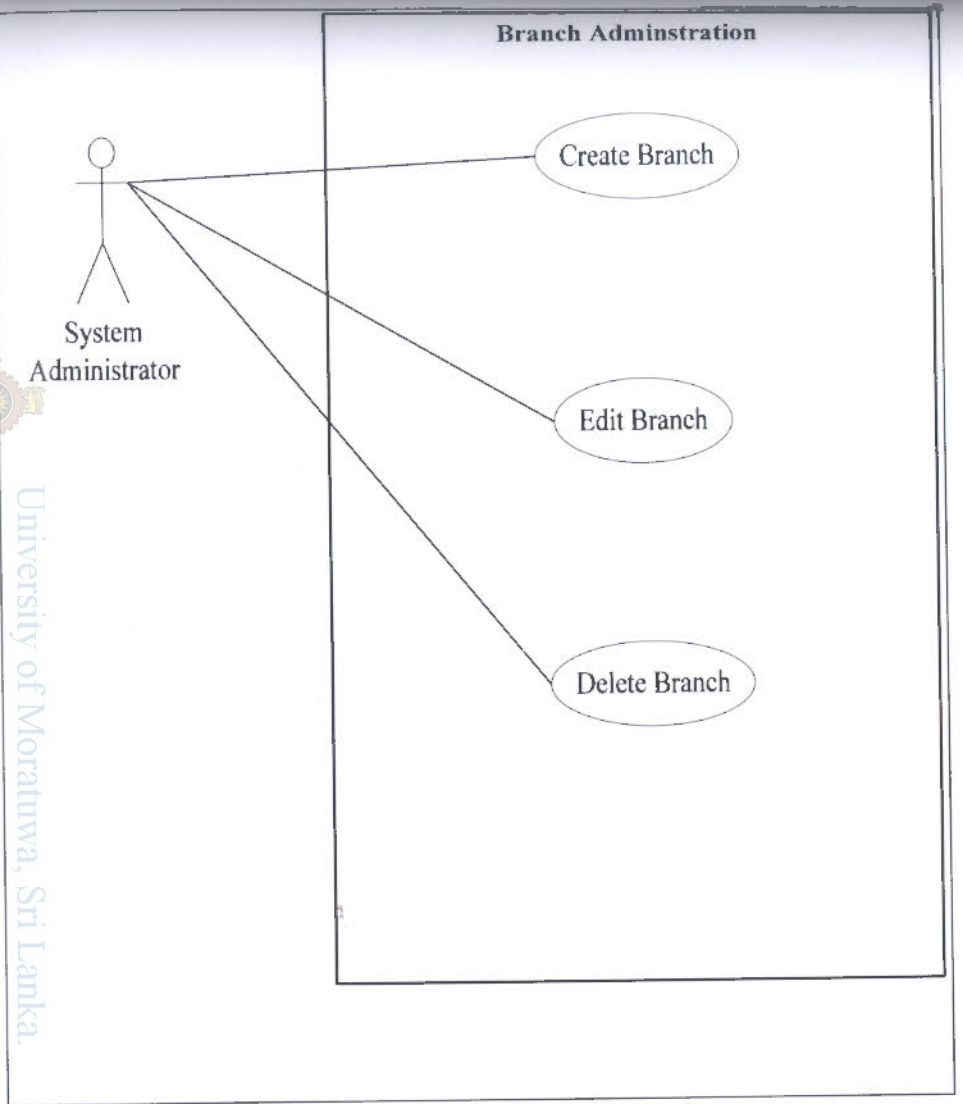

Figure E.8– Use Case – Branch administration

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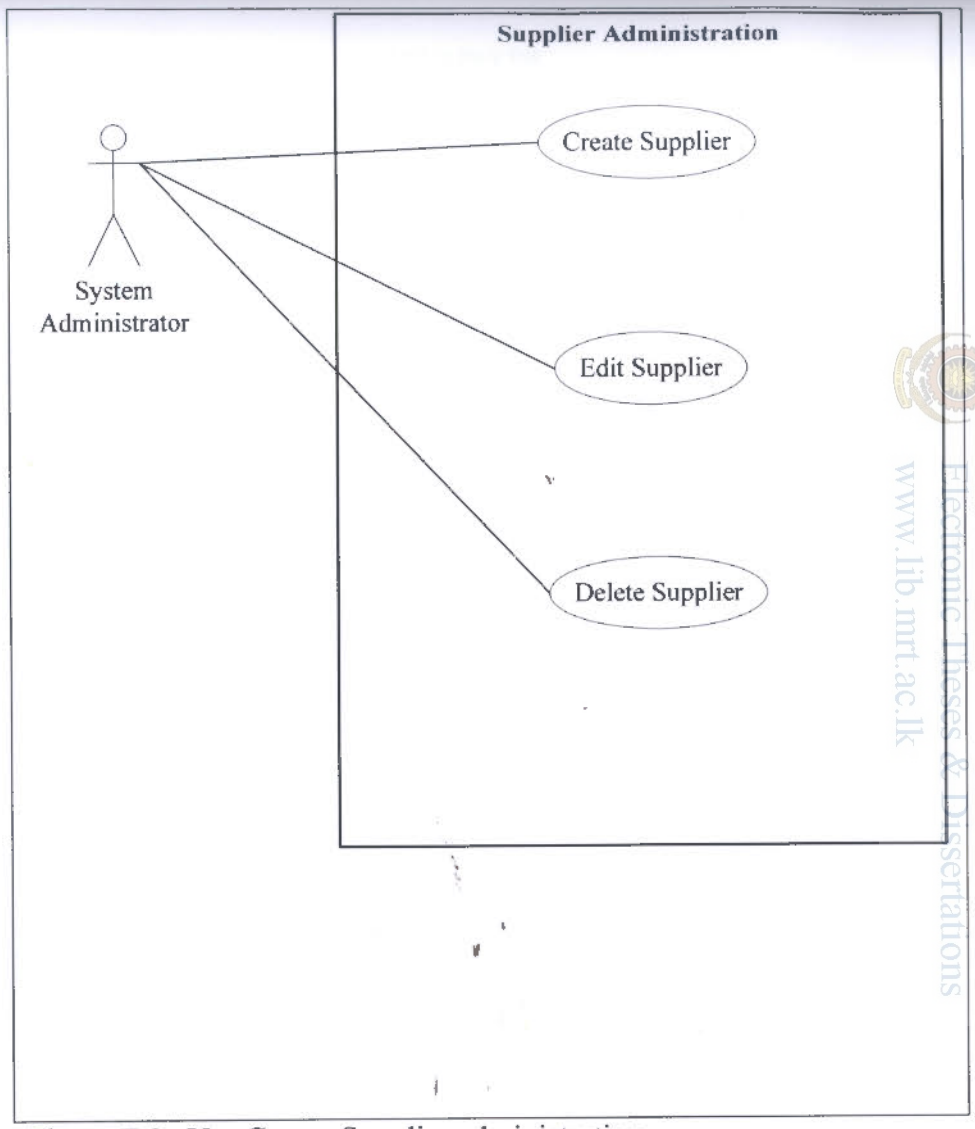

Figure E.9– Use Case – Supplier administration

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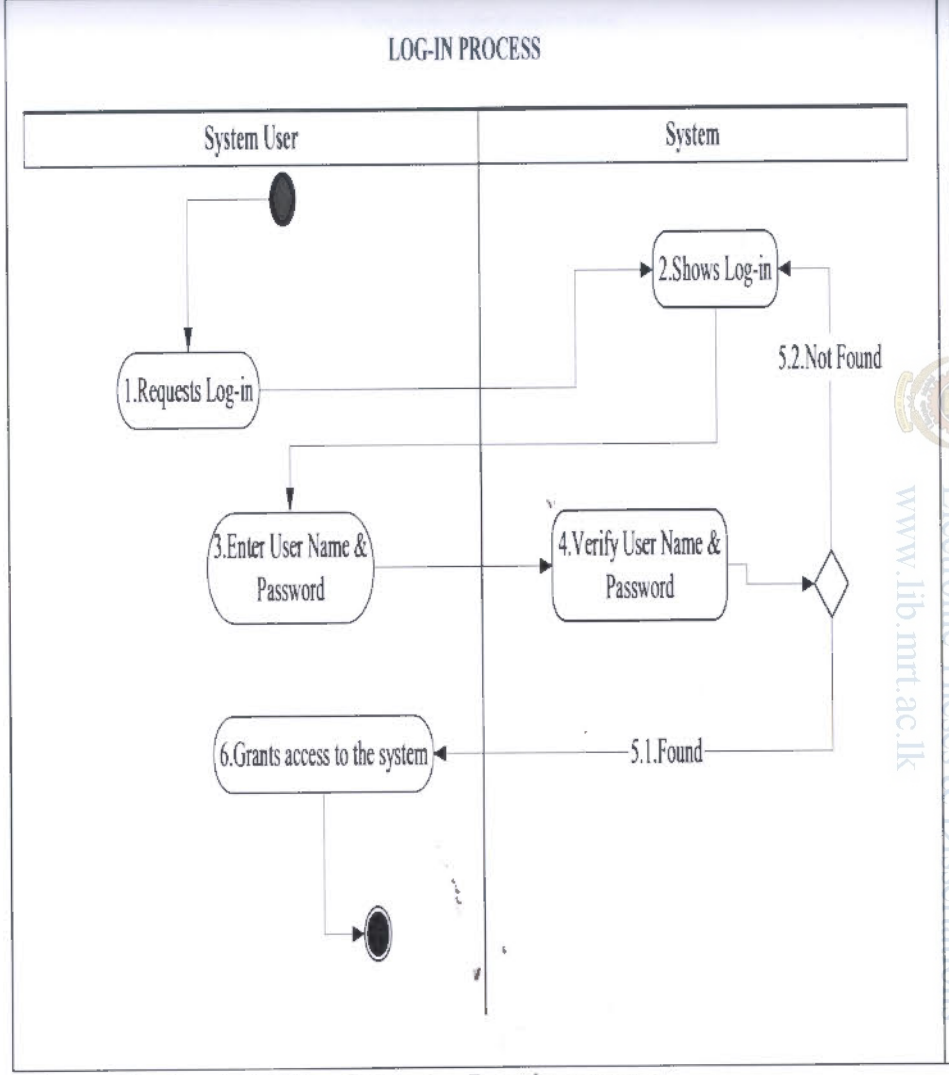

Figure E.10 – Activity Diagram – Log-in process

Name	Log in Process
Description	
Actor	System User
Pre-Conditions	1. System user must have a user name & password to log-in to the system
Post Condition	1. System user should be able to access the system
Flow	1. System user requests log-in to the system 2. System shows log-in 3. System user enters username & password 4. System verifies username & password 5.1. If User name & password found 5. System grants accesses the system
Exception	5.2. Else User name & password not found 2. System shows log-in interface

Figure E.11 – Use Case Description – Log-in process

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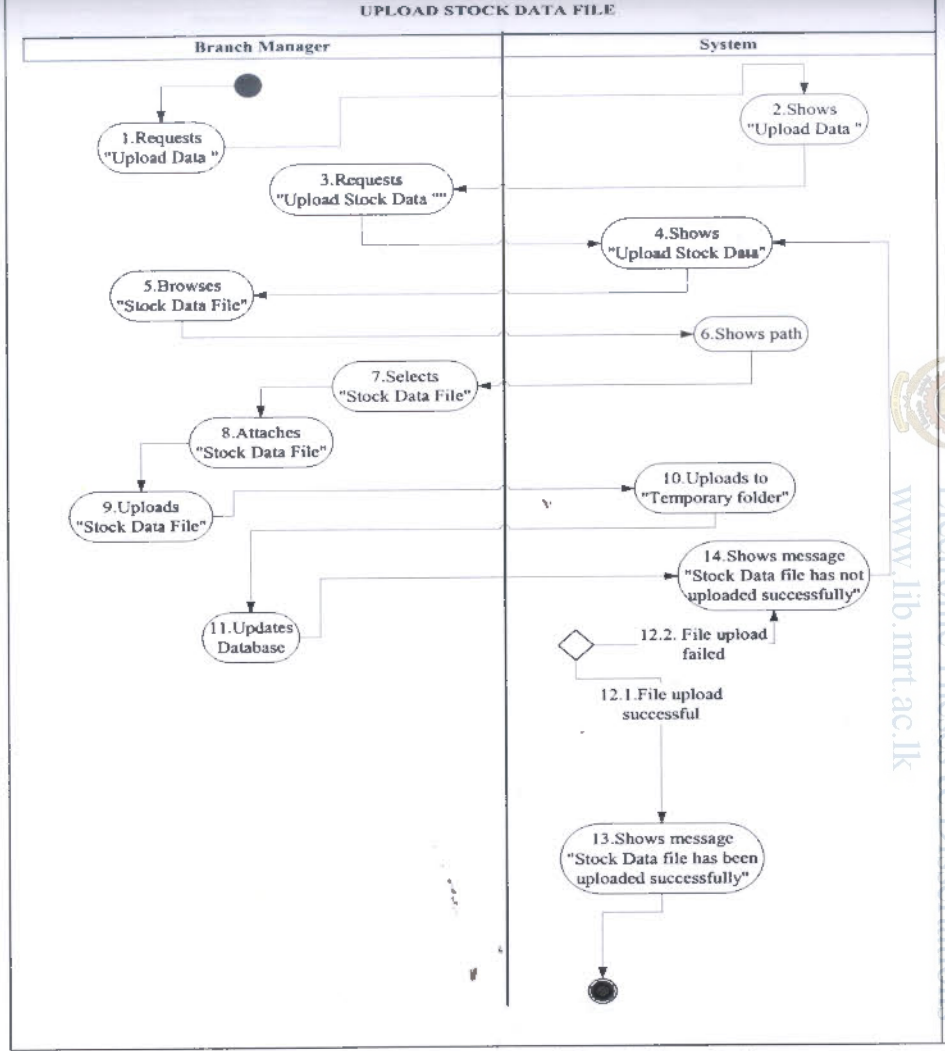

Figure E.12 – Activity Diagram – Upload Stock Data File

Name	Upload Stock Data File
Description	
Actor	Branch Manager
Pre-Conditions	An already generated Stock Data file must be available for upload
Post Condition	System must be updated with latest Stock Data file of the branch
Flow	1. Branch Manager requests Upload Data 2. System Shows Upload Data 3. Branch Manager requests Upload Stock Data 4. System shows Upload Stock Data 5. Branch Manager browses Stock Data file 6. System shows the path 7. Branch Manager selects Stock Data file 8. Branch Manger attaches Stock Data file 9. Branch Manager uploads Stock Data file 10. System uploads Stock Data file toa temporary folder 11. Branch Manager updates stock date file 12.1. If file upload successful 13. System shows message " Stock Data file has been uploaded successfully".
Exception	8.2. Else Stock Data File upload failed 14. System shows message "Stock Data file has not uploaded successfully"

Figure E.13 – Use Case Description – Upload Stock Data File

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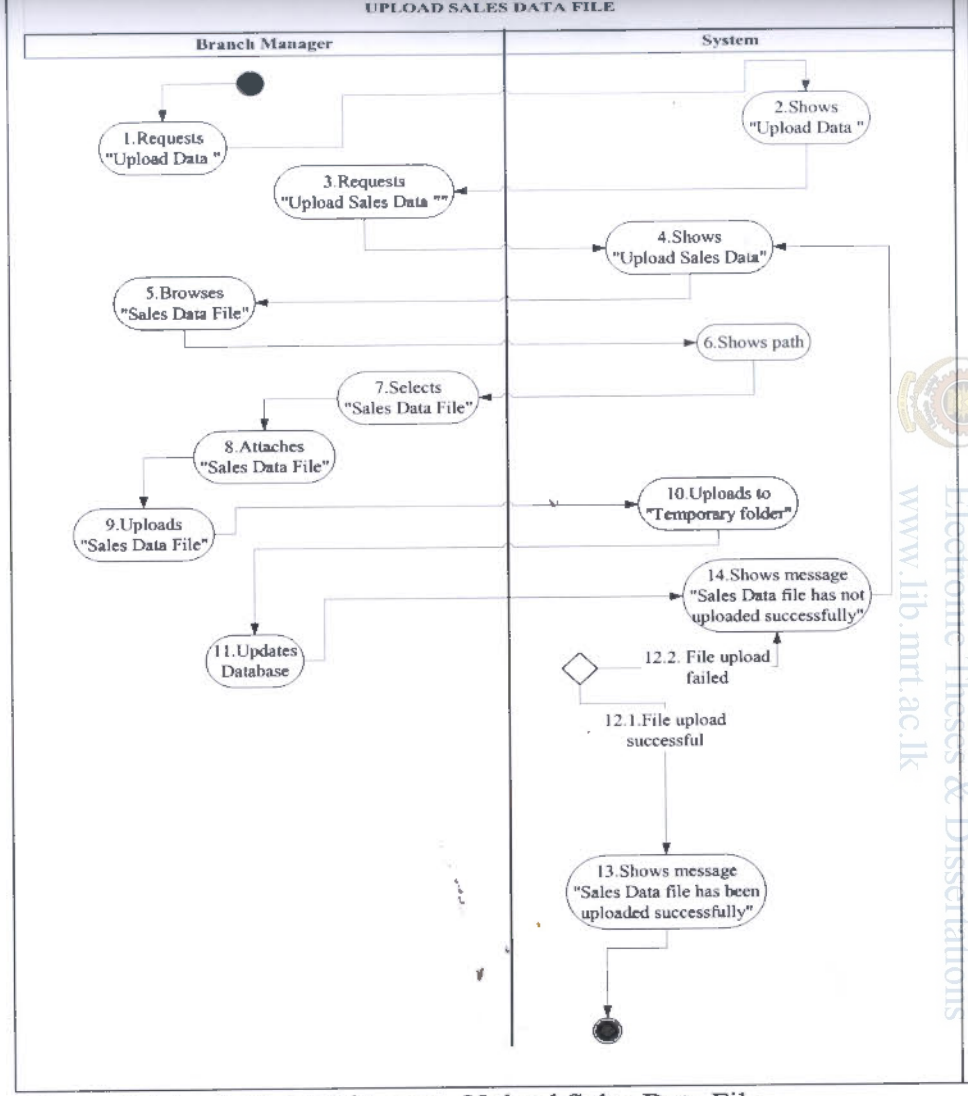

Figure E.14 – Activity Diagram –Upload Sales Data File

Name	Upload Sales Data File
Description	
Actor	Branch Manager
Pre-Conditions	An already generated Sales Data file must be available for upload
Post Condition	System must he updated with latest Sales Data file of the branch
Flow	1. Branch Manager requests Upload Data 2. System Shows Upload Data 3. Branch Manager requests Upload Sales Data 4. System shows Upload Sales Data 5. Branch Manager browses Sales Data file 6. System shows the path 7. Branch Manager selects Sales Data file 8. Branch Manger attaches Sales Data file 9. Branch Manager uploads Sales Data file 10. System uploads Sales Data file to a temporary folder 12. Branch Manager updates Sales Date file 12.1. If file upload successful 13. System shows message " Sales Data file has been uploaded successfully".
Exception	8.2. Else Data File upload failed 14. System shows message "Sales Data file has not uploaded successfully"

Figure E.15 – Use Case Description – Upload Sales Data File

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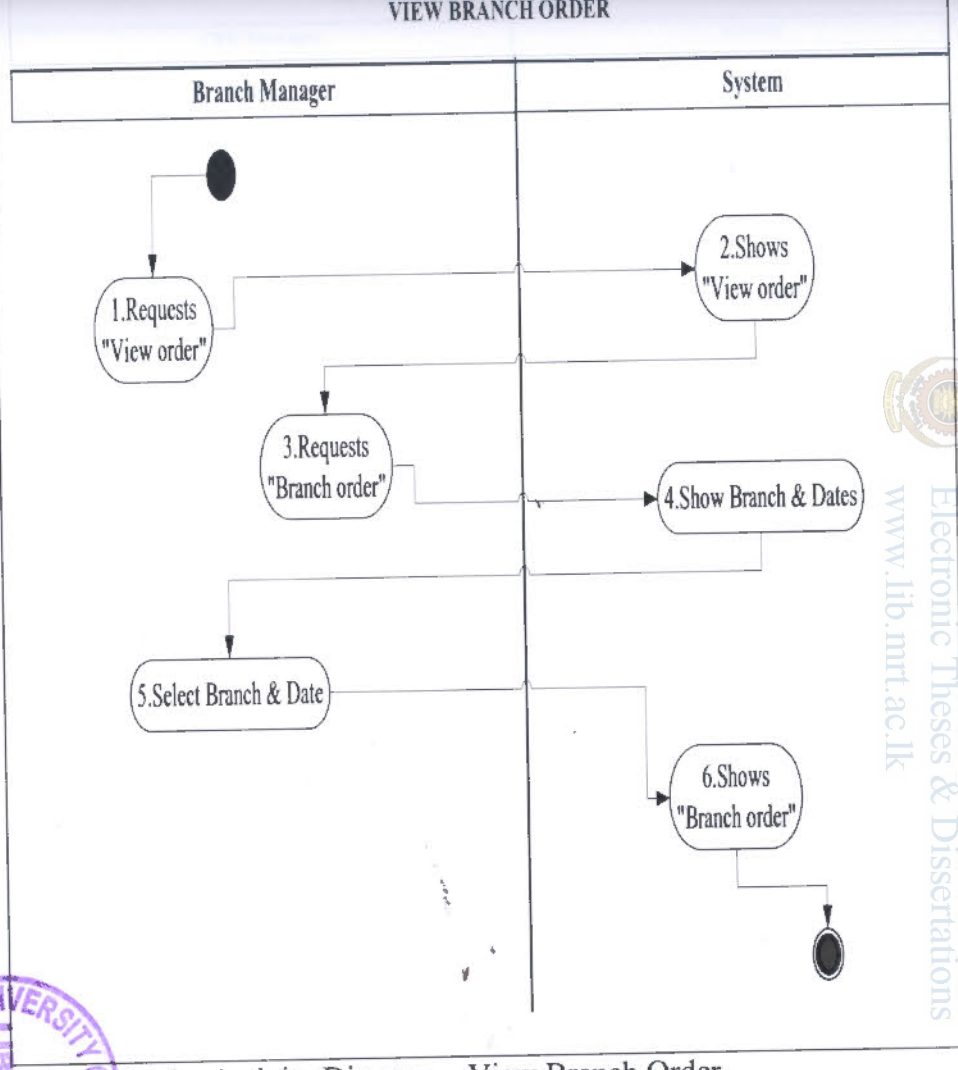

Figure E.16 – Activity Diagram – View Branch Order

Description	
Actor	Branch Manager
Pre-Conditions	An already generated Branch order must be available in the system to view
Post Condition	Branch Manager should be able to view Branch Order
Flow	1. Branch Manager requests view orders 2. System shows view orders 3. Branch Manager requests Branch Order 4. System shows Branch and date to be selected 5. Branch Manager selects Branch and date 6. System shows Branch Order

Figure E.17 – Use Case Description – View Branch Order

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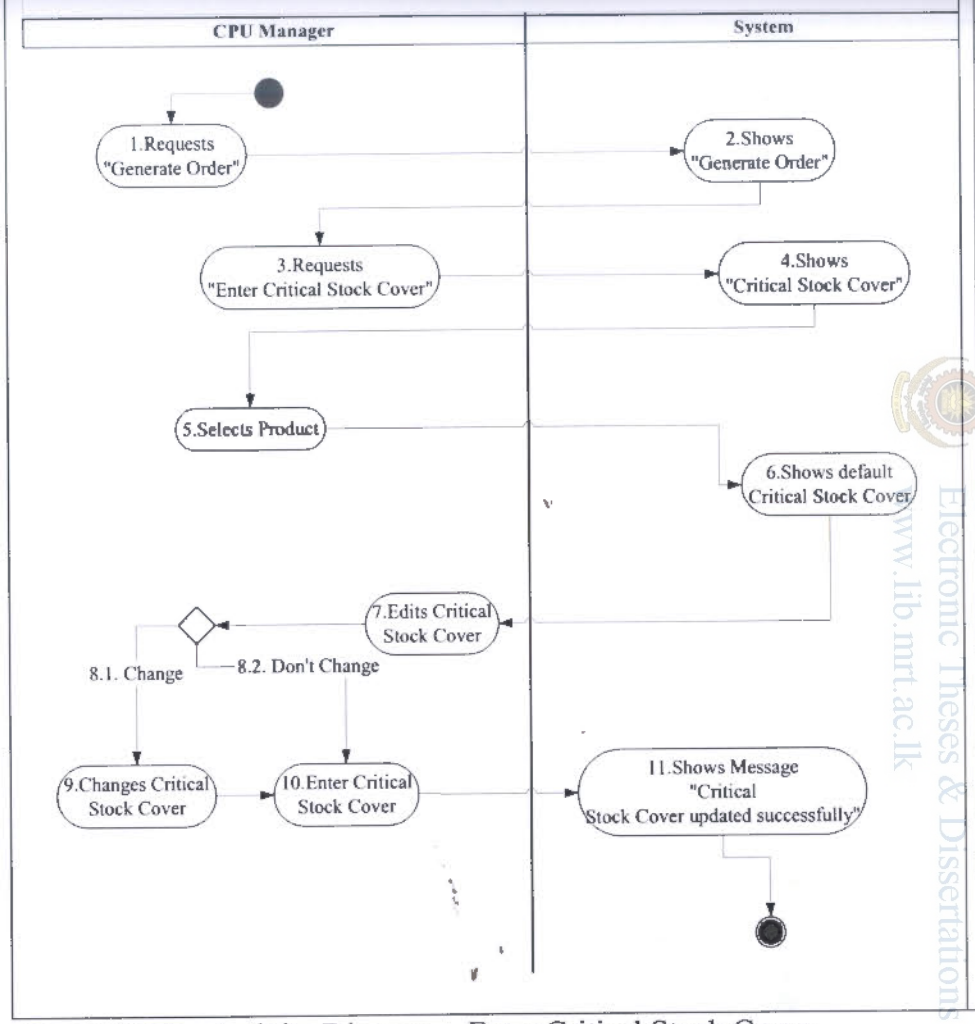

Figure E.18 – Activity Diagram – Enter Critical Stock Cover

Description	
Actor	CPU Manager
Pre-Conditions	A default Critical Stock Cover should be available in the system
Post Condition	System must be updated with latest Critical Stock Cover
Flow	1. CPU Manager requests Generate Order 2. System Shows Generate Order 3. CPU Manager requests Enter Critical Stock Cover 4. System shows Enter Critical Stock Cover 5. CPU Manager selects product 6. System shows default Enter Critical Stock Cover 7. CPU Manager edits Critical Stock Cover 8.1. If CPU Manager to change Critical Stock Cover 9. CPU Manager changes Critical Stock Cover 10. CPU Manager to Enter Critical Stock Cover 11. System shows message "Critical Stock Cover updated successfully".
Exception	9.2. CPU Manager not to change Critical Stock Cover 6. System shows message "Sales Data file has not uploaded successfully"

Figure E.19 – Use Case Description – Enter Critical Stock Cover

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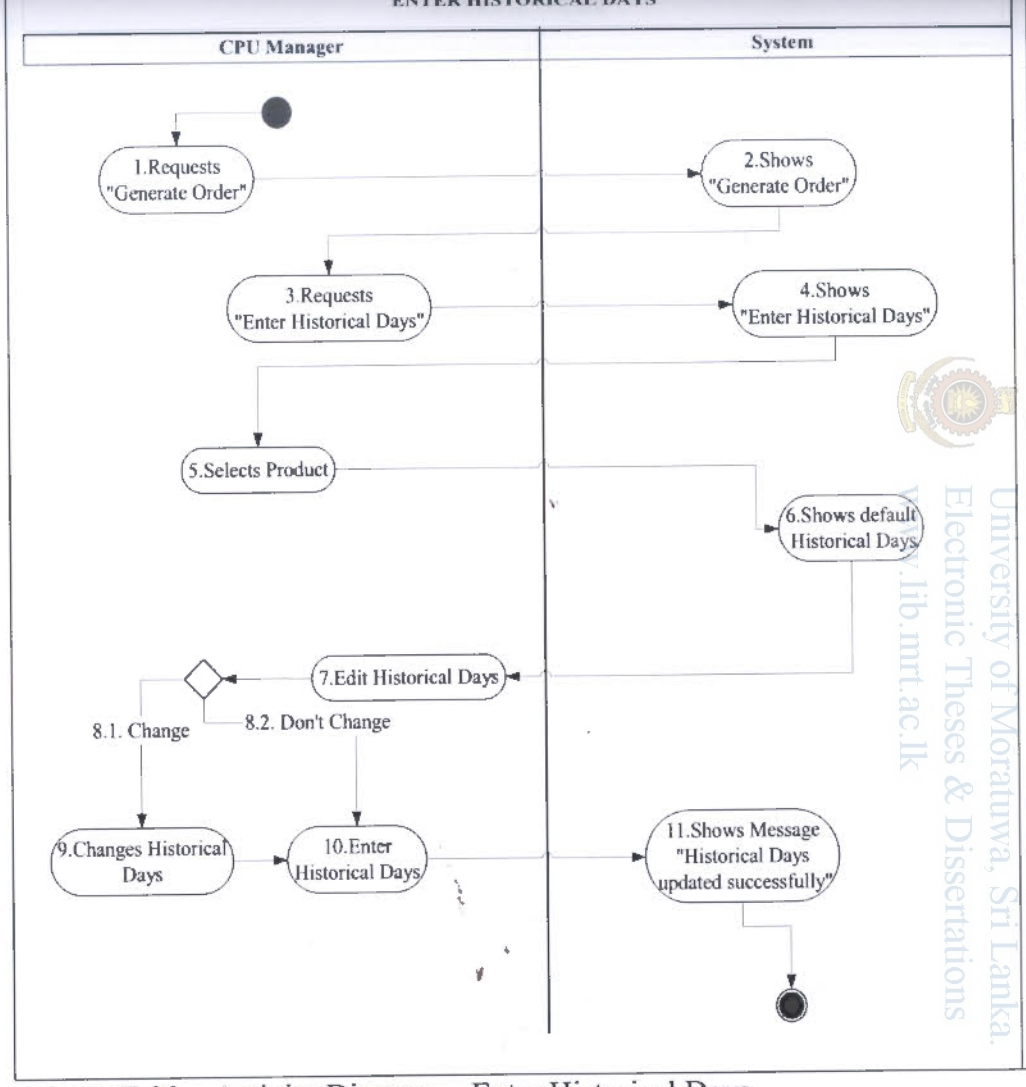

Figure E.20 – Activity Diagram – Enter Historical Days

Description	
Actor	CPU Manager
Pre-Conditions	A default Historical Days should be available in the system
Post Condition	System must be updated with latest Historical Days
Flow	1. CPU Manager requests Generate Order 2. System Shows Generate Order 3. CPU Manager requests Enter Historical Days 4. System shows Enter Historical Days 5. CPU Manager selects product 6. System shows default Historical Days 7. CPU Manager edits Historical Days 8.1. If CPU Manager to change Historical Days 9. CPU Manager changes Historical Days 10. CPU Manager to Enter Historical Days 11. System shows message "Historical Days updated successfully".
Exception	9.2. CPU Manager not to change Historical Days 6. System shows message "Historical Days updated successfully".

Figure E.21 – Use Case Description – Enter Historical Days

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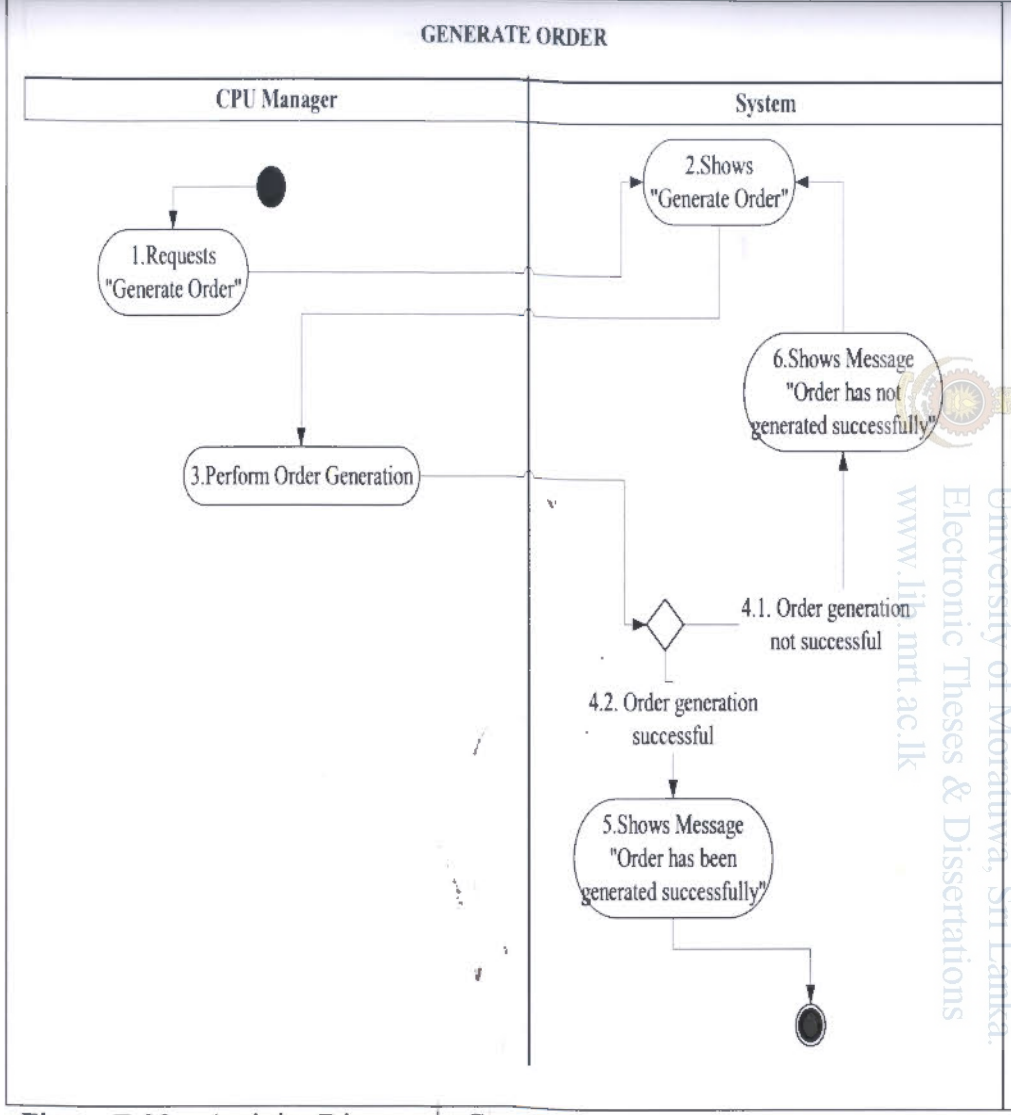

Figure E.22 – Activity Diagram – Generate Order

Name	Generate Order
Description	
Actor	CPU Manager
Pre-Conditions	1. System must've already defined Historical No of Days 2. System must've already defined Critical Stock Cover 3. System must be updated with latest Sales Data of the branches 4. System must be updated with latest Stock Data of the branches
Post Condition	1. Branch wise order can be viewed 2. Supplier wise order can be viewed
Flow	1. CPU Manager requests Generate Order 2. System Shows Generate Order 3. CPU Manager performs Order Generation 4.1. If Order Generation Successful 5. System shows message "Order has been generated successfully"
Exception	9.2. CPU Manager not to change Historical Days 6. System shows message "Order has not generated successfully".

Figure E.23 – Use Case Description – Generate Order

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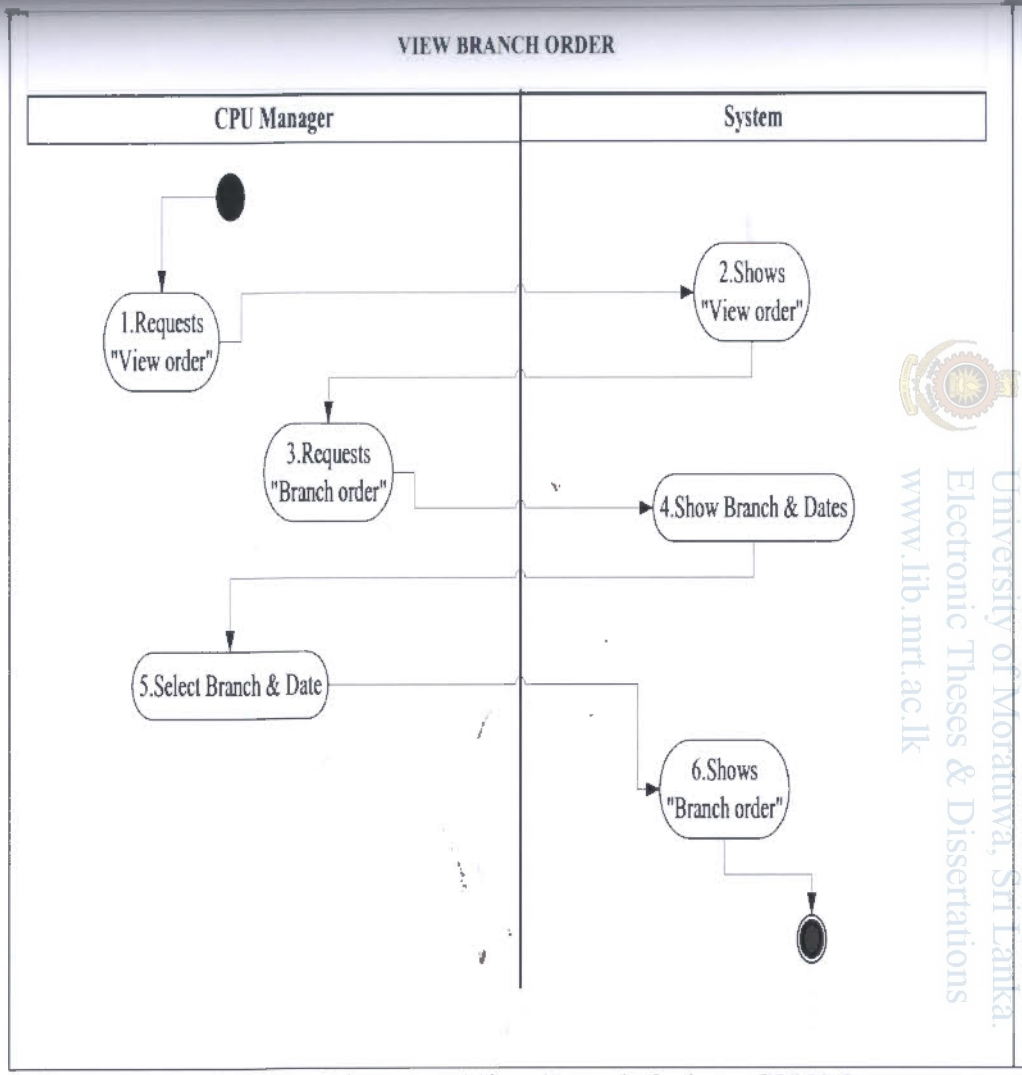

Figure E.24 – Activity Diagram – View Branch Order – CPU Manager

Name	View Branch Order
Description	
Actor	CPU Manager
Pre-Conditions	An already generated Branch order must be available in the system to view
Post Condition	CPU Manager should be able to view Branch Order
Flow	7. CPU Manager requests view orders 8. System shows view orders 9. CPU Manager requests Branch Order 10. System shows Branch and date to be selected 11. CPU Manager selects Branch and date 12. System shows Branch Order

Figure E.25 – Activity Diagram – View Branch Order – CPU Manager

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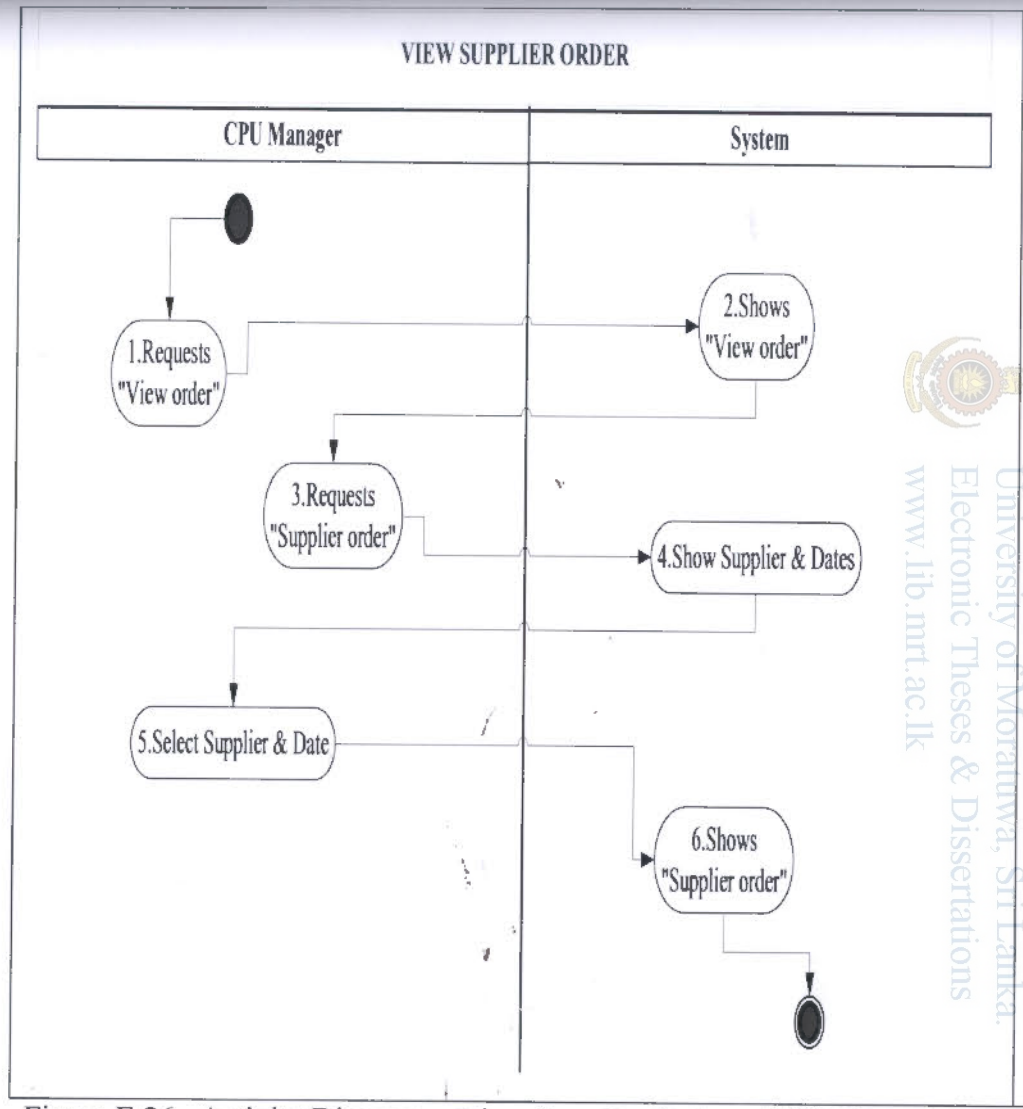

Figure E.26– Activity Diagram – View Supplier Order – CPU Manager Manager

Name	View Supplier Order
Description	
Actor	CPU Manager
Pre-Conditions	An already generated Supplier order must be available in the system to view
Post Condition	CPU Manager should be able to view Supplier Order
Flow	1. CPU Manager requests view orders 2. System shows view orders 3. CPU Manager requests Supplier Order 4. System shows Supplier and date to be selected 5. CPU Manager selects Supplier and date 6. System shows Supplier Order

Figure E.27 – Activity Diagram – View Supplier Order – CPU

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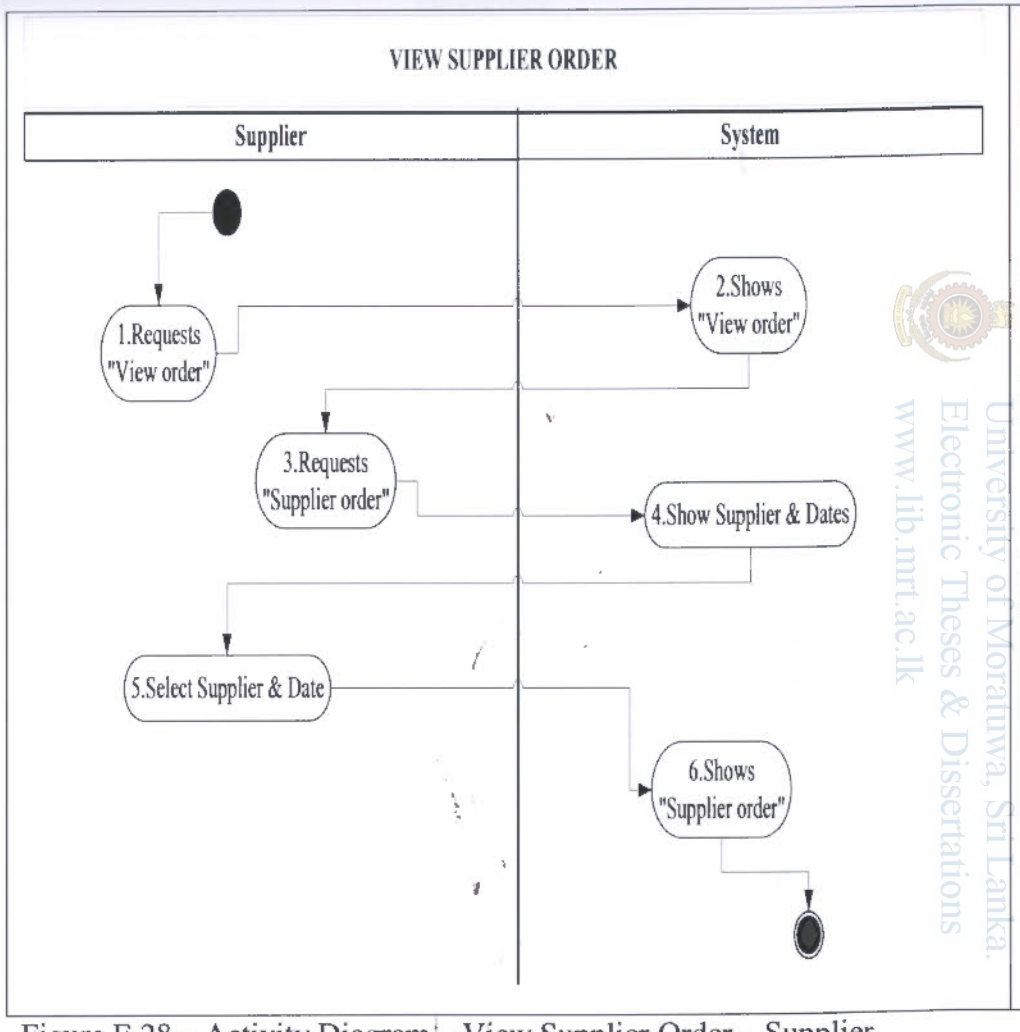

Figure E.28 – Activity Diagram – View Supplier Order – Supplier Supplier

Name	View Supplier Order
Description	
Actor	Supplier
Pre-Conditions	An already generated Supplier order must be available in the system to view
Post Condition	Supplier should be able to view Supplier Order
Flow	1. Supplier requests view orders 2. System shows view orders 3. Supplier requests Supplier Order 4. System shows Supplier and date to be selected 5. Supplier selects Supplier and date 6. System shows Supplier Order

Figure E.29 – Activity Diagram – View Supplier Order -

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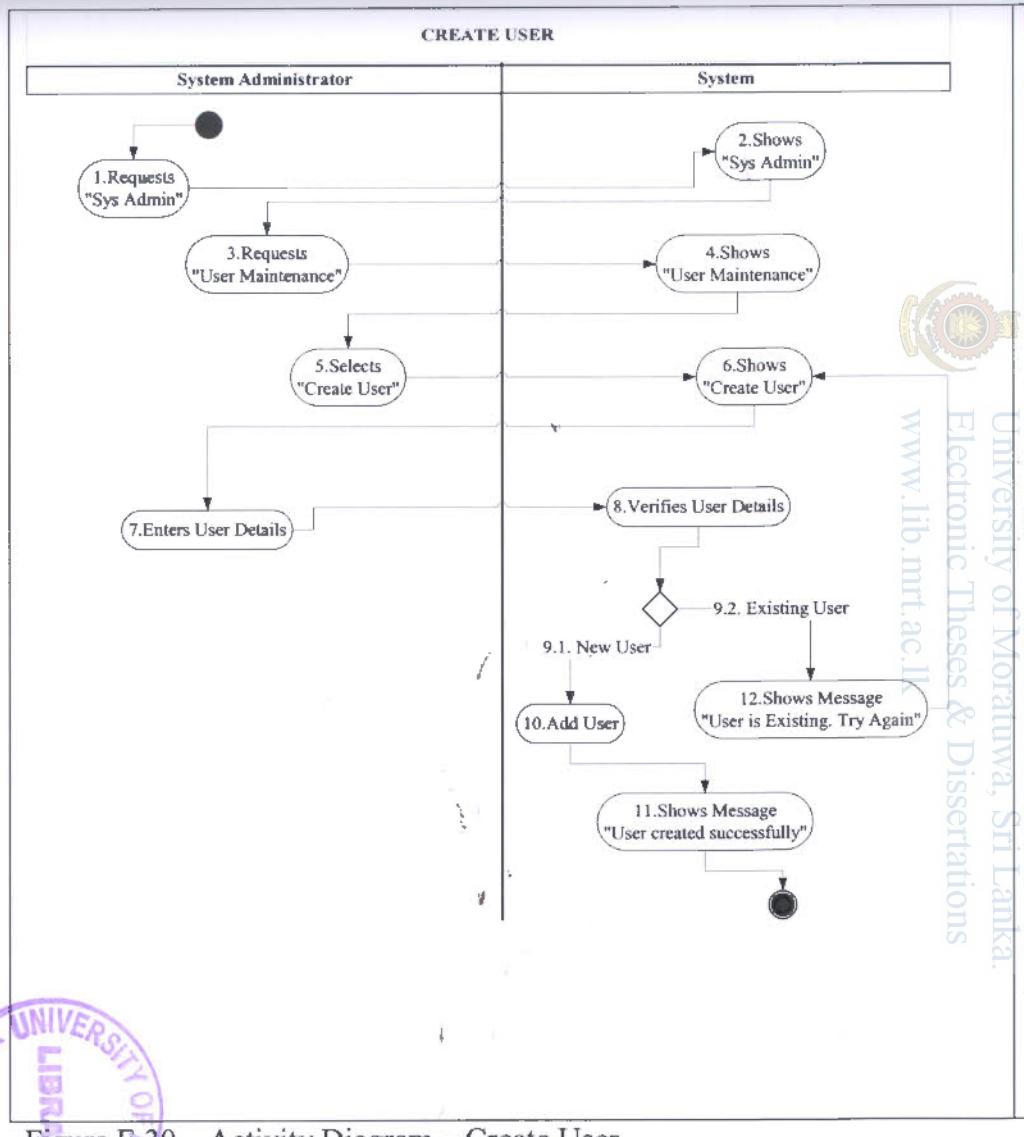

Figure E.30 – Activity Diagram – Create User

Name	Create User
Description	
Actor	System Administrator
Pre-Conditions	System Administrator should posses permission to grant access to new users
Post Condition	New user should be bale to access the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests User Maintenance 4. System shows User Maintenance 5. System Administrator selects Create User 6. System shows Create user 7. System Administrator enters user details 8. System verified User Details 9.1. If new User 12. System adds new user to the system 13. System shows message "User Created Successfully"
Exception	9.2. Else existing User 6. System shows message "User is existing. Try again."

Figure E.31 – Activity Diagram – Create User

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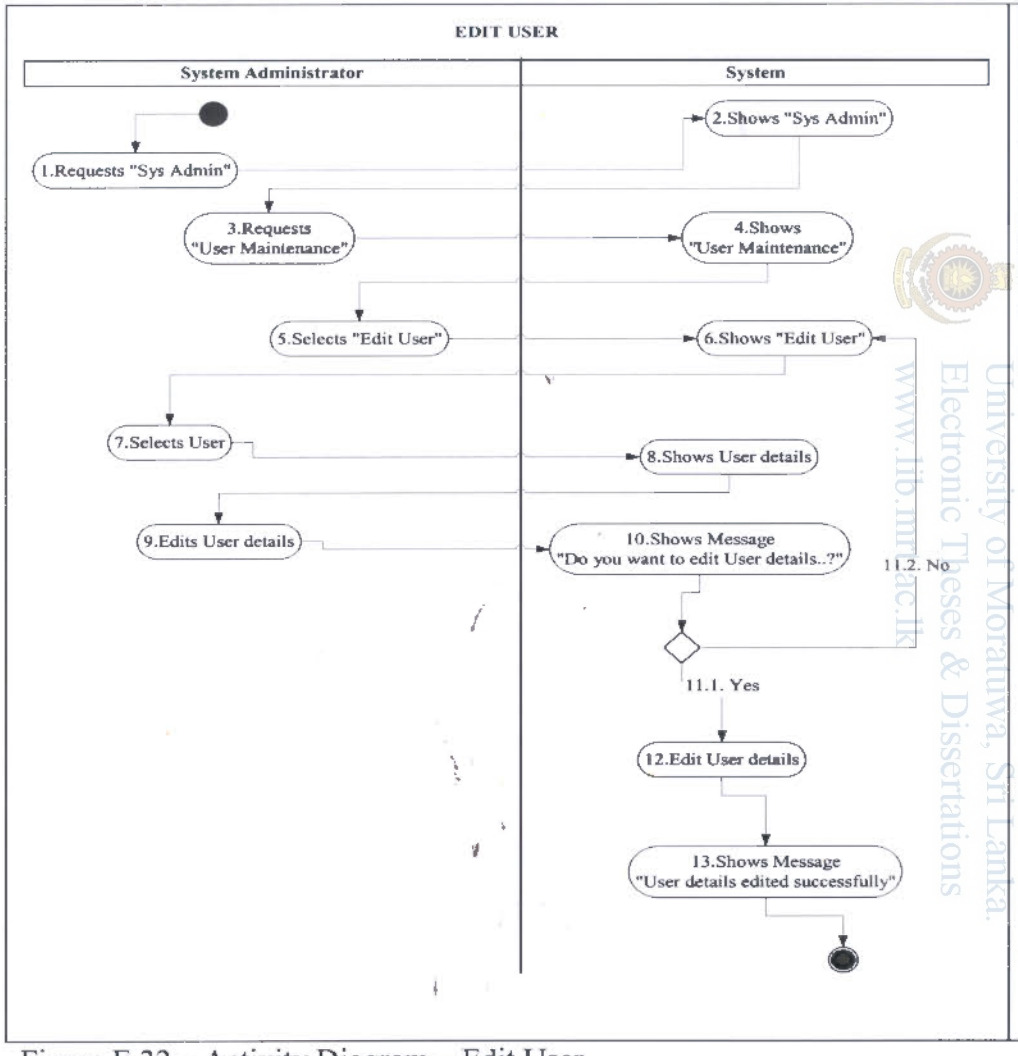

Figure E.32 – Activity Diagram – Edit User

Name	Edit User
Description	
Actor	System Administrator
Pre-Conditions	User must be an exiting user
Post Condition	User's new details must available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests User Maintenance 4. System shows User Maintenance 5. System Administrator selects Edit User 6. System shows Edit User 7. System Administrator selects User 8. System shows User Details 9. System Administrator edits User Details 10. System shows message " Do you want to edit User Details..?". 11.1. If yes 14. System edits User Details 15. System shows message "User Details edited Successfully"
Exception	11.2. Else no 6. System shows edit User

Figure E.33 – Activity Diagram – Edit User

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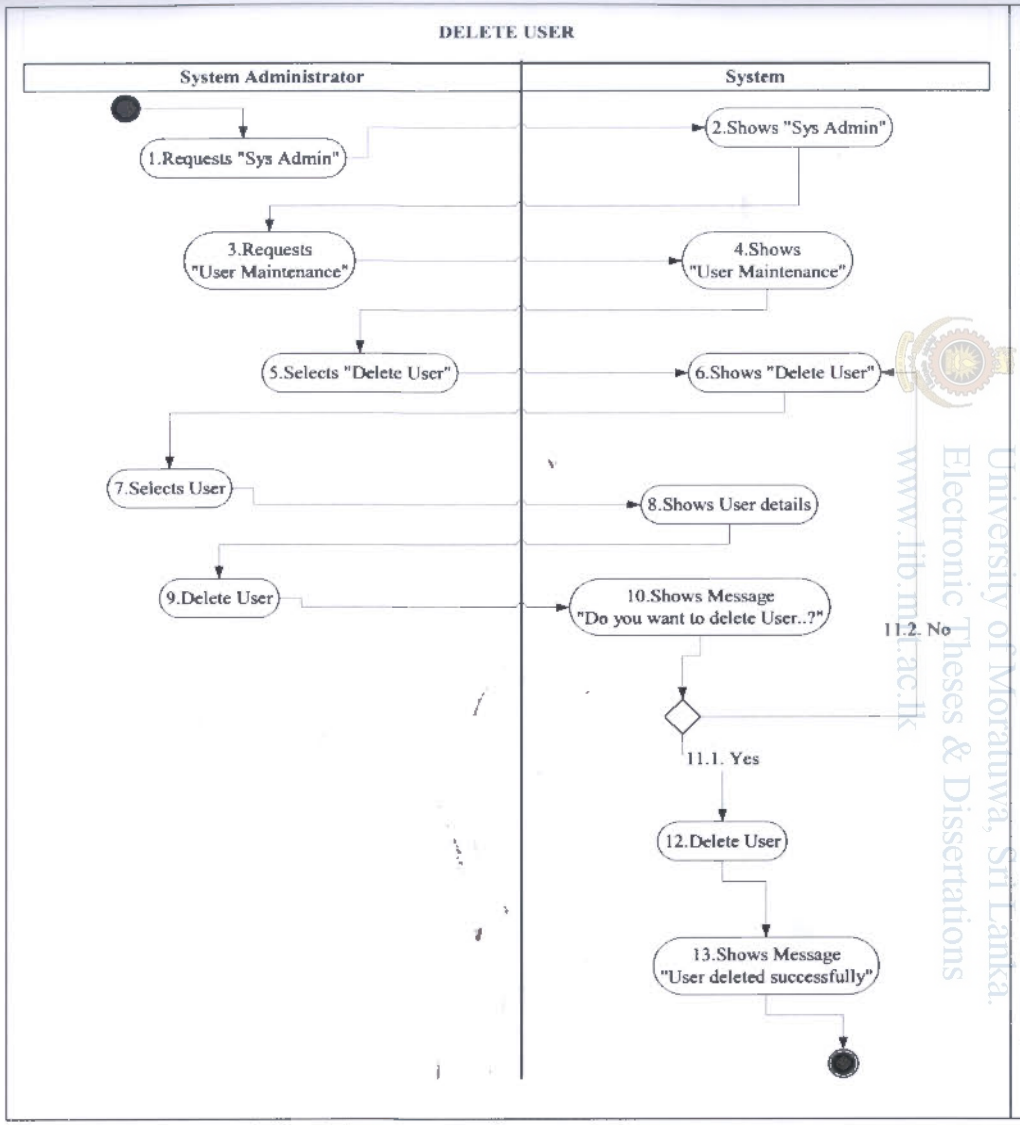

Figure E.34 – Activity Diagram – Delete User

Name	Delete User
Description	
Actor	System Administrator
Pre-Conditions	User must be an exiting user
Post Condition	user shouldn't bale to access tbe system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests User Maintenance 4. System shows User Maintenance 5. System Administrator selects Delete User 6. System shows Delete User 7. System Administrator selects User 8. System shows User Details 9. System Administrator Delete User 10. System shows message " Do you want to Delete User..?". 11.1. If yes 16. System Deletes User 17. System shows message "deleted Successfully"
Exception	11.2. Else no 7. System shows Delete User

Figure E.35 – Activity Diagram – Delete User

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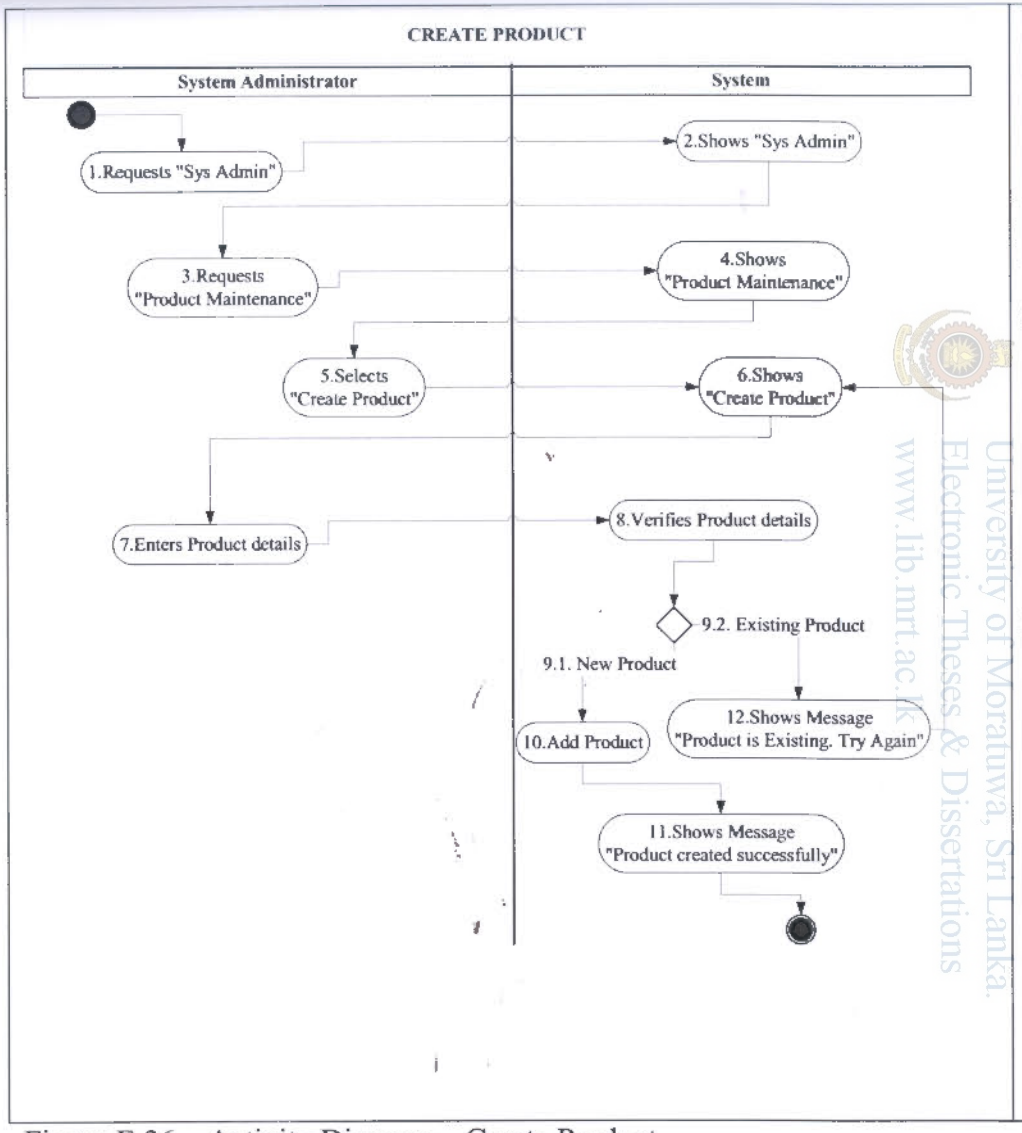

Figure E.36 – Activity Diagram – Create Product

Name	Create Product
Description	
Actor	System Administrator
Pre-Conditions	System Administrator should posses permission create new Products
Post Condition	New product should be bale available
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Product Maintenance 4. System shows Product Maintenance 5. System Administrator selects Create Product 6. System shows Create product 7. System Administrator enters product details 8. System verified Product Details 9.1. If new Product 10. System adds new product to the system 11. System shows message "Product Created Successfully"
Exception	9.2. Else existing Product 12. System shows message "Product is existing. Try again." 13. System shows Create Product

Figure E.37 – Activity Diagram – Create Product

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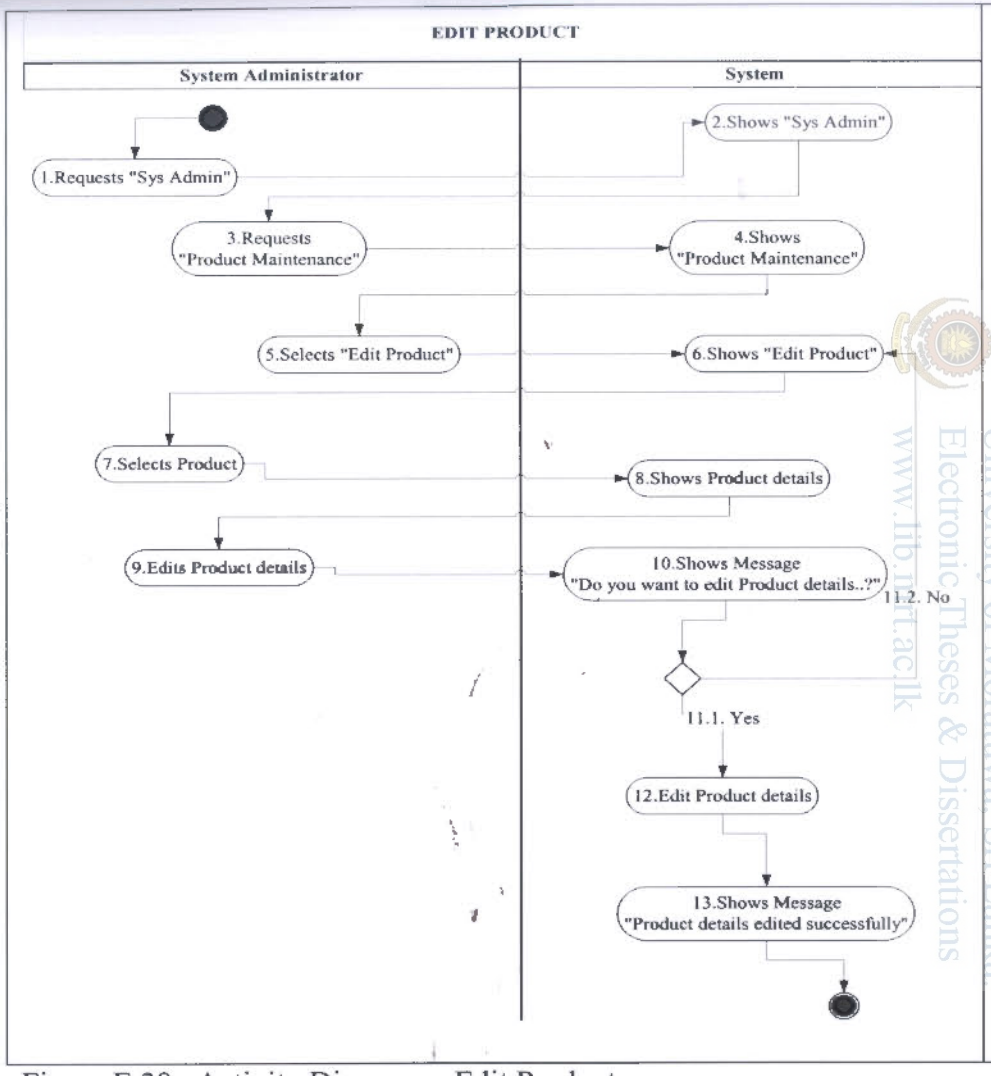

Figure E.38– Activity Diagram – Edit Product

Name	Edit Product
Description	
Actor	System Administrator
Pre-Conditions	Product must be an exiting product
Post Condition	Product's new details must available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Product Maintenance 4. System shows Product Maintenance 5. System Administrator selects Edit Product 6. System shows Edit Product 7. System Administrator selects Product 8. System shows Product Details 9. System Administrator edits Product Details 10. System shows message " Do you want to edit Product Details..?". 11.1. If yes 12. System edits Product Details 13. System shows message "Product Details edited Successfully"
Exception	11.2. Else no 6. System shows edit Product

Figure E.39 – Activity Diagram – Edit Product

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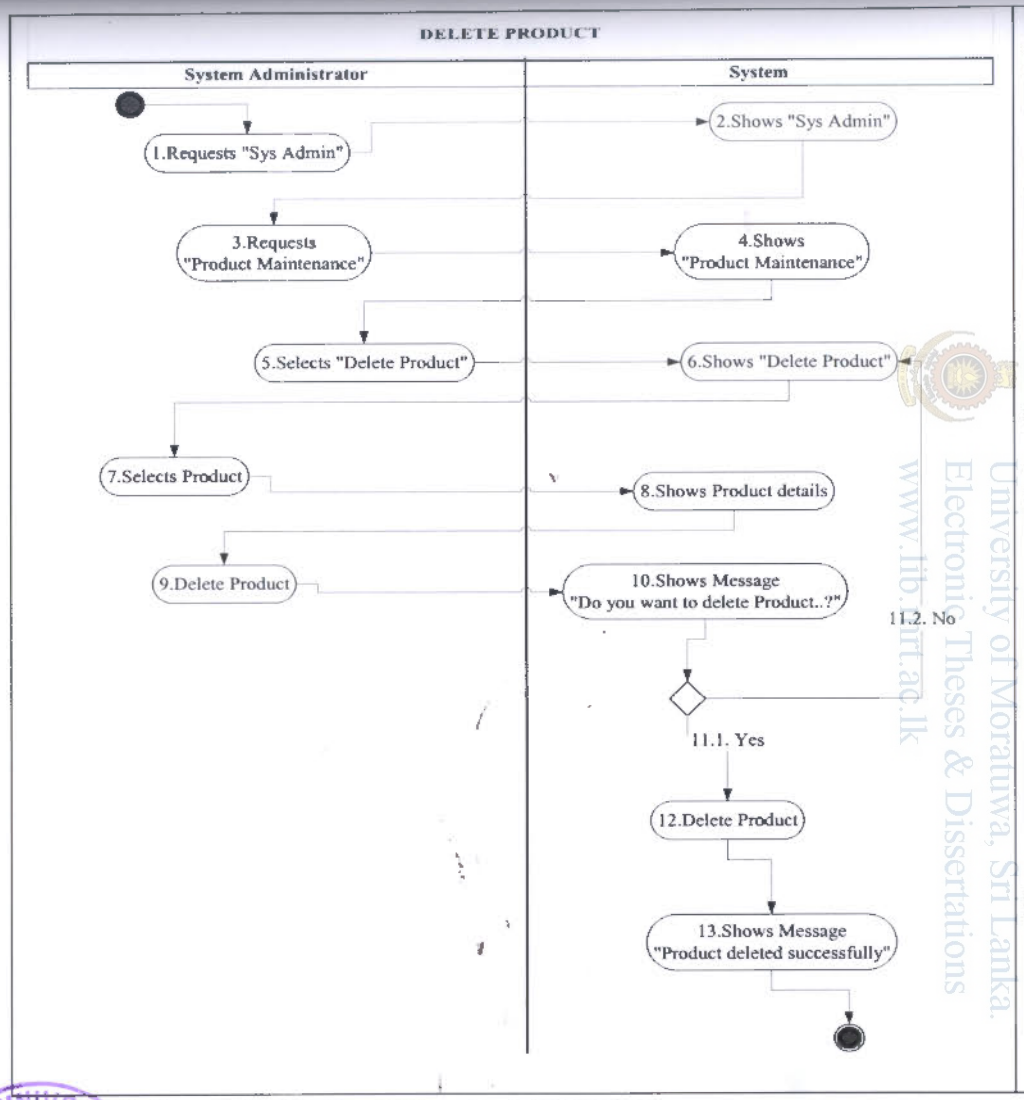

Figure E.40 – Activity Diagram – Delete Product

Name	Delete Product
Description	
Actor	System Administrator
Pre-Conditions	Product must be an exiting product
Post Condition	product shouldn't be available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Product Maintenance 4. System shows Product Maintenance 5. System Administrator selects Delete Product 6. System shows Delete Product 7. System Administrator selects Product 8. System shows Product Details 9. System Administrator Delete Product 10. System shows message " Do you want to Delete Product..?". 11.1. If yes 12. System Deletes Product 13. System shows message "Product Deleted Successfully"
Exception	11.2. Else no 6. System shows Delete Product

Figure E.41 – Activity Diagram – Delete Product

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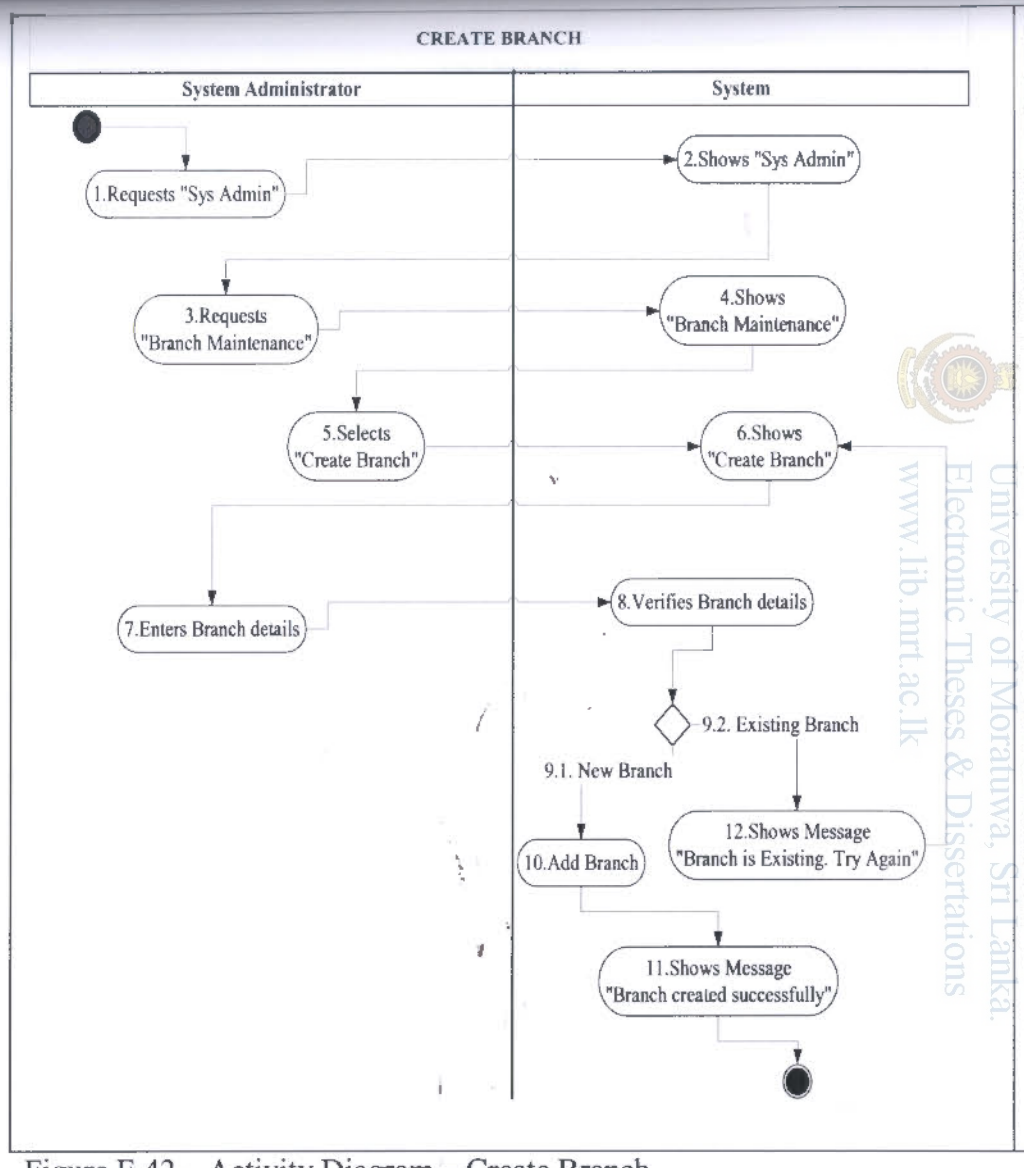

Figure E.42 – Activity Diagram – Create Branch

Name	Create Branch
Description	
Actor	System Administrator
Pre-Conditions	System Administrator should posses permission create new Branch
Post Condition	New Branch should be available
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Branch Maintenance 4. System shows Branch Maintenance 5. System Administrator selects Create Branch 6. System shows Create Branch 7. System Administrator enters Branch details 8. System verifies Branch Details 9.1. If new Branch 10. System adds new Branch to the system 11. System shows message "Branch Created Successfully"
Exception	9.2. Else existing Branch 12. System shows message "Branch is existing. Try again." 6. System shows Create Branch

Figure E.43 – Activity Diagram – Create Branch

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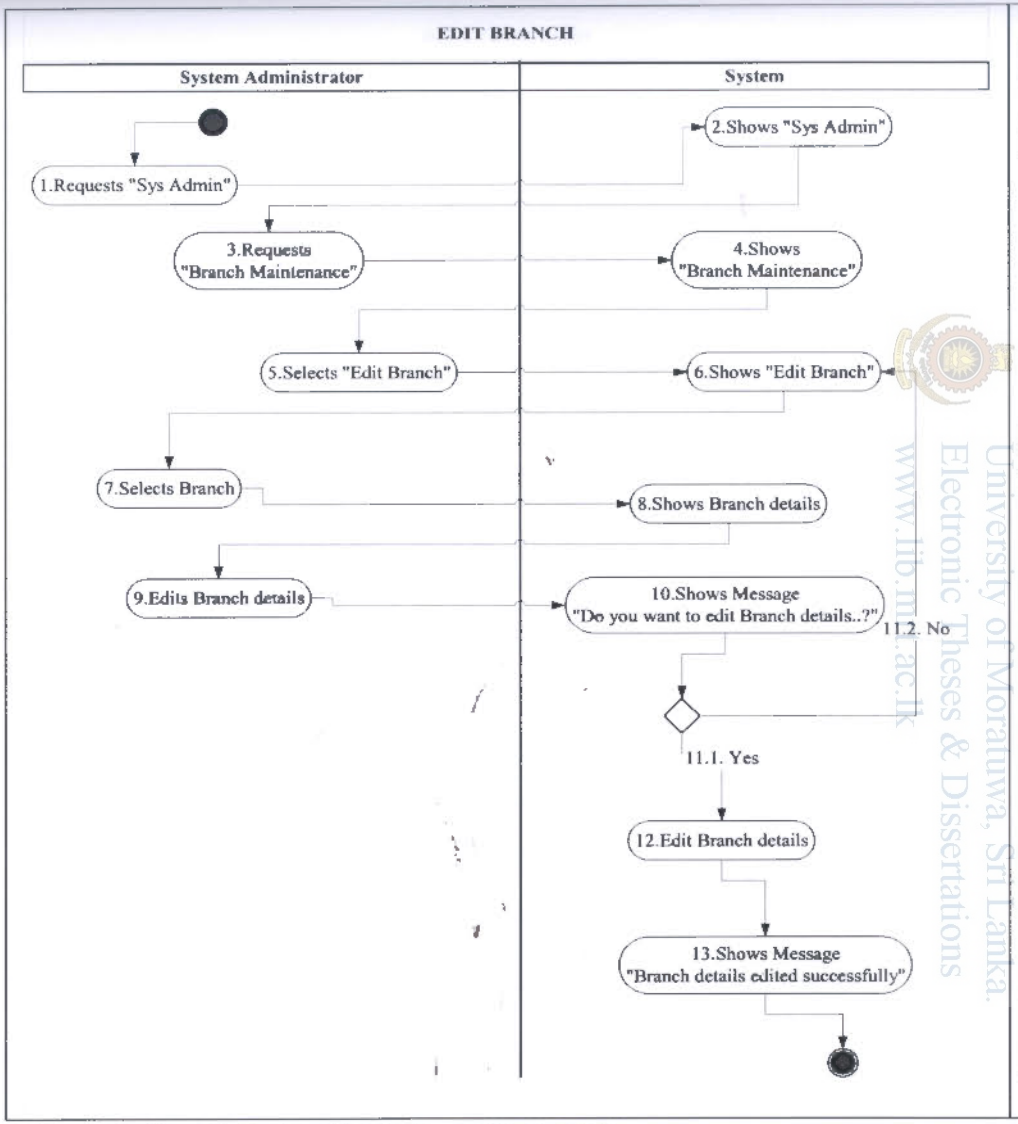

Figure E.44 – Activity Diagram – Edit Branch

Name	Edit Branch
Description	
Actor	System Administrator
Pre-Conditions	Branch must be an exiting Branch
Post Condition	Branch's new details must available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Branch Maintenance 4. System shows Branch Maintenance 5. System Administrator selects Edit Branch 6. System shows Edit Branch 7. System Administrator selects Branch 8. System shows Branch Details 9. System Administrator edits Branch Details 10. System shows message " Do you want to edit Branch Details..?". 11.1. If yes 12. System edits Branch Details 13. System shows message "Branch Details edited Successfully"
Exception	11.2. Else no 6. System shows edit Branch

Figure E.45– Activity Diagram – Edit Branch

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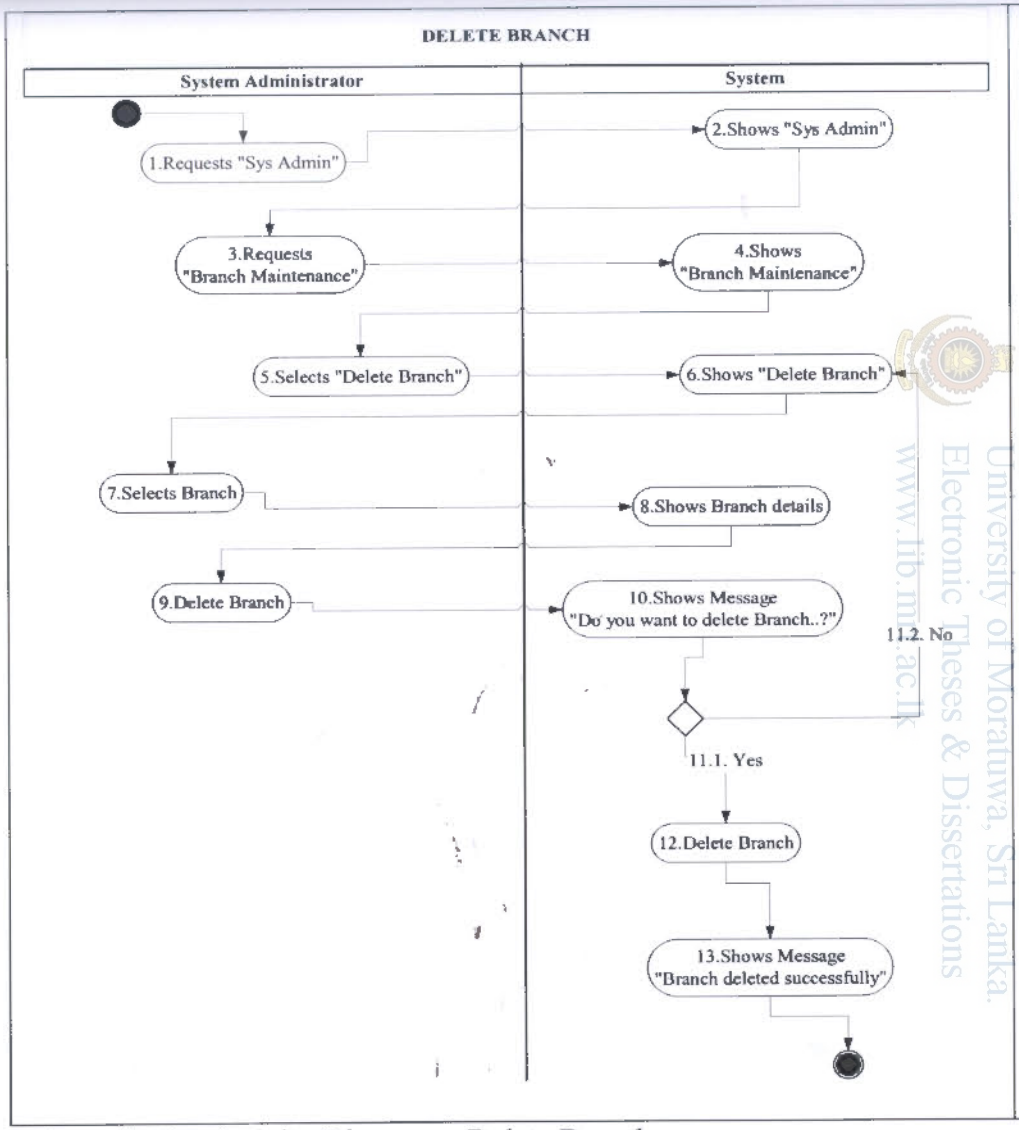

Figure E.46 – Activity Diagram – Delete Branch

Name	Delete Branch
Description	
Actor	System Administrator
Pre-Conditions	Branch must be an exiting Branch
Post Condition	Branch shouldn't be available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Branch Maintenance 4. System shows Branch Maintenance 5. System Administrator selects Delete Branch 6. System shows Delete Branch 7. System Administrator selects Branch 8. System shows Branch Details 9. System Administrator Delete Branch 10. System shows message " Do you want to Delete Branch..?". 11.1. If yes 11. System Deletes Branch 12. System shows message "Branch Deleted Successfully"
Exception	11.2. Else no 6. System shows Delete Branch

Figure E.47 – Activity Diagram – Delete Branch

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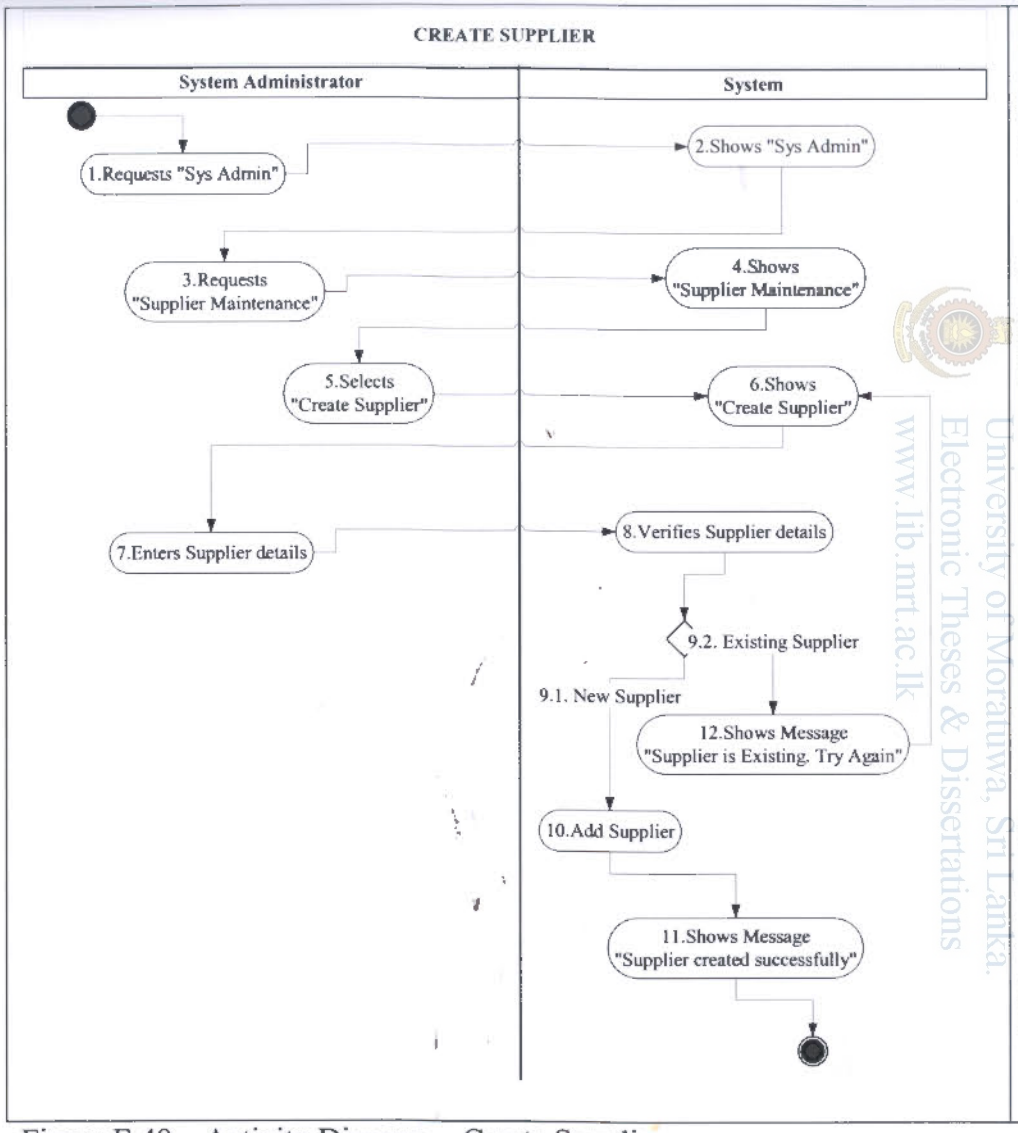

Figure E.48 – Activity Diagram – Create Supplier

Name	Create Supplier
Description	
Actor	System Administrator
Pre-Conditions	System Administrator should posses permission to create new Supplier
Post Condition	New Supplier should be available
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Supplier Maintenance 4. System shows Supplier Maintenance 5. System Administrator selects Create Supplier 6. System shows Create Supplier 7. System Administrator enters Supplier details 8. System verifies Supplier Details 9.1. If new Supplier 10. System adds new Supplier to the system 11. System shows message "Supplier Created Successfully"
Exception	9.2. Else existing Supplier 12. System shows message "Supplier is existing. Try again." 6. System shows Create Supplier

Figure E.49 – Activity Diagram – Create Supplier

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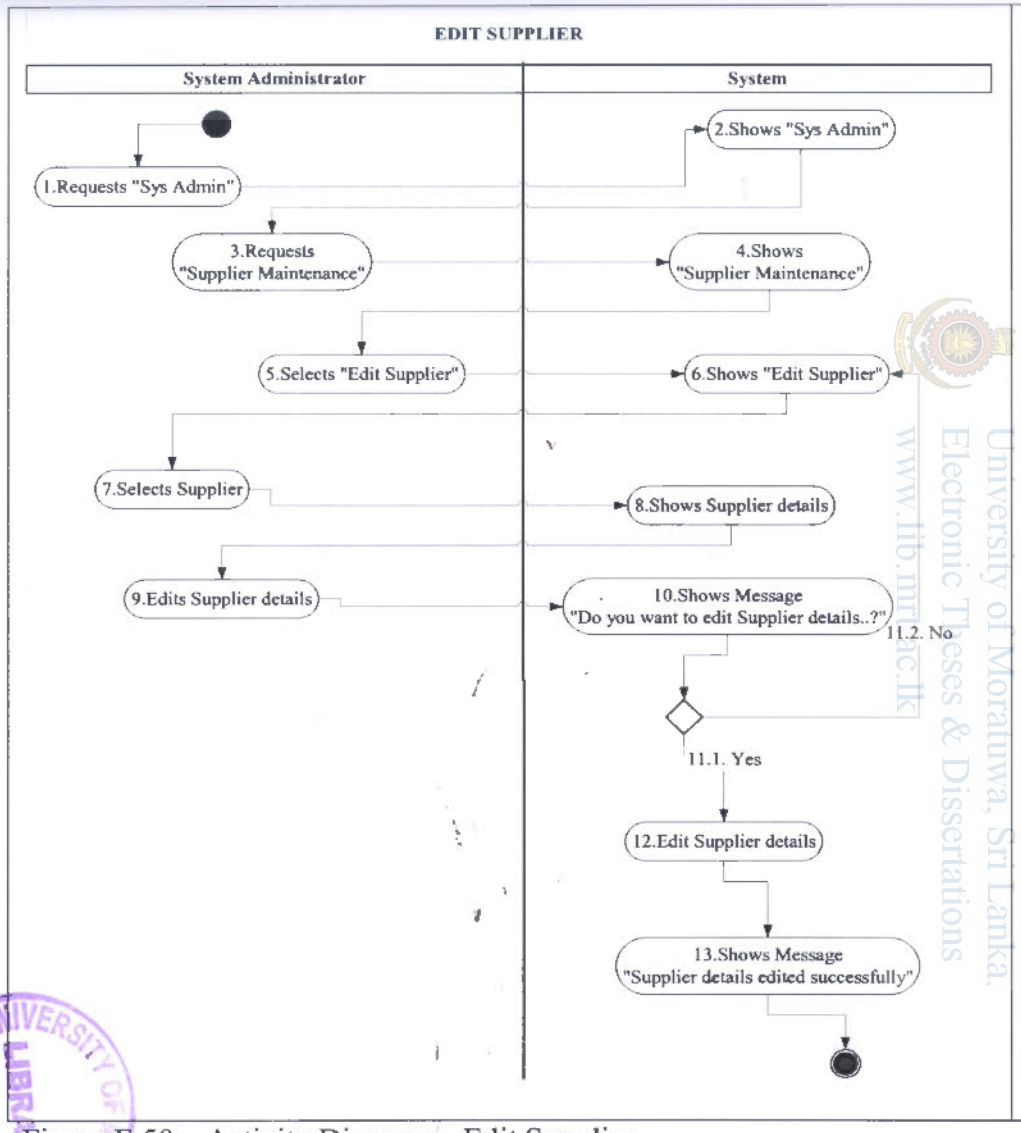

Figure E.50 – Activity Diagram – Edit Supplier

Name	Edit Supplier
Description	
Actor	System Administrator
Pre-Conditions	Supplier must be an exiting Supplier
Post Condition	Supplier's new details must available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Supplier Maintenance 4. System shows Supplier Maintenance 5. System Administrator selects Edit Supplier 6. System shows Edit Supplier 7. System Administrator selects Supplier 8. System shows Supplier Details 9. System Administrator edits Supplier Details 10. System shows message " Do you want to edit Supplier Details..?". 11.1. If yes 12. System edits Supplier Details 13. System shows message "Supplier Details edited Successfully"
Exception	11.2. Else no 6. System shows edit Supplier

Figure E.51 – Activity Diagram – Edit Supplier

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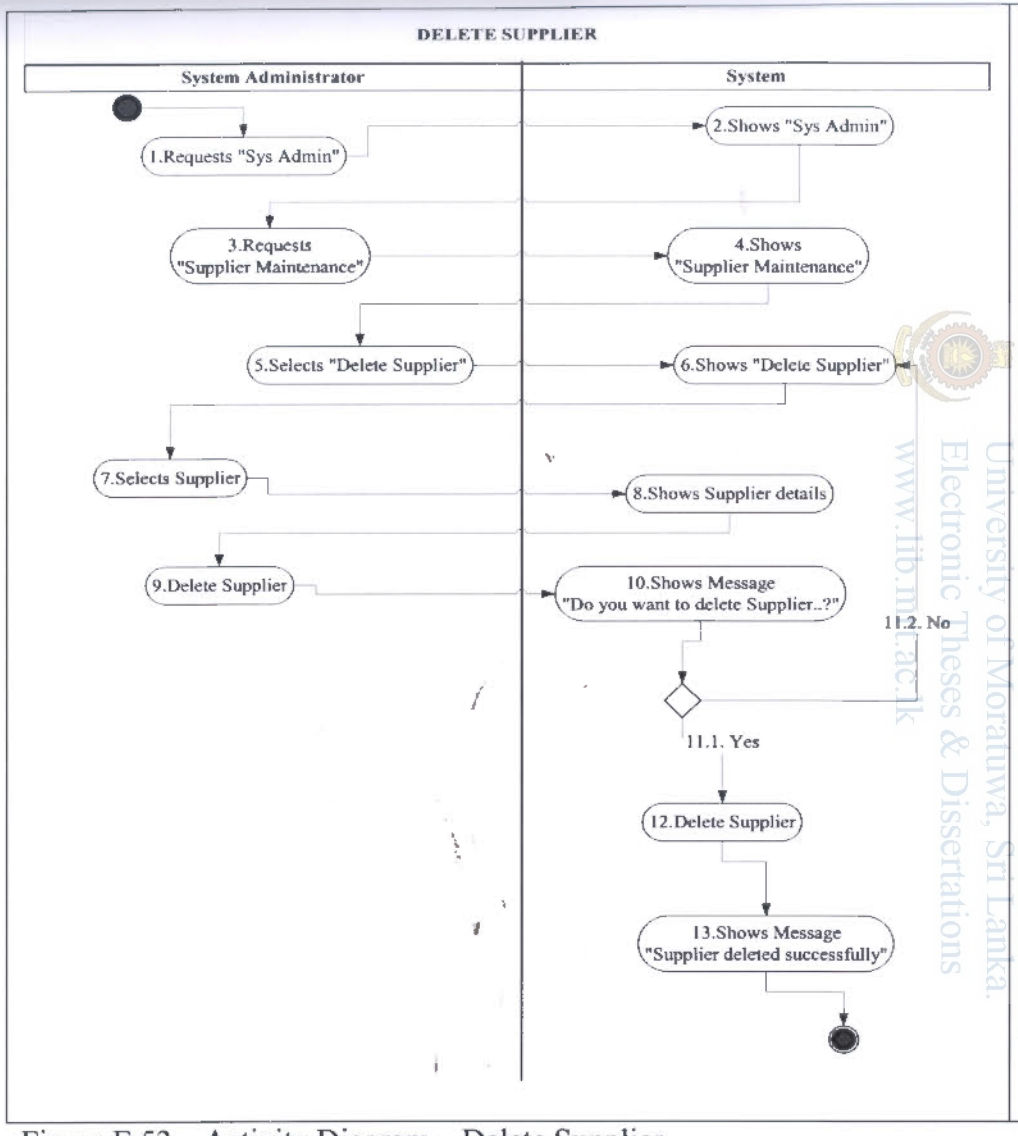

Figure E.52 – Activity Diagram – Delete Supplier

Name	Delete Supplier
Description	
Actor	System Administrator
Pre-Conditions	Supplier must be an exiting Supplier
Post Condition	Supplier shouldn't be available in the system
Flow	1. System Administrator requests Sys Admin 2. System Shows Sys Admin 3. System Administrator Requests Supplier Maintenance 4. System shows Supplier Maintenance 5. System Administrator selects Delete Supplier 6. System shows Delete Supplier 7. System Administrator selects Supplier 8. System shows Supplier Details 9. System Administrator Delete Supplier 10. System shows message " Do you want to Delete Supplier..?". 11.1. If yes 12. System Deletes Supplier 13. System shows message "Supplier Deleted Successfully"
Exception	11.2. Else no 6. System shows Delete Supplier

Figure E.53 – Activity Diagram – Delete Supplier

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Sequence diagrams

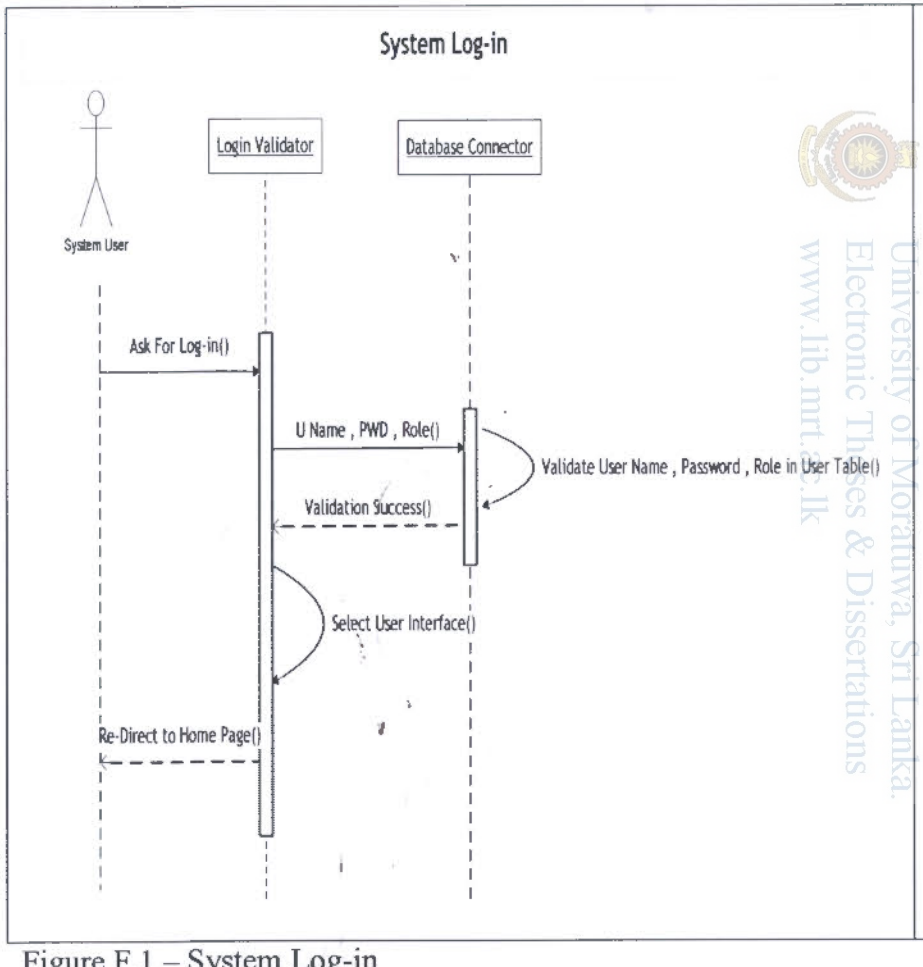

Figure F.1 – System Log-in

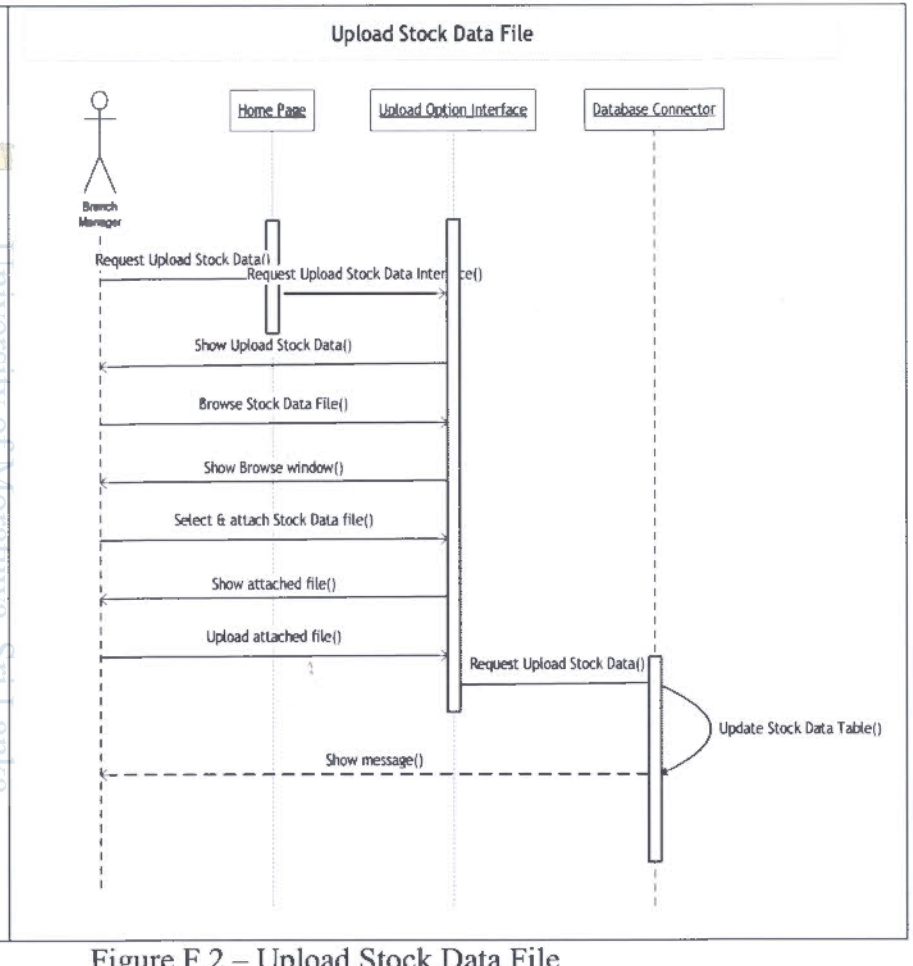

Figure F.2 – Upload Stock Data File

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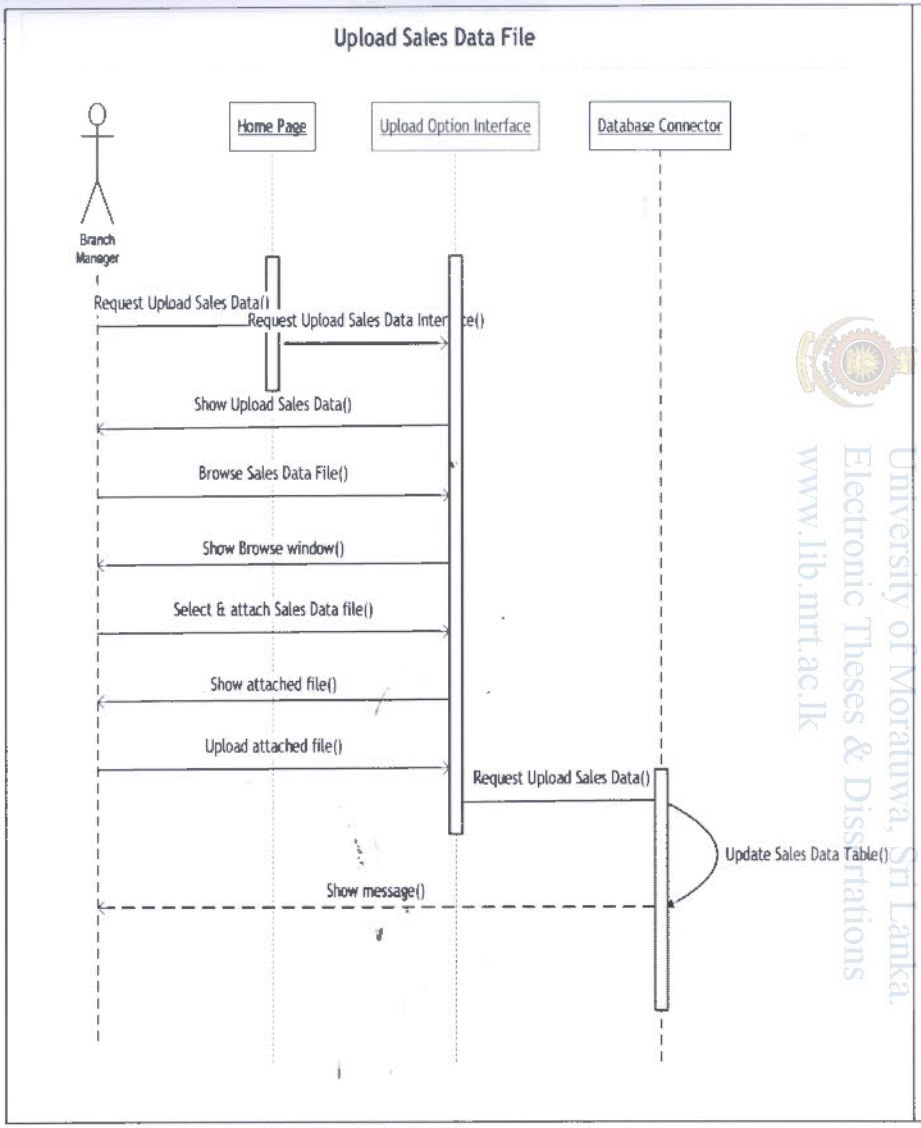

Figure F.3 – Upload Sales Data File

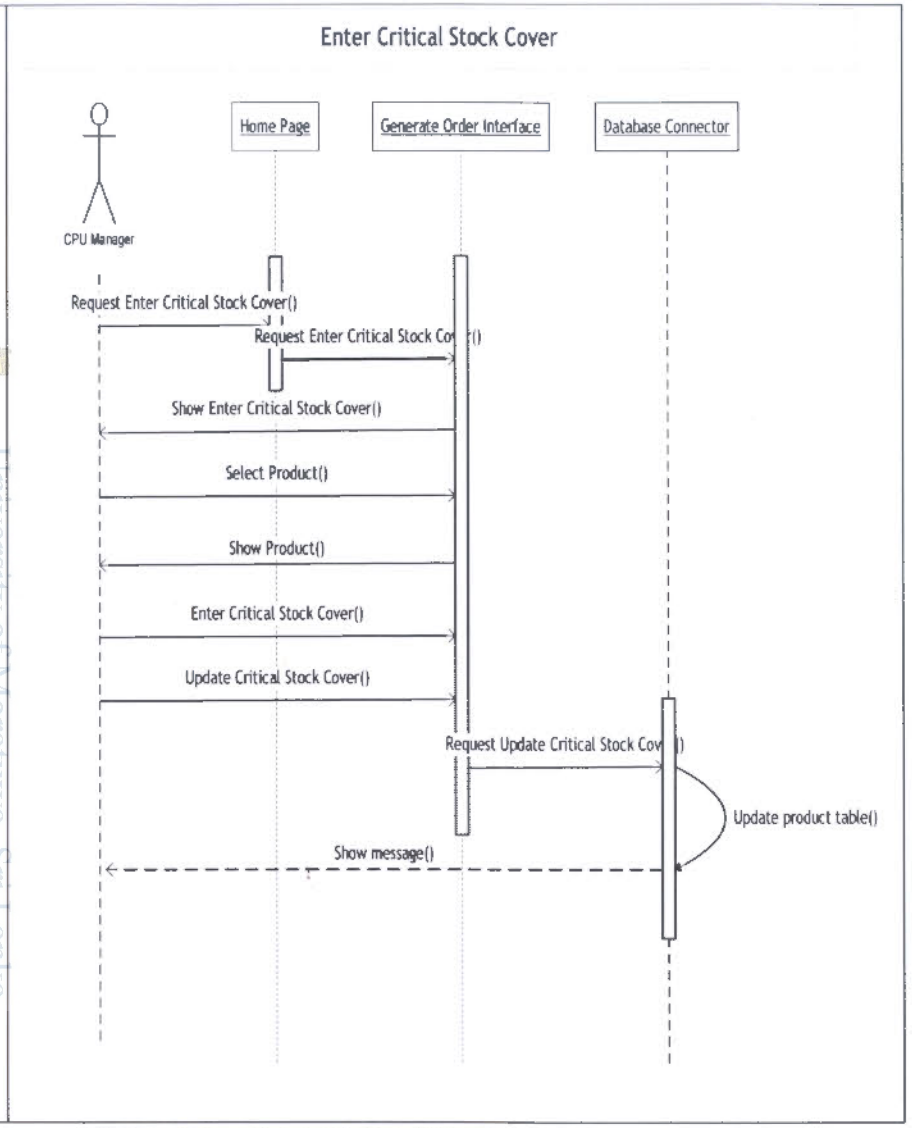

Figure F.4 – Enter Critical Stock Cover

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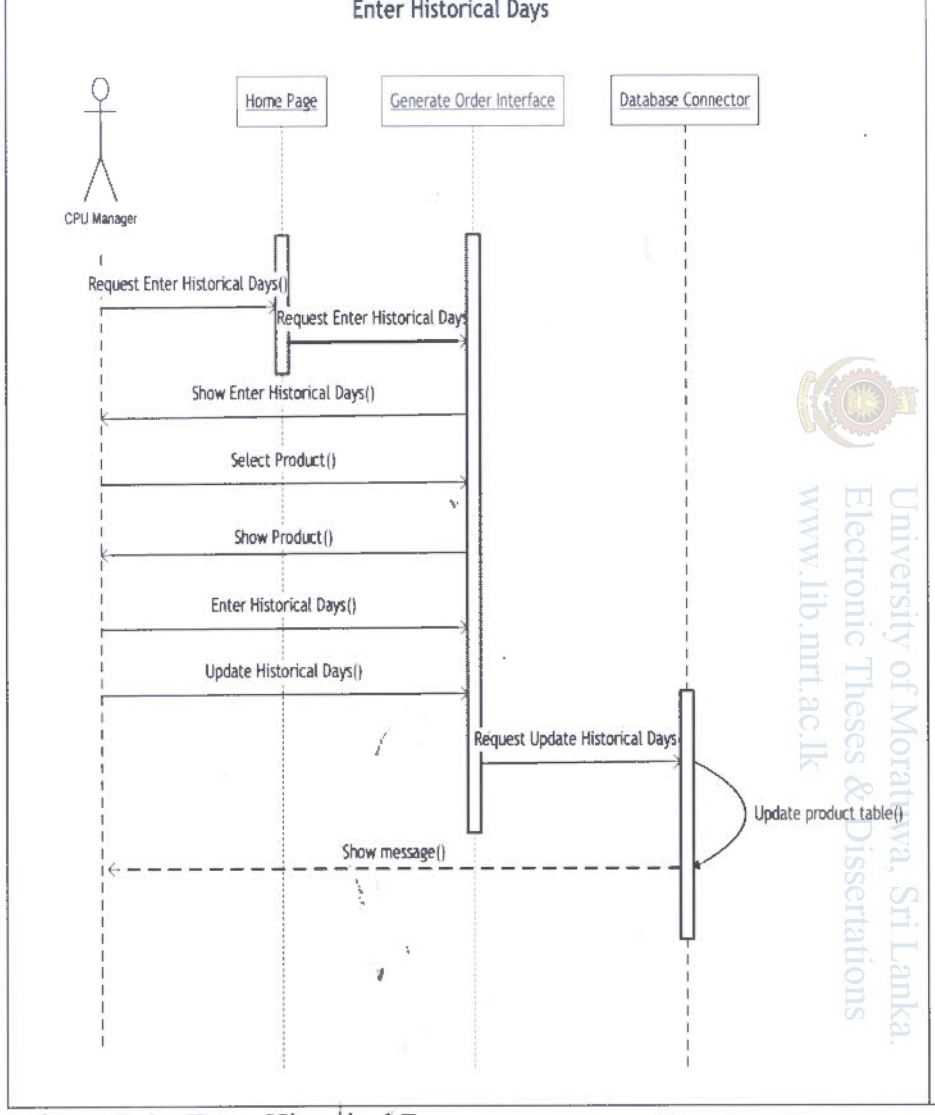

Figure F.6 – Enter Historical Days

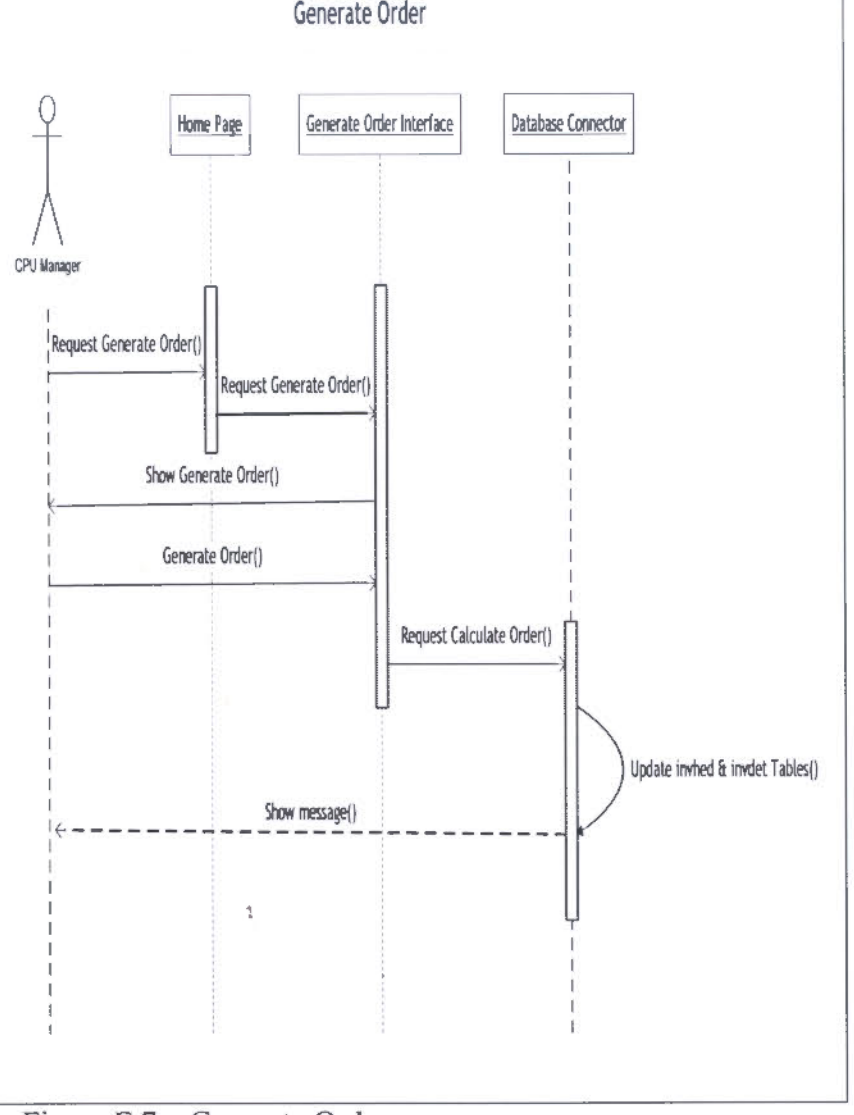

Figure F.7 – Generate Order

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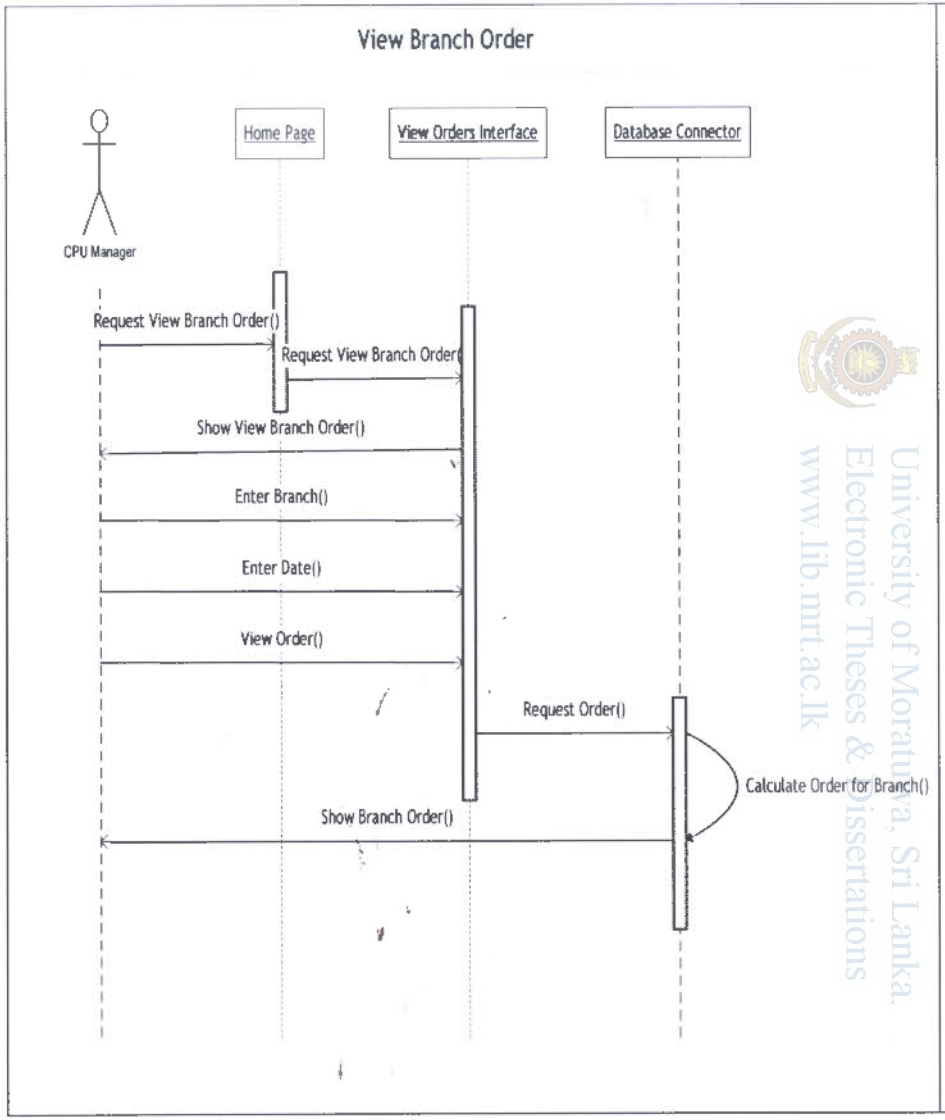

Figure F.8 – View Branch Order

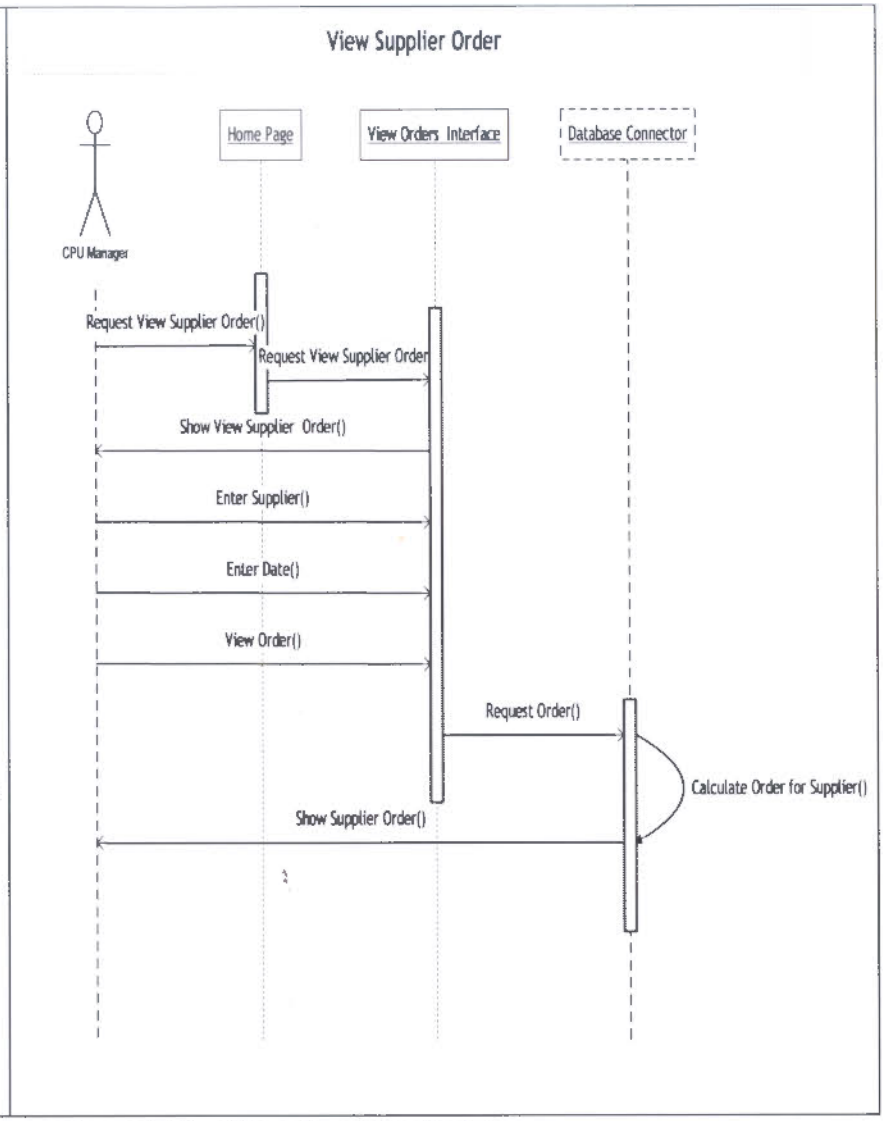

Figure F.9 – View Supplier Order

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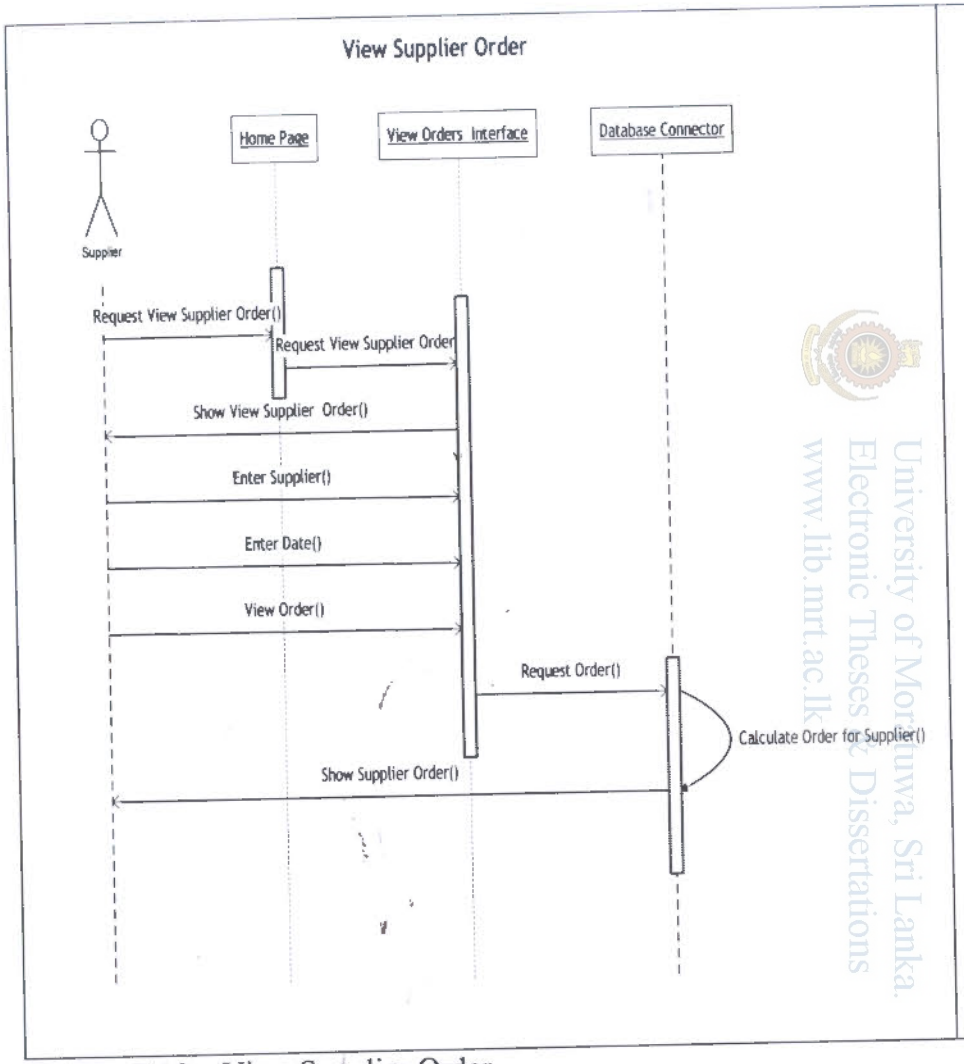

Figure F.10 – View Supplier Order

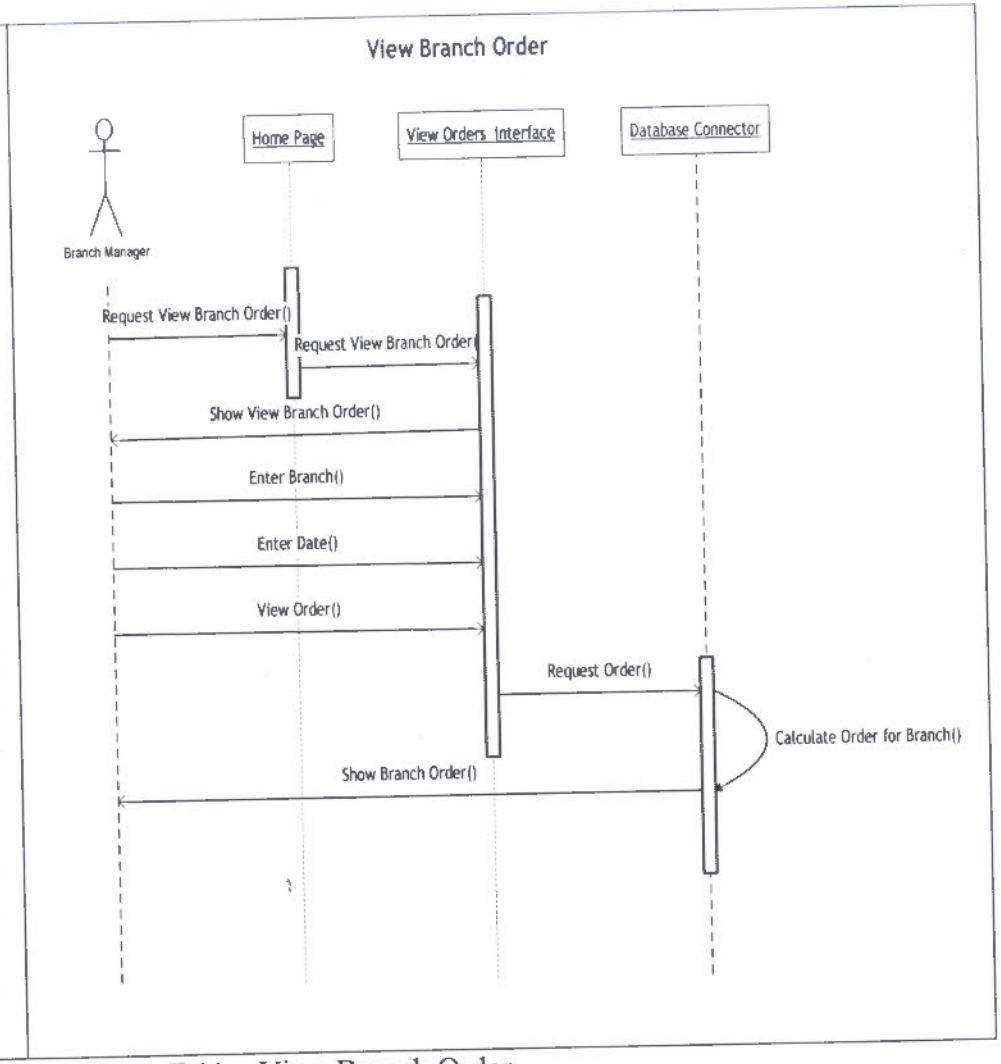

Figure F.11 – View Branch Order

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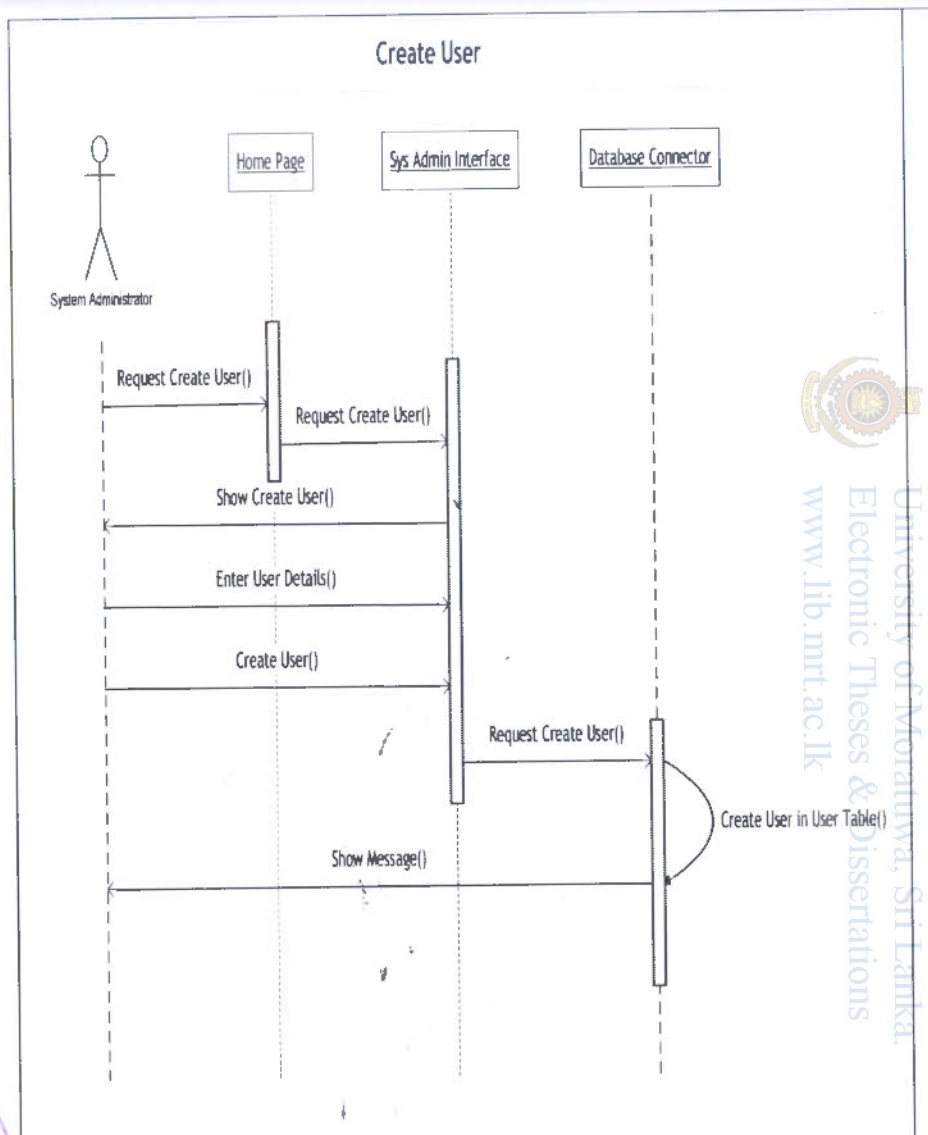

Figure F.12 – Create User

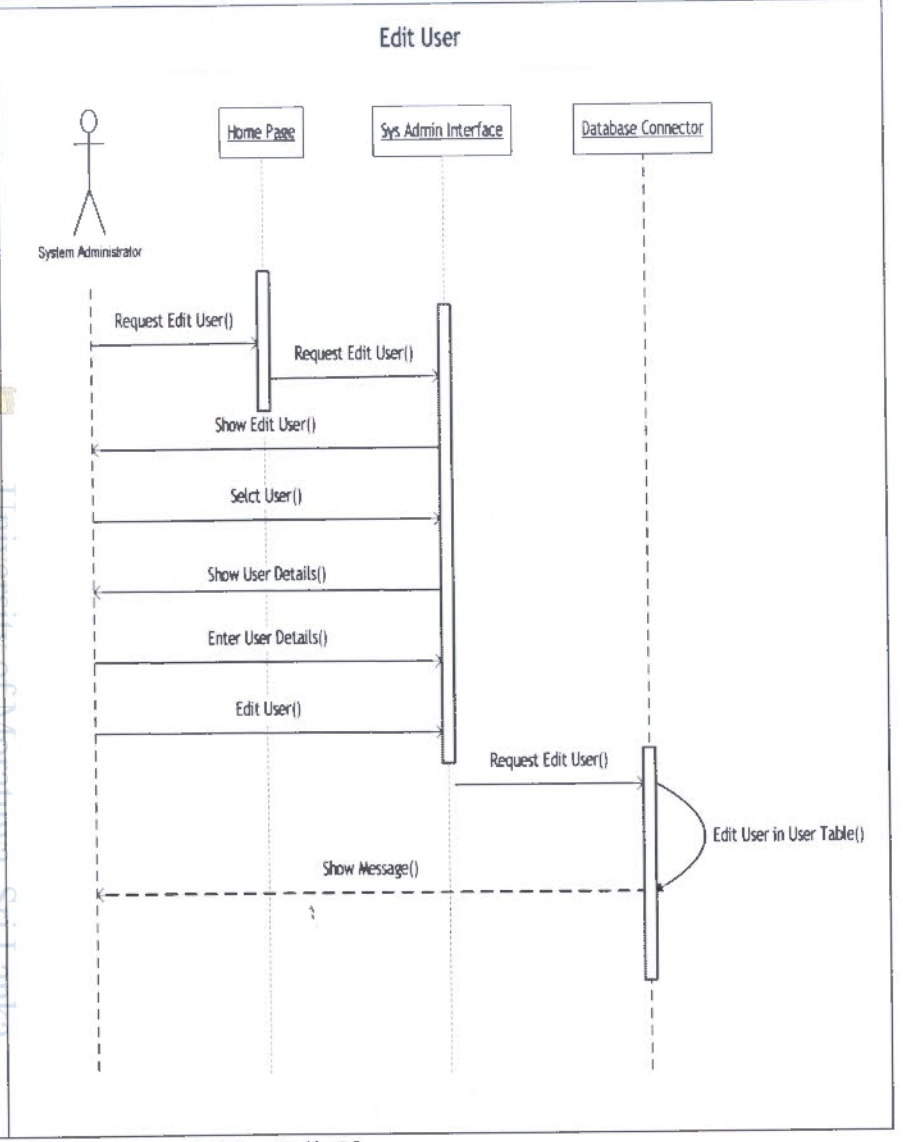

Figure F.13 – Edit User

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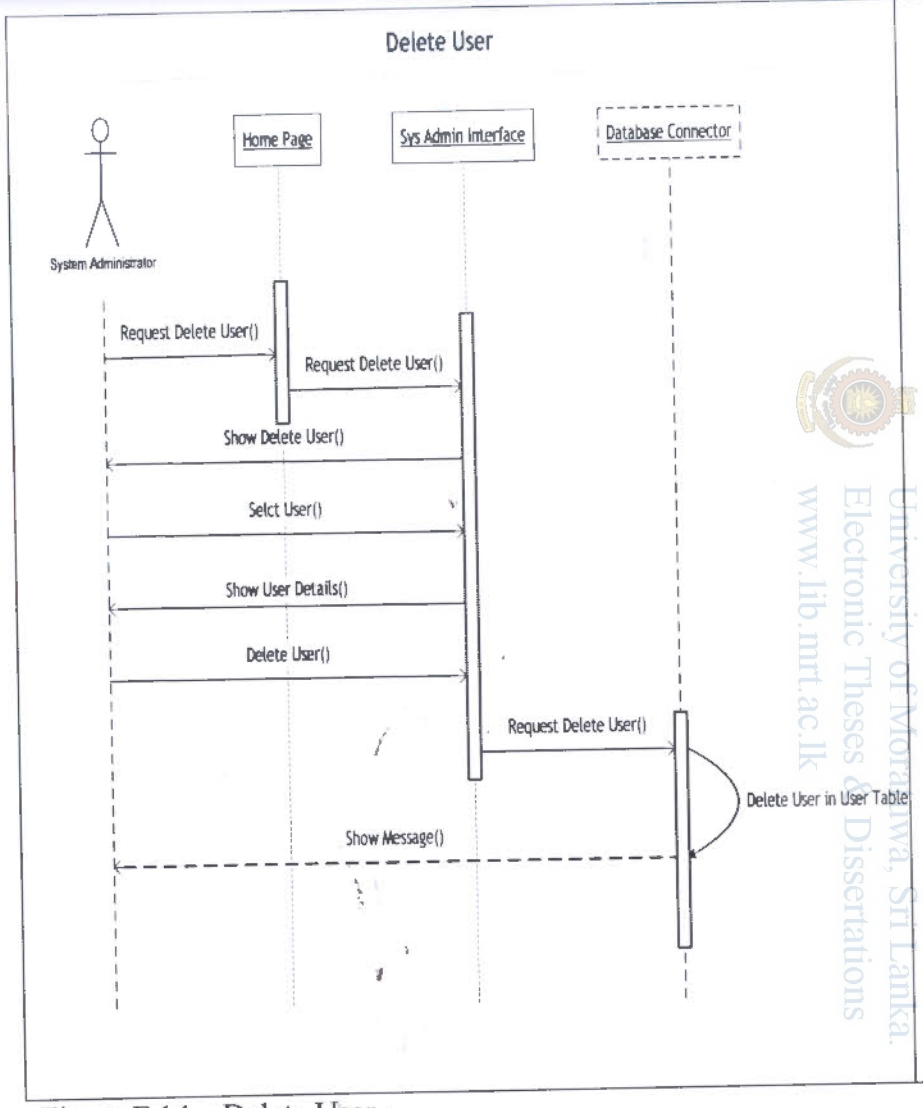

Figure F.14 – Delete User

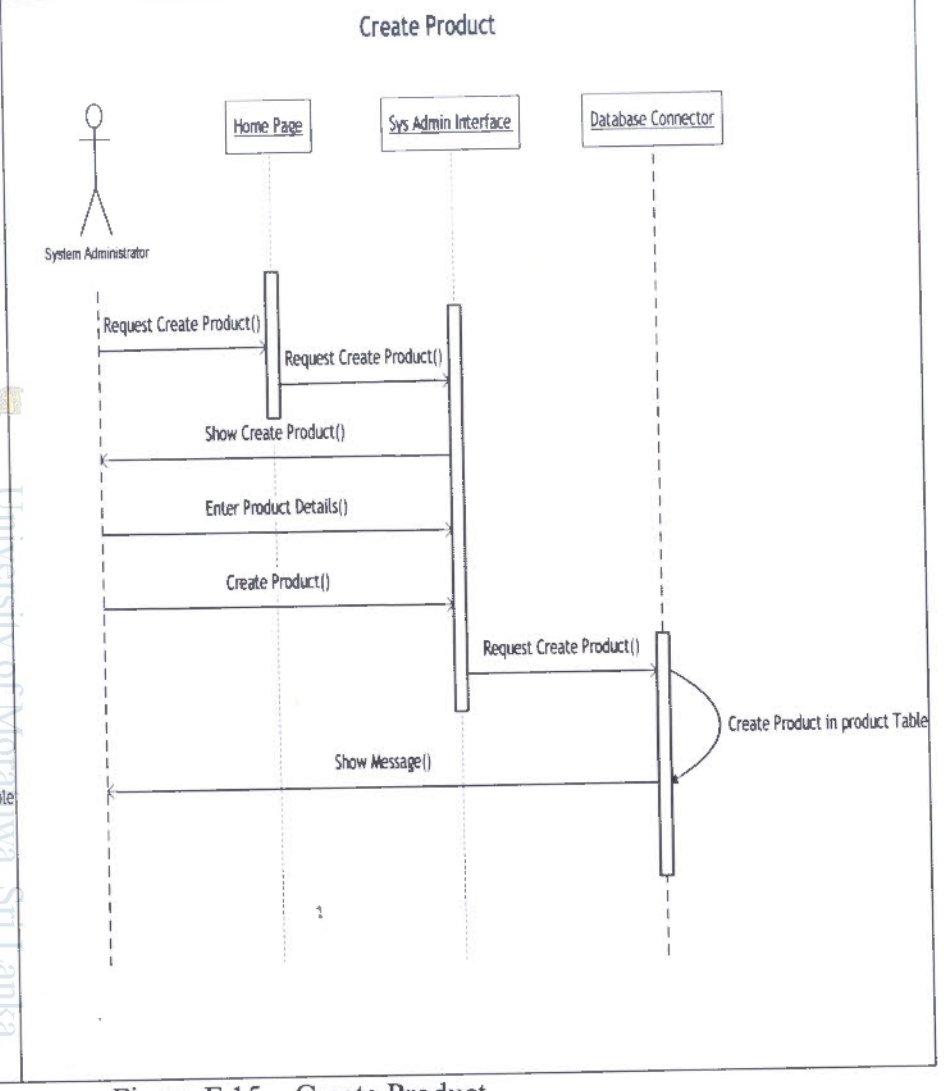

Figure F.15 – Create Product

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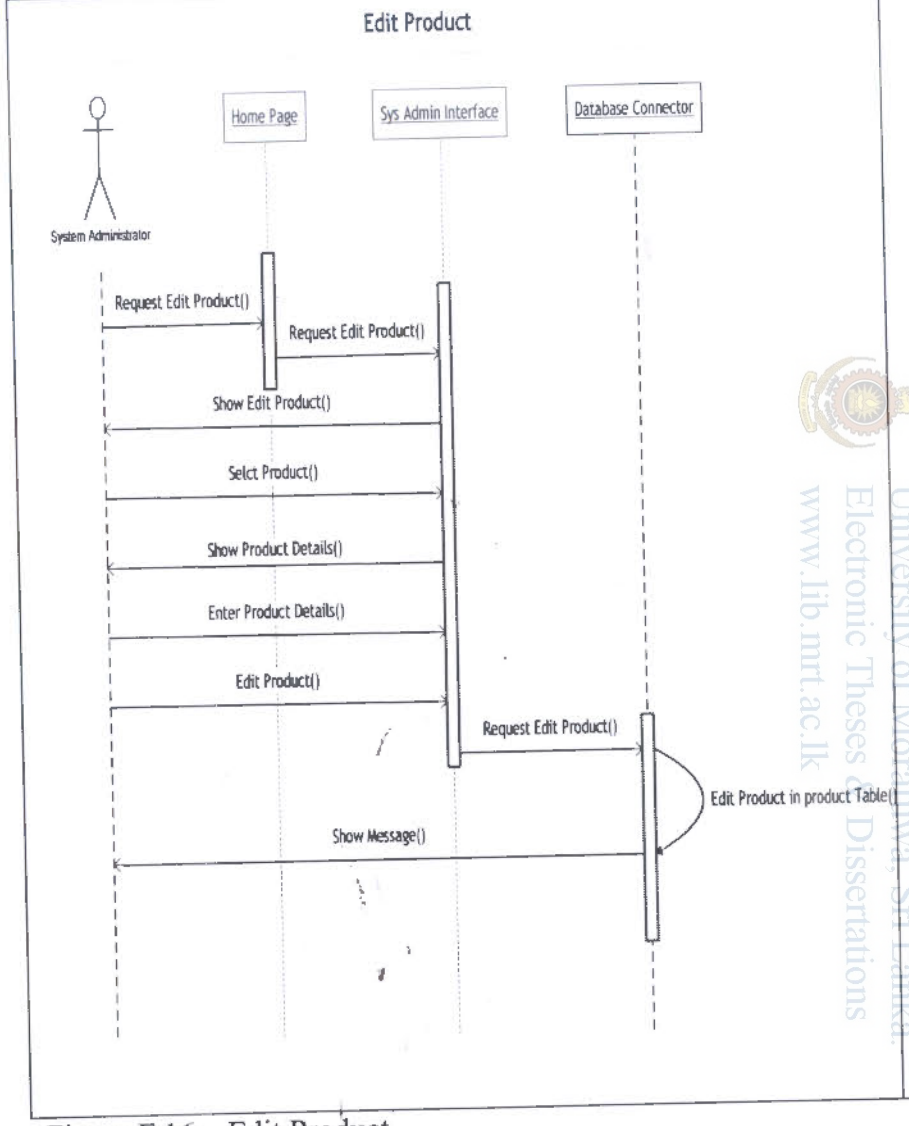

Figure F.16 – Edit Product

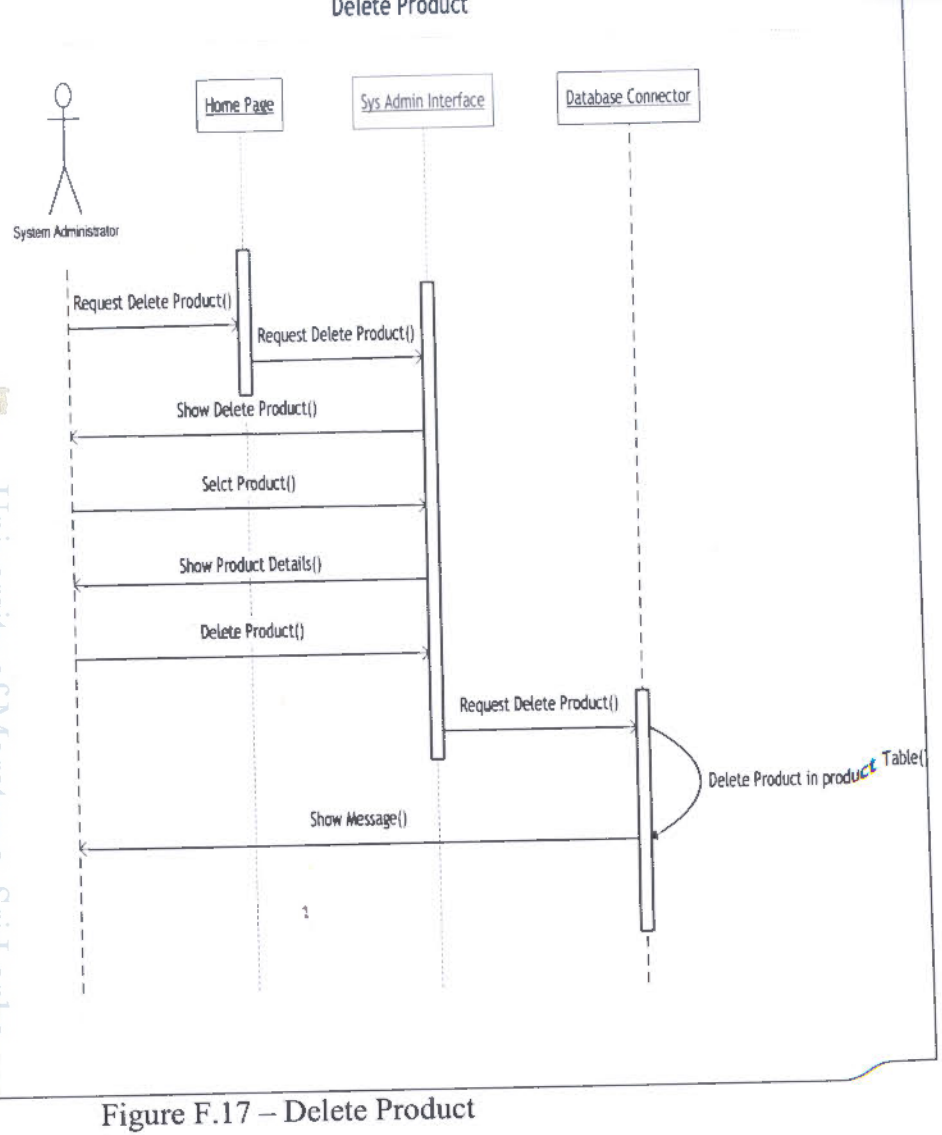

Figure F.17 – Delete Product

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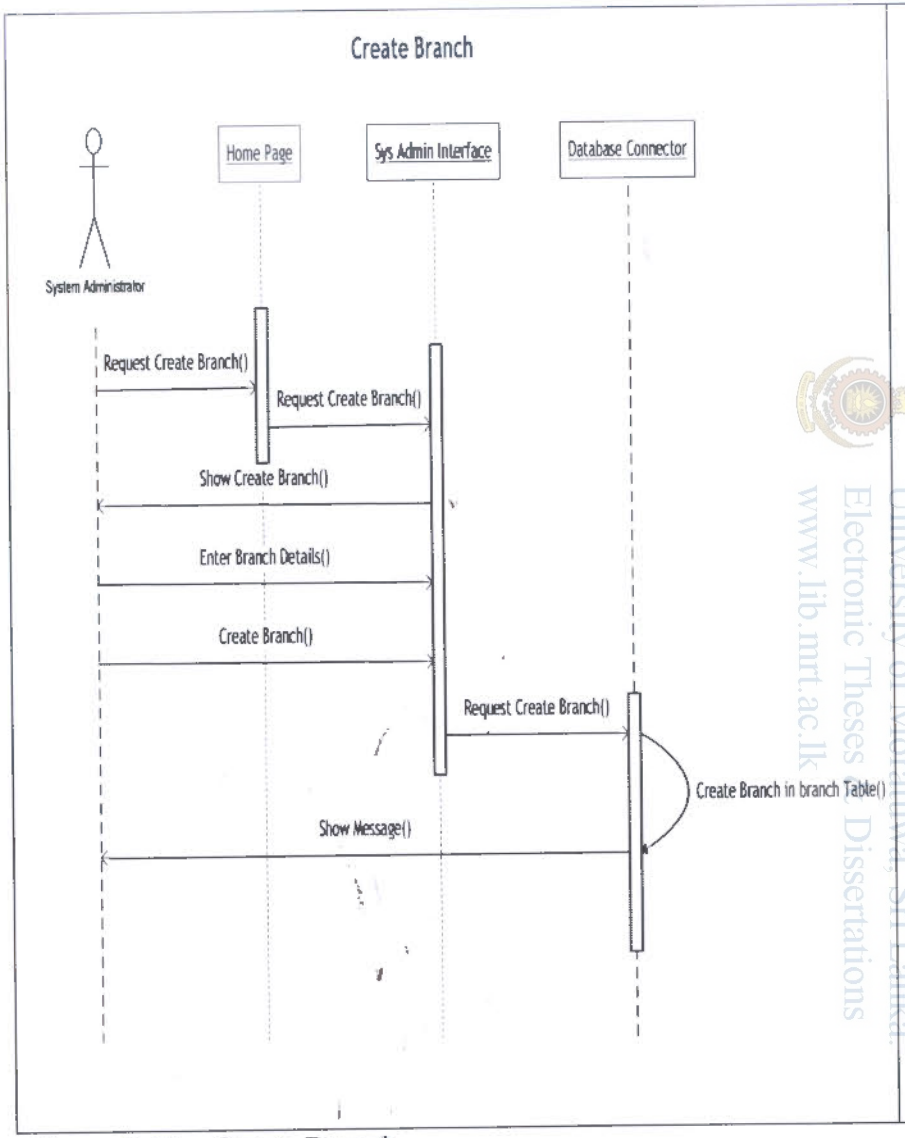

Figure F.18 – Create Branch

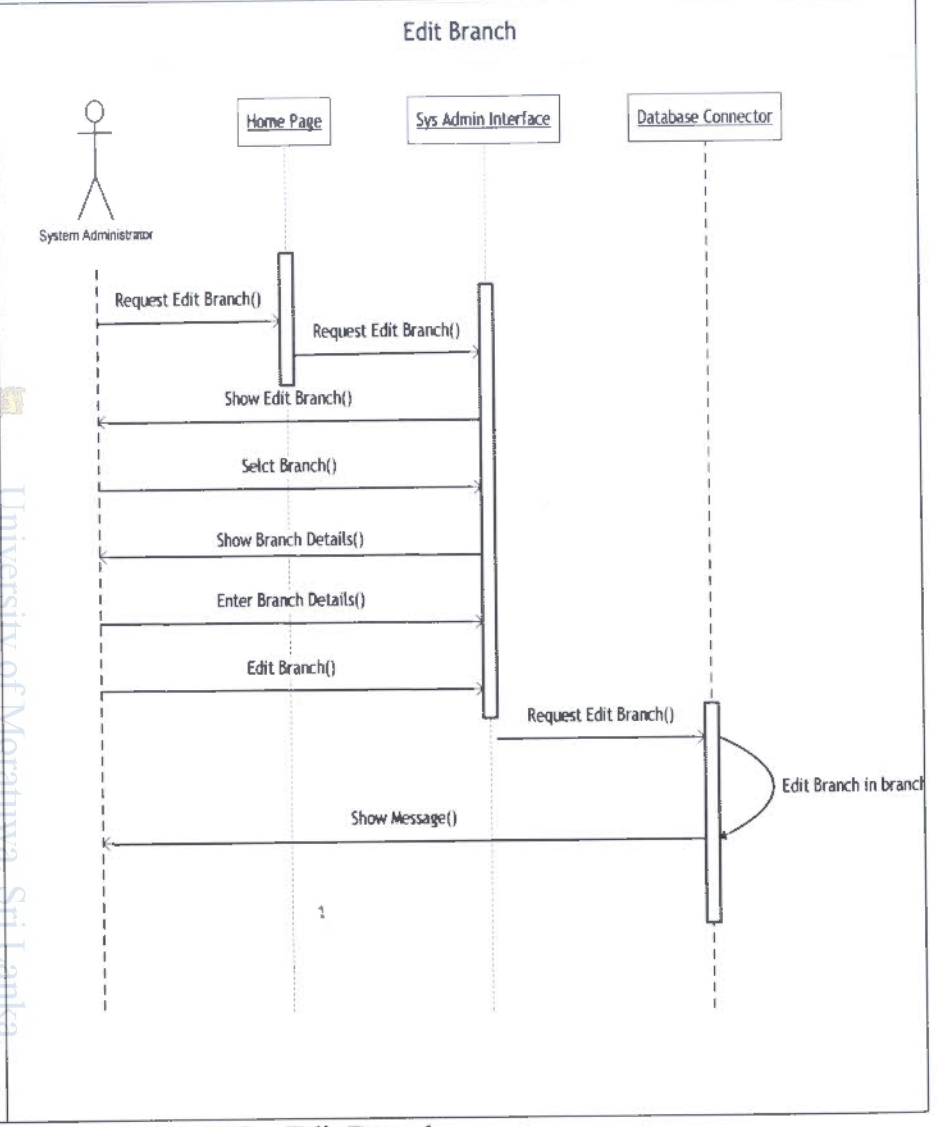

Figure F.19 – Edit Branch

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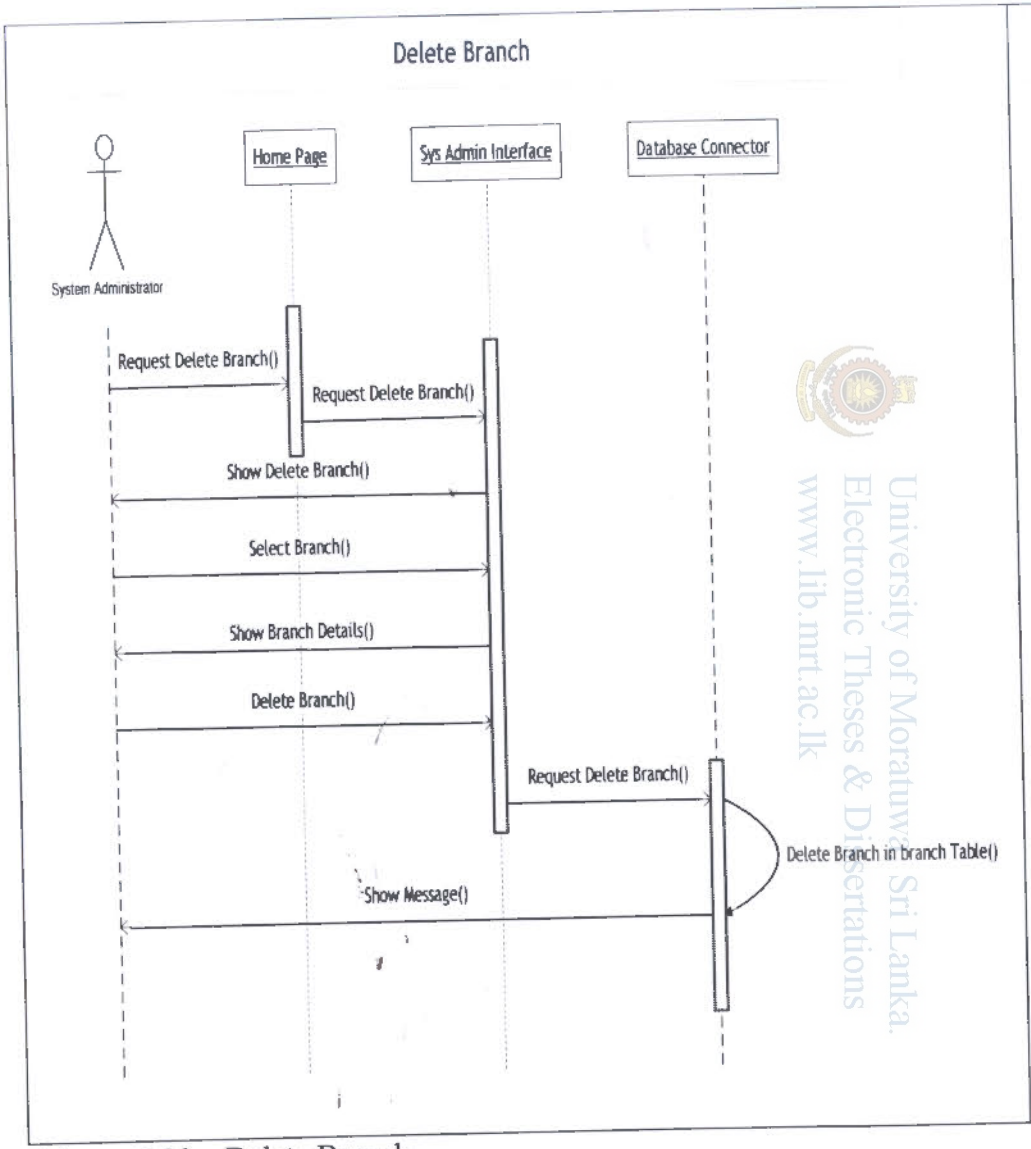

Figure F.20 – Delete Branch

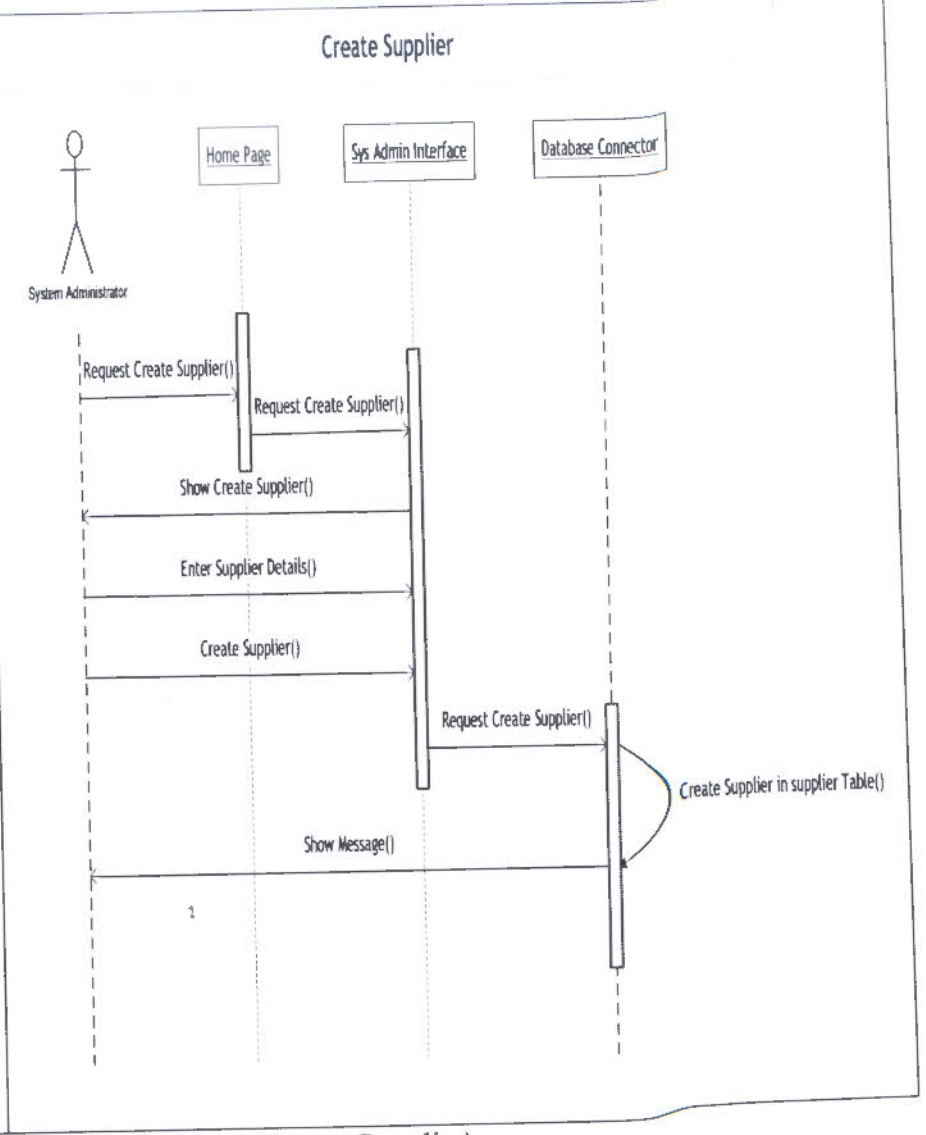

Figure F.21 – Create Supplier\

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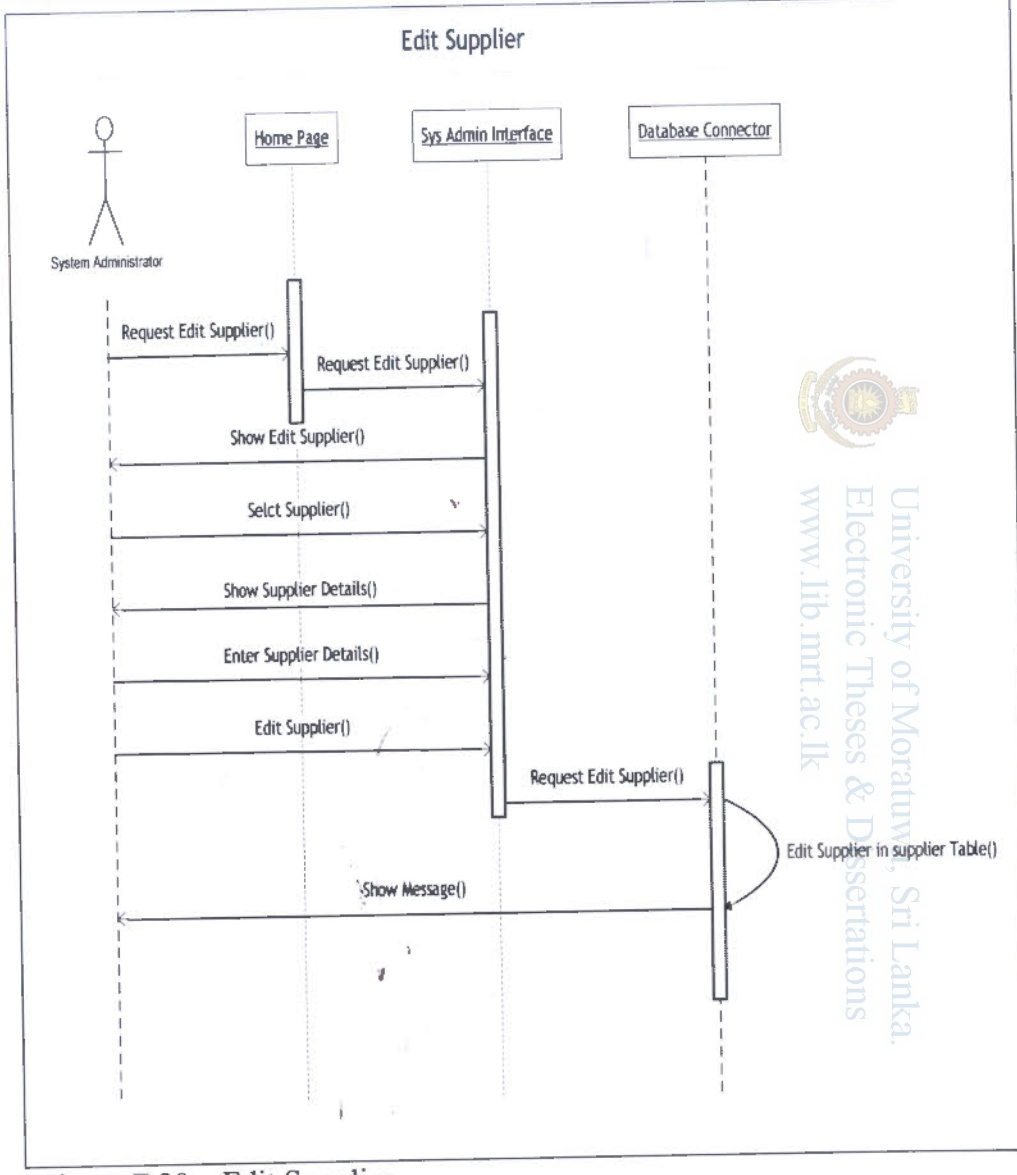

Figure F.20 – Edit Supplier

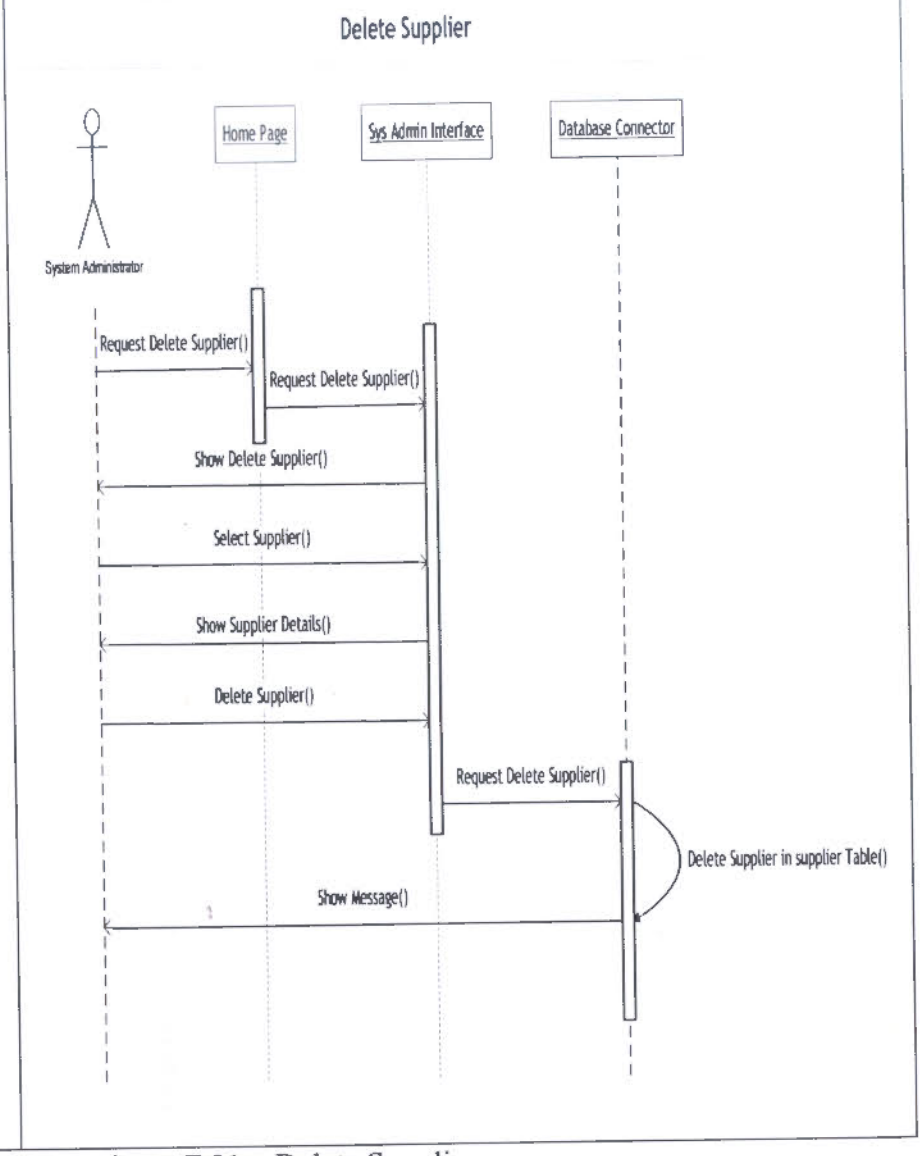

Figure F.21 – Delete Supplier

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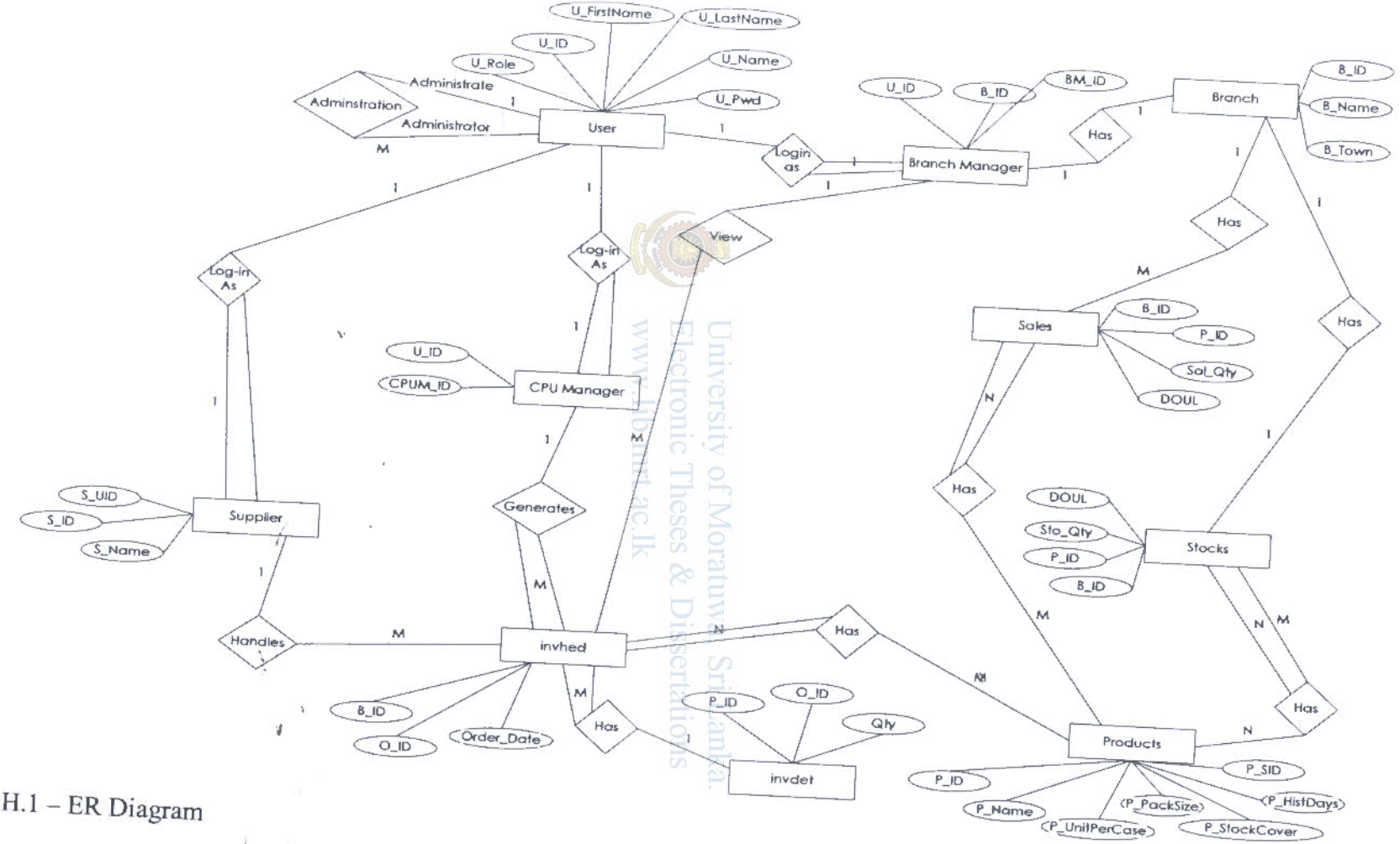

Figure H.1 – ER Diagram

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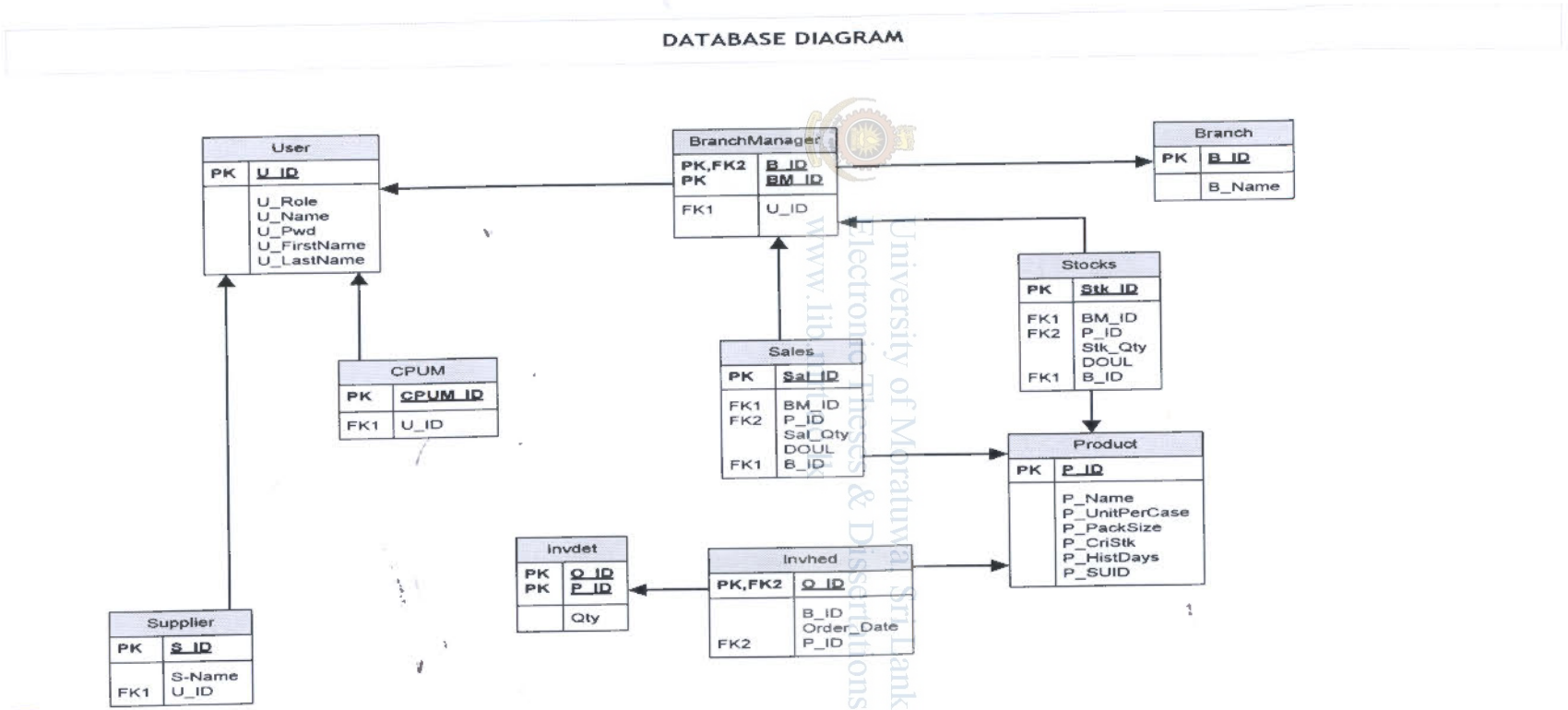
Database diagram



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Appendix J

Description of graphical user interface (GUI)

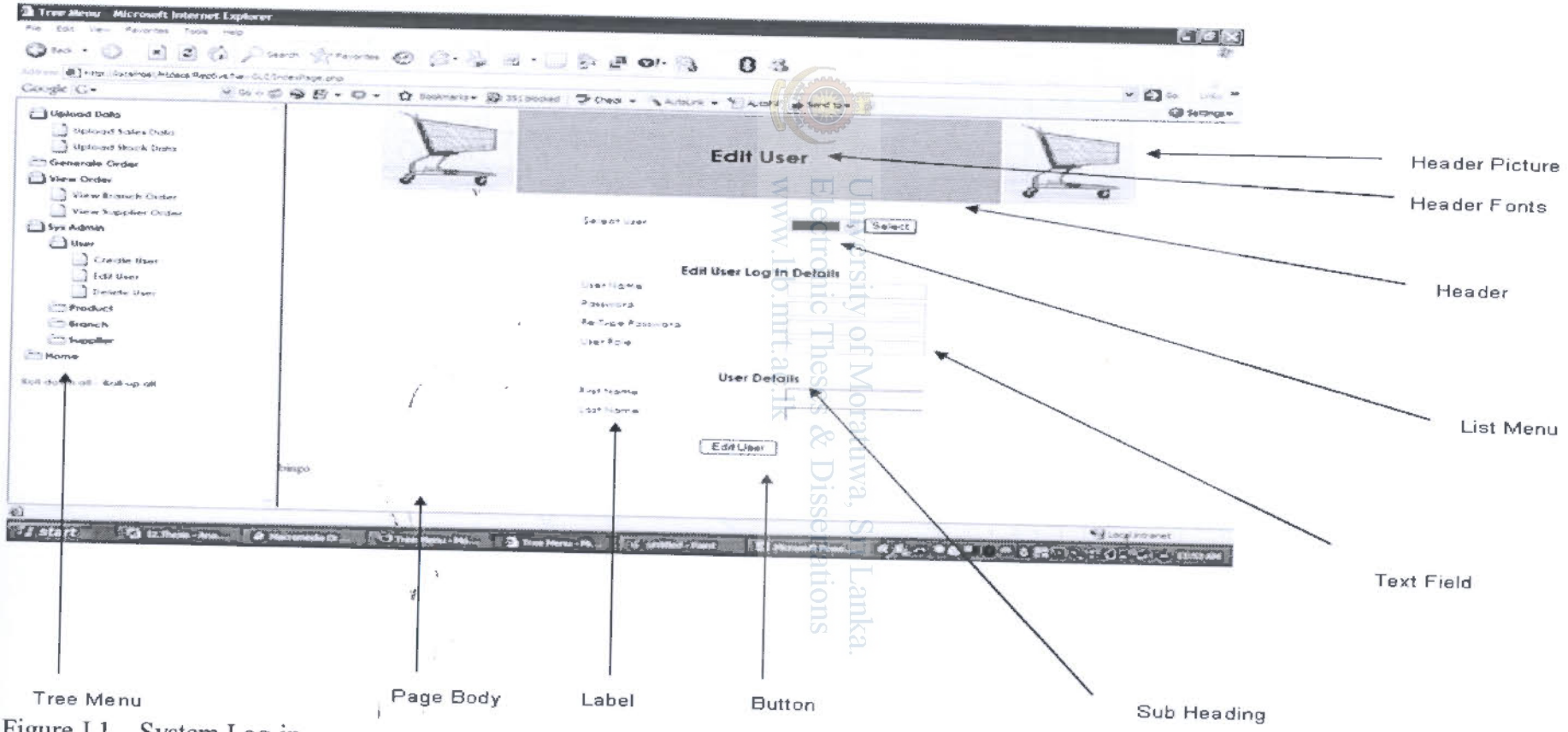

Figure J.1 – System Log-in

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Appendix K

Evaluation results

Designation	Date of evaluation	Usability	Understandability	Learnability	Operability	Attractiveness	Efficiency	Installability
Group - 1	13-Oct-08							
Branch Manager - 1		√	√	√	√	X	√	√
Branch Store Keeper		√	√	√	√	√	√	√
Branch Manager - 2		√	√	√	√	X	√	√
CPUM		√	√	√	√	√	√	√
CPU Store Keeper		√	√	√	√	√	√	√
Group - 2	15-Oct-08							
GM - ABC Supermarket		√	√	√	√	√	√	X
Head of IT		√	√	√	√	√	X	√
Supplier	15-Oct-08	√	√	√	√	√	√	√

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Appendix L

Test cases and test results

Test Case ID	1
Tested Component	User Log-in
Tested Area	Functionality
Purpose	User can Log-in with username and password
Prerequisites	User exist and user status must be active
Test Data	Username = {valid, invalid, empty} Password = {valid, invalid, empty}

Test Case Description

No.	Test Case	Expected output
1	Enter username and password	Load home page
2	Enter invalid username and password	Error message "Invalid Username or Password. Please enter again" should be displayed
3	Enter empty username and password	Error message "Username / Password is missing. Please enter username / Password" should be displayed

Figure K.1 – Test Case - User Log-in

Test Case ID	1
Tested Component	User login
Test Results Description	
Test Case - 1	**Enter valid username and password**
Input Specification	Text, Numeric
Sample Data	Username: admn , password: admin123
Test Result	Pass
Remarks	Correct user identified by the system
Test Case - 2	**Enter invalid username and password**
Input Specification	Text, Numeric
Sample Data	Username : crbt , Password: abc
Test Result	Pass
Remarks	System does not accept the user
Test Case - 3	**Enter empty username and password**
Input Specification	Keep blank
Sample Data	Username : , Password :
Test Result	Pass
Remarks	System do not accept the username or password

Figure K.1 – Test result - User Log-in

Test Case ID	2
Tested Component	Upload Sales Data
Tested Area	Functionality
Purpose	To check whether the user can Upload Sales Data file in to the data base
Prerequisites	User must already logged-in to the system. Sales date file for upload must be available
Test Data	File = {valid, invalid}

Test Case Description

No.	Test Case	Expected output
1	Upload valid file	Message " File upload successful" should he displayed
2	Upload in-valid file	Error message "File upload Failed. Try Again" should be displayed

Figure K.2 – Test Case - Upload Sales Data

Test Case ID	2
Tested Component	Upload Sales Data

Test Results Description

Test Case - 1	Upload valid file
Input Specification	Data File
Sample Data	CSV File
Test Result	Pass
Remarks	Sales data table updated
Test Case - 2	**Upload in-valid file**
Input Specification	Data File
Sample Data	Text file
Test Result	Pass
Remarks	Sales data table did not update

Figure K.2 – Test result – upload Sales Data

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Test Case ID	3
Tested Component	Upload Stock Data
Tested Area	Functionality
Purpose	To check whether the user can Upload Stock Data file in to the data base
Prerequisites	User must already logged-in to the system. Stock data file for upload must be available
Test Data	File = {valid, invalid}

Test Case Description

No.	Test Case	Expected output
1	Upload valid file	Message " File upload successful" should be displayed
2	Upload in-valid file	Error message "File upload Failed. Try Again" should be displayed

Figure K.3 – Test Case -Upload Stock Data

Test Case ID	3
Tested Component	Upload Stock Data

Test Results Description

Test Case - 1	**Upload valid file**
Input Specification	Data File
Sample Data	CSV File
Test Result	Pass
Remarks	Stock data table updated
Test Case - 2	**Upload in-valid file**
Input Specification	Data File
Sample Data	Text file
Test Result	Pass
Remarks	Stock data table did not update

Figure K.3 – Test result – Upload Stock Data

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Test Case ID	4
Tested Component	Enter Critical Stock Cover
Tested Area	Functionality
Purpose	To check whether the user can change default Critical Stock Cover
Prerequisites	User must already logged-in to the system. Default Critical Stock Cover must be displayed
Test Data	Critical Stock Cover = {Default, New , Empty}

Test Case Description

No.	Test Case	Expected output
1	Leave default Critical Stock Cover as it is	Message "Critical Stock Cover has not changed" should be displayed
2	Enter new Critical Stock Cover	Message " Are you want to Update Critical Stock Cover ?" should be displayed
3	Enter empty Critical Stock Cover	Message "Please enter Critical Stock Cover" should be displayed

Figure K.4 – Test Case – Enter Critical Stock Cover

Test Case ID	4
Tested Component	Enter Critical Stock Cover

Test Results Description

Test Case - 1	**Leave default Critical Stock Cover as it is**
Input Specification	Numeric
Sample Data	Default Critical Stock Cover
Test Result	Pass
Remarks	Critical Stock Cover in the system did not changed
Test Case - 2	**Enter new Critical Stock Cover**
Input Specification	Numeric
Sample Data	Critical Stock Cover = "5"
Test Result	Pass
Remarks	Critical Stock Cover in the system updated
Test Case - 3	**Enter empty Critical Stock Cover**
Input Specification	
Sample Data	Critical Stock Cover = " "
Test Result	Pass
Remarks	System not accept the Critical Stock Cover

Figure K.4 – Test result – Enter Critical Stock Cover

Test Case ID	5
Tested Component	Enter Historical Days
Tested Area	Functionality
Purpose	To check whether the user can change default Historical Days
Prerequisites	User must already logged-in to the system. Default Historical Days must be displayed
Test Data	Historical Days = {Default, New , Empty}

Test Case Description

No.	Test Case	Expected output
1	Enter default Historical Days	Message "Historical Days Updated Successfully" will display
2	Enter new Historical Days	Message " Are you want to Update Historical Days ?" should be displayed
2	Enter empty Historical Days	Message "Please enter Historical Days" should be displayed

Figure K.5 – Test Case - Enter Historical Days

Test Case ID	5
Tested Component	Enter Historical Days

Test Results Description

Test Case - 1	**Leave default Enter Historical Days as it is**
Input Specification	Numeric
Sample Data	Default Historical Days
Test Result	Pass
Remarks	Enter Historical Days in the system did not change
Test Case - 2	**Enter new Enter Historical Days**
Input Specification	Numeric
Sample Data	Enter Historical Days = "3"
Test Result	Pass
Remarks	Enter Historical Days in the system updated
Test Case - 3	**Enter empty Enter Historical Days**
Input Specification	
Sample Data	Enter Historical Days = " "
Test Result	Pass
Remarks	System not accept the Critical Stock Cover

Figure K.5 – Test result – Enter Historical Days

Test Case ID	6
Tested Component	Order Generation
Tested Area	Functionality
Purpose	To check whether the user can generate orders by branches , by supplier
Prerequisites	User must already logged-in to the system Critical Stock Cover must be updated Historical Days must be updated
Test Data	Order Generation = {Generated }

Test Case Description

No.	Test Case	Expected output
1	Order Generation	Message "Order Generated Successfully" should be displayed

Figure K.6 – Test Case – Order Generation

Test Case ID	6
Tested Component	Order Generation

Test Results Description

Test Case	Generate Order
Input Specification	
Sample Data	
Test Result	Pass
Remarks	System generates Branch wise , supplier wise orders.

Figure K.6 – Test result – Order Generation

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Test Case ID	7
Tested Component	View Branch Order
Tested Area	Functionality
Purpose	To check whether the user can view Branch Order
Prerequisites	User must already logged-in to the system An already generated order must be available in the system
Test Data	Date = {Valid }

Test Case Description

No.	Test Case	Expected output
1	Select date from the drop down window	Branch order should be displayed

Test Case ID	7
Tested Component	View Branch Order

Test Results Description

Test Case	Select date from the drop down window
Input Specification	Numeric , text
Sample Data	Select Date = '24-11-08'
Test Result	Pass
Remarks	System displays Branch Order

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Test Case ID	8
Tested Component	View Supplier Order
Tested Area	Functionality
Purpose	To check whether the user can view Supplier Order
Prerequisites	User must already logged-in to the system An already generated order must be available in the system
Test Data	Date = {Valid }

Test Case Description

No.	Test Case	Expected output
1	Select date from the menu	Supplier Order should be displayed

Figure K.8 – Test Case – View supplier order

Test Case ID	8
Tested Component	View Supplier Order

Test Results Description

Test Case	Select date from the menu
Input Specification	Numeric , text
Sample Data	Select Date = '24-11-08'
Test Result	Pass
Remarks	System displays Supplier Order

Figure K.8 – Test result – View supplier order

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Test Case ID	9
Tested Component	Create User
Tested Area	Functionality
Purpose	Add user to the system
Prerequisites	User must not be an existing user of the system
Test Data	User Name = {Valid , In-valid, Empty } User Details = {Valid , In-valid, Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid user name & details	Message "User created successfully" should be displayed.
2	Enter existing user name & details	Message "User already exists" should be displayed
3	Enter in-valid user name & details	Message "User not created. Please re-check user details" should be displayed
4	Enter empty user name & details	Message "User not created. Please re-check user details" should be displayed

Test Case ID	9
Tested Component	Create User

Test Results Description

Test Case	Enter valid user name & details
Input Specification	Numeric , Text
Sample Data	User Name = 'AH5699' Passwd = 'abc123' User Role = 'ADMN' , User first name = 'Anuradha' User last name = 'Hewamanne'
Test Result	Pass
Remarks	System Creates a new user
Test Case	Enter existing user name & details
Input Specification	Numeric , Text
Sample Data	User Name = 'AH5699' Passwd = 'abc123' User Role = 'ADMN' , User first name = 'Anuradha' User last name = 'Hewamanne'
Test Result	Pass
Remarks	System does not create user since it is available
Test Case	Enter in-valid user name & details
Input Specification	Numeric , Text
Sample Data	User Name = 'AHr5699d' Passwd = 'abc123' User Role = 'ADMN' , User first name = 'Anuradha' User last name = 'Hewamanne'
Test Result	Pass
Remarks	System does not create user

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Figure K.9 – Test Case - Create User

Test Case	Enter empty user name & details
Input Specification	Numeric , Text
Sample Data	User Name = ‘ ’ Passwd = ‘abc123’ User Role = ‘ ’, User first name = ‘Anuradha’ User last name = ‘Hewamanne’
Test Result	Pass
Remarks	System does not create user

Figure K.9 – Test result – Crete User

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Test Case ID	10
Tested Component	Edit User
Tested Area	Functionality
Purpose	Edit User Details
Prerequisites	User must be an existing user of the system
Test Data	User Name = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Select valid user name	User details should be displayed.
2	Select empty user name	Message "User Name does not exist. Please re-check" should be displayed

Figure K.10 – Test Case – Edit User

Test Case ID	10
Tested Component	Edit User

Test Results Description

Test Case	Enter valid user name
Input Specification	Texts , numeric
Sample Data	User name = "AH5699"
Test Result	Pass
Remarks	System displays user details to be edited
Test Case	Enter empty user name
Input Specification	Texts , numeric
Sample Data	User name = " "
Test Result	Pass
Remarks	System refuses to upload display details

Figure K.10 – Test result – Edit user

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Test Case ID	11
Tested Component	Delete User
Tested Area	Functionality
Purpose	Remove user from the system
Prerequisites	User must be an existing user of the system
Test Data	User Name = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Select valid user name	User details should be displayed..
3	Select empty user name	Message "User Name does not exist. Please re-check" should be displayed

Figure K.11 – Test Case – Delete User

Test Case ID	11
Tested Component	Delete User
Test Results Description	
Test Case	Enter valid user name
Input Specification	Texts , numeric
Sample Data	User name = "AH5699"
Test Result	Pass
Remarks	System displays user details to be deleted
Test Case	Enter empty user name
Input Specification	Texts , numeric
Sample Data	User name = " "
Test Result	Pass
Remarks	System does not display details

Figure K.11 – Test result – Delete user

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Test Case ID	12
Tested Component	Create Product
Tested Area	Functionality
Purpose	Add product to the system
Prerequisites	Product must not be an existing product of the system
Test Data	User Code = {Valid , In-valid, Empty } User Details = {Valid , In-valid, Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid product code & details	Message "Product created successfully" should be displayed.
2	Enter existing product code & details	Message" Product already exists" should be displayed
3	Enter in-valid product code & details	Message "Product not available. Please re-check product details" should be displayed
4	Enter empty product code & details	Message "Product not available. Please re-check product details" should be displayed

Test Case ID	12
Tested Component	Create Product

Test Results Description

Test Case	Enter valid product code & details
Input Specification	Numeric , Text
Sample Data	Product code = '01101' Product Name = "Sunlight Soap – Yellow – 130g", Unite per case = '120' Pack size = 130g Critical Stock Cover = '25 Historical Days = '4' , Supplier ID = '6'
Test Result	Pass
Remarks	System Creates a new product
Test Case	Enter valid product code & details
Input Specification	Numeric , Text
Sample Data	Product code = '01101' Product Name = "Sunlight Soap – Yellow – 130g", Unite per case = '120' Pack size = 130g Critical Stock Cover = '25 Historical Days = '4' , Supplier ID = '6'
Test Result	Pass
Remarks	System does not create product since it is available
Test Case	Enter in-valid product code & details
Input Specification	Numeric , Text
Sample Data	Product code = '01rc101' Product Name = "Sunlight Soap – Yellow – 130g", Unite per case = '120' Pack size = 130g Critical Stock Cover =

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Figure K.12 – Test Case – Create product

	'3325 Historical Days = '4' , Supplier ID = '6'
Test Result	Pass
Remarks	System does not create product
Test Case	Enter empty user name & details
Input Specification	Numeric , Text
Sample Data	Product code = '' Product Name = " ", Unite per case = '120' Pack size = 130g Critical Stock Cover = '25 Historical Days = '4' , Supplier ID = '6'
Test Result	Pass
Remarks	System does not create product

Figure K.12 – Test result – Create product

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Test Case ID	13
Tested Component	Edit product
Tested Area	Functionality
Purpose	Edit product details
Prerequisites	User must be an existing user of the system
Test Data	Product Code = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Select valid product code	Product details should be displayed.
2	Select empty product code	Message "Product Name does not exist. Please re-check" should be displayed

Figure K.13 – Test Case – Edit product

Test Case ID	13
Tested Component	Edit Product

Test Results Description

Test Case	Select valid product code
Input Specification	Texts , numeric
Sample Data	Product code = "01101"
Test Result	Pass
Remarks	System displays product details to be edited
Test Case	Enter empty product code
Input Specification	Texts , numeric
Sample Data	Product code = " "
Test Result	Pass
Remarks	System refuses to display details

Figure K.13 – Test result – Edit product

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Test Case ID	14
Tested Component	Delete product
Tested Area	Functionality
Purpose	Remove product from the system
Prerequisites	Product must be an existing product of the system
Test Data	Product Code = {Valid, Empty }

Test Case Description

No.	Test Case	Expected output
1	Select valid product code	Product details should be displayed.
3	Select empty product code	Message "Product Name does not exist. Please re-check" should be displayed

Figure K.14 – Test Case – Delete product

Test Case ID	14
Tested Component	Delete Product

Test Results Description

Test Case	Enter valid product code
Input Specification	Texts , numeric
Sample Data	Product code = "AH5699"
Test Result	Pass
Remarks	System displays product details to be deleted
Test Case	Select empty product code
Input Specification	Texts , numeric
Sample Data	Product Code = " "
Test Result	Pass
Remarks	System refuses to display details

Figure K.14 – Test result – Delete product

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Test Case ID	15
Tested Component	Create Branch
Tested Area	Functionality
Purpose	Add Branch to the system
Prerequisites	Branch must not be an existing Branch of the system
Test Data	Branch code = {Valid , In-valid, Empty } Branch details = {Valid , In-valid, Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid Branch code & details	Message "Branch created successfully" should be displayed.
2	Enter existing Branch code & details	Message" Branch already exists" should be displayed
3	Enter invalid branch code & details	Message "Branch not created. Please re-check Branch details" should be displayed
4	Enter empty Branch code & details	Message "Branch not created. Please re-check Branch details" should be displayed

Test Case ID	15
Tested Component	Create Branch
Test Results Description	
Test Case	Enter valid branch code & details
Input Specification	Numeric , Text
Sample Data	Branch code = 'BRKD01' Branch Name = 'ABC – Kandy City Branch Town = Kandy
Test Result	Pass
Remarks	System Creates a new branch
Test Case	Enter existing branch code & details
Input Specification	Numeric , Text
Sample Data	Branch code = 'BRKD01' Branch Name = 'ABC – Kandy City Branch Town = Kandy
Test Result	Pass
Remarks	System does not create branch since it is available
Test Case	Enter in-valid branch code & details
Input Specification	Numeric , Text
Sample Data	Branch code = 'BR66KD01' Branch Name = 'ABC – Kandy City Branch Town = Kandy
Test Result	Pass
Remarks	System does not create branch
Test Case	Enter empty branch code & details

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Figure K.15 – Test Case – Create branch

Input Specification	Numeric , Text
Sample Data	Product code = '' Product Name = " ", Unite per case = '120' Pack size = 130g Critical Stock Cover = '25 Historical Days = '4' , Supplier ID = '6'
Test Result	Pass
Remarks	System does not create branch

Figure K.15 – Test result – Create branch

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Test Case ID	16
Tested Component	Edit Branch
Tested Area	Functionality
Purpose	Edit Branch details
Prerequisites	Branch must be an existing Branch of the system
Test Data	Branch Code = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Select valid Branch code	Branch details should be displayed.
2	Select empty Branch code	Message "Branch does not exist. Please re-check" should be displayed

Figure K.16 – Test Case – Edit branch

Test Case ID	16
Tested Component	Edit Branch

Test Results Description

Test Case - 01	Select valid branch code
Input Specification	Texts , numeric
Sample Data	Product code = "SUP001"
Test Result	Pass
Remarks	System displays branch details to be edited
Test Case - 02	Enter empty branch code
Input Specification	Texts , numeric
Sample Data	Branch code = " "
Test Result	Pass
Remarks	System refuses to display details

Figure K.16 – Test result – Edit branch

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Test Case ID	18
Tested Component	Create Supplier
Tested Area	Functionality
Purpose	Add Supplier to the system
Prerequisites	Supplier must not be an existing Supplier of the system
Test Data	Supplier code = {Valid , In-valid, Empty } Supplier details = {Valid , In-valid, Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid Supplier code & details	Message "Supplier created successfully" should be displayed.
2	Enter existing Supplier code & details	Message" Supplier already exists" should be displayed
3	Enter in-valid Supplier code & details	Message "Supplier not created. Please re-check Supplier details" should be displayed
4	Enter empty Supplier code & details	Message "Supplier not created. Please re-check Supplier details" should be displayed

Test Case ID	15
Tested Component	Create Supplier

Test Results Description

Test Case	Enter valid supplier code & details
Input Specification	Numeric , Text
Sample Data	Supplier code = 'SUP001' Supplier Name = 'Unilever' User ID = '6'
Test Result	Pass
Remarks	System creates a new supplier
Test Case	Enter existing supplier code & details
Input Specification	Numeric , Text
Sample Data	Supplier code = 'SUP001' Supplier Name = 'Unilever' User ID = '6'
Test Result	Pass
Remarks	System does not create supplier since it is available
Test Case	Enter in-valid supplier code & details
Input Specification	Numeric , Text
Sample Data	Supplier code = 'SUP00rr1' Supplier Name = 'Unilever' User ID = '6'

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Test Result	Pass
Remarks	System does not create branch
Test Case	Enter empty supplier code & details
Input Specification	Numeric , Text
Sample Data	Supplier code = ' ' Supplier Name = 'Unilever' User ID = '6'
Test Result	Pass
Remarks	System does not create Supplier

Figure K.18 – Test Case – Create supplier

Figure K.18 – Test result – Create supplier

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Test Case ID	19
Tested Component	Edit Supplier
Tested Area	Functionality
Purpose	Edit Supplier details
Prerequisites	Supplier must be an existing Supplier of the system
Test Data	Supplier Code = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid Supplier code	Supplier details should be displayed
2	Enter empty Supplier code	Message "Supplier does not exist. Please re-check" should be displayed

Figure K.19 – Test Case – Edit Supplier

Test Case ID		19
Tested Component		Edit Supplier
Test Results Description		
Test Case		Select valid supplier code
Input Specification		Texts , numeric
Sample Data		Supplier code = "SUP001"
Test Result		Pass
Remarks		System displays supplier details to be edited
Test Case		Enter empty supplier code
Input Specification		Texts , numeric
Sample Data		Supplier code = " "
Test Result		Pass
Remarks		System refuses to display details

Figure K.19 – Test result – Edit supplier

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Test Case ID	20
Tested Component	Delete Supplier
Tested Area	Functionality
Purpose	Remove Supplier from the system
Prerequisites	Supplier must be an existing Supplier of the system
Test Data	Supplier Code = {Valid , Empty }

Test Case Description

No.	Test Case	Expected output
1	Enter valid Supplier code	Supplier details should be displayed.
3	Enter empty Supplier code	Message "Supplier does not exist. Please re-check" should be displayed

Figure K.20 – Test Case – Delete supplier

Test Case ID	17
Tested Component	Delete Supplier

Test Results Description

Test Case	Enter valid supplier code
Input Specification	Texts , numeric
Sample Data	Supplier code = "AH5699"
Test Result	Pass
Remarks	System displays Supplier details to be deleted
Test Case	Select empty supplier code
Input Specification	Texts , numeric
Sample Data	Supplier Code = " "
Test Result	Pass
Remarks	System refuses to display details

Figure K.20 – Test result – Delete supplier

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Appendix M

User manual – For supervisor

1. Login to the System

Current GUI reference No	Activity	Result GUI reference No
1	Enter username & password	2

2. Upload data

Current GUI reference No	Activity	Result GUI reference No
2	Select Upload Sales Data under Upload Data of tree menu	3.1
2	Select Upload Stock Data under Upload Data of tree menu	3.2

3. Generate Order

Current GUI reference No	Activity	Result GUI reference No
2	Select Enter Critical Stock Cover under Generate Order of tree menu	4.1
2	Select Enter Historical Days under Generate Order of tree menu	4.2
2	Select Order Generation under Generate Order of tree menu	4.3

4. View Order

Current GUI reference No	Activity	Result GUI reference No
2	Select View Branch Order under View Order of tree menu	5.1
2	Select View Supplier Order under View Order of tree menu	5.2

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5. Sys Admin – User Maintenance

Current GUI reference No	Activity	Result GUI reference No
2	Select Create User under User Maintenance of Tree menu	6.1.1
2	Select Edit User under User Maintenance of Tree menu	6.1.2
2	Select Delete User under User Maintenance of Tree menu	6.1.3

6. Sys Admin – Product Maintenance

Current GUI reference No	Activity	Result GUI reference No
2	Select Create Product under Product Maintenance of Tree menu	6.2.1
2	Select Edit Product under Product Maintenance of Tree menu	6.2.2
2	Select Delete Product under Product Maintenance of Tree menu	6.2.3

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7. Sys Admin – Branch Maintenance

Current GUI reference No	Activity	Result GUI reference No
2	Select Create Branch under Branch Maintenance of Tree menu	6.3.1
2	Select Edit Branch under Branch Maintenance of Tree menu	6.3.2
2	Select Delete Branch under Branch Maintenance of Tree menu	6.3.3

8. Sys Admin – Supplier Maintenance

Current GUI reference No	Activity	Result GUI reference No
2	Select Create Supplier under Supplier Maintenance of Tree menu	6.4.1
2	Select Edit Supplier under Supplier Maintenance of Tree menu	6.4.2
2	Select Delete Supplier under Supplier Maintenance of Tree menu	6.4.3

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