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Project: Library Checkout System

Requirements:

- UR-003: An admin or librarian must be able to alter a customer's information
- UR-004: The admin can add media to the library
- UR-007: The customer or librarian can request new media to be added to the library
- UR-008: The admin or librarian can search for a customer's account details

Note: - As our project implementation is very small, the User Requirements translate directly to Use Cases.

• Use Case Documents:

Use Case ID:	UR-003
Use Case Name:	Alter Customer Information
Description:	Admin and Librarian can alter a Customer's information

Actors:	Admin, Librarian																
Pre-conditions:	Admin and Librarian must be logged in.																
Post-conditions:	The information of Customer is updated.																
Frequency of Use:	When contact information of a Customer changes.																
Flow of Events:	<table><tr><th></th><th>Actor Action</th><th>System Response</th></tr><tr><td>1</td><td>Enter Customer ID in Search Customer box.</td><td>System returns Customer information from database.</td></tr><tr><td>2</td><td>Click on Update Information button.</td><td>System displays text boxes with corresponding fields.</td></tr><tr><td>3</td><td>Enter new information.</td><td></td></tr><tr><td>4</td><td>Click Save.</td><td>The information is updated.</td></tr></table>			Actor Action	System Response	1	Enter Customer ID in Search Customer box.	System returns Customer information from database.	2	Click on Update Information button.	System displays text boxes with corresponding fields.	3	Enter new information.		4	Click Save.	The information is updated.
	Actor Action	System Response															
1	Enter Customer ID in Search Customer box.	System returns Customer information from database.															
2	Click on Update Information button.	System displays text boxes with corresponding fields.															
3	Enter new information.																
4	Click Save.	The information is updated.															
Variations:	1. The queried Customer information does not exist in database																
Exceptions:																	
Developer Notes:																	

Use Case ID:	UR-004
Use Case Name:	Add New Media
Description:	Admin can add new Media to the Library

Actors:	Admin																			
Pre-conditions:	Admin must be logged in.																			
Post-conditions:	A new Media item is added to the Library.																			
Frequency of Use:	As per frequency of requests.																			
Flow of Events:	<table> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> <tr> <td>1</td><td></td><td>System displays all the requests for Media in a List.</td></tr> <tr> <td>2</td><td>Get the desired Media from the List.</td><td></td></tr> <tr> <td>3</td><td>Click the Media to be added.</td><td></td></tr> <tr> <td>4</td><td>Click Add.</td><td></td></tr> <tr> <td>5</td><td></td><td>The Media is added to the database and removed from requests.</td></tr> </table>			Actor Action	System Response	1		System displays all the requests for Media in a List.	2	Get the desired Media from the List.		3	Click the Media to be added.		4	Click Add.		5		The Media is added to the database and removed from requests.
	Actor Action	System Response																		
1		System displays all the requests for Media in a List.																		
2	Get the desired Media from the List.																			
3	Click the Media to be added.																			
4	Click Add.																			
5		The Media is added to the database and removed from requests.																		
Variations:	1. No requests for new Media.																			
Exceptions:																				
Developer Notes:																				

Use Case ID:	UR-007
Use Case Name:	Request New Media
Description:	Customer and Librarian can request for New Media

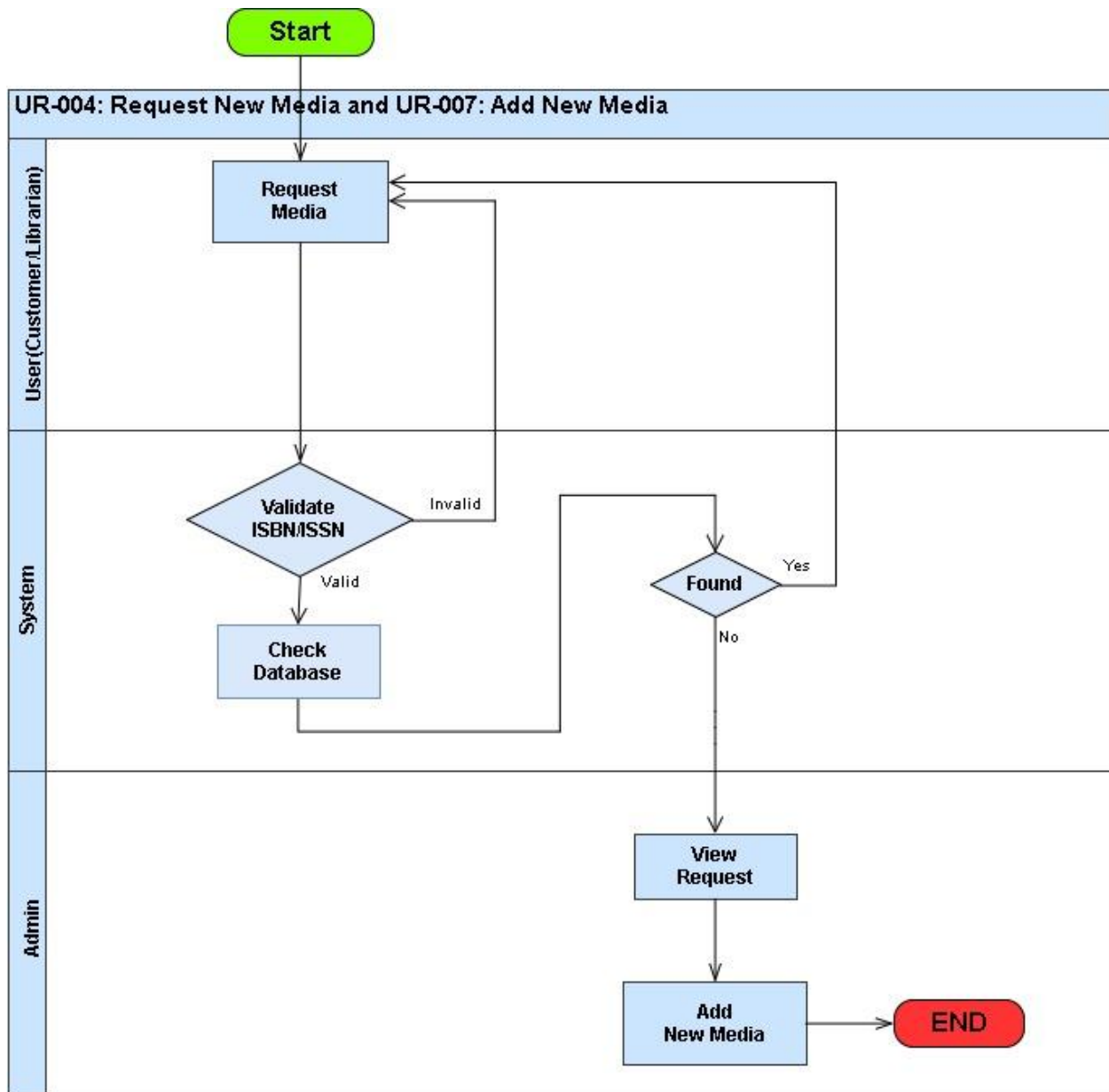
Actors:	Customer, Librarian										
Pre-conditions:	Customer and Librarian must be logged in.										
Post-conditions:	The Request for New Media is added to System.										
Frequency of Use:	Usually once or twice a month										
Flow of Events:	<table> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> <tr> <td>1</td><td>Click on Request New Media.</td><td>System returns a form containing Name and ISBN/ISSN fields.</td></tr> <tr> <td>2</td><td>Enter Required information and click Request.</td><td>System adds the request visible to the admin.</td></tr> </table>			Actor Action	System Response	1	Click on Request New Media.	System returns a form containing Name and ISBN/ISSN fields.	2	Enter Required information and click Request.	System adds the request visible to the admin.
	Actor Action	System Response									
1	Click on Request New Media.	System returns a form containing Name and ISBN/ISSN fields.									
2	Enter Required information and click Request.	System adds the request visible to the admin.									
Variations:	2. The requested Media already exists in the Library.										
Exceptions:											
Developer Notes:											

Use Case ID:	UR-008
Use Case Name:	Search Account
Description:	Admin and Librarian can view a Customer's details.

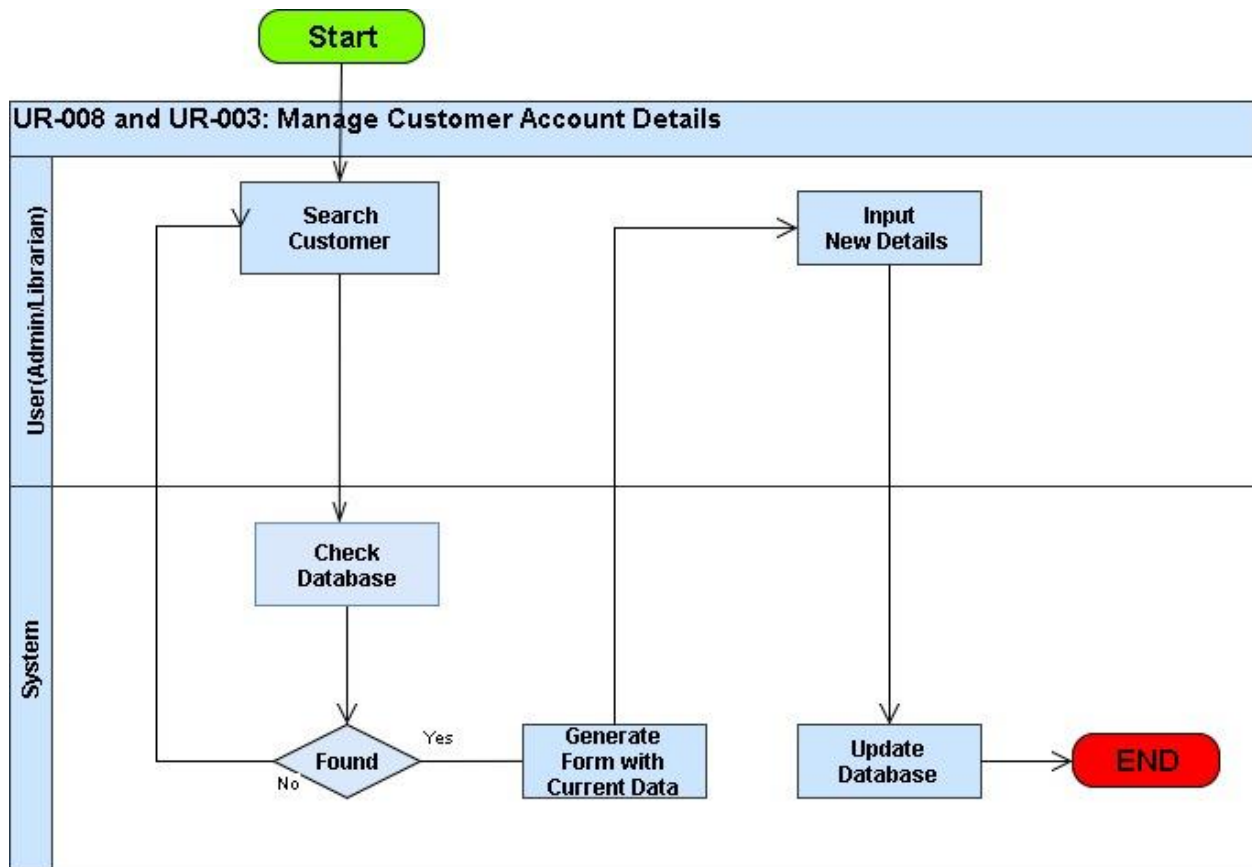
Actors:	Admin, Librarian										
Pre-conditions:	Admin and Librarian must be logged in.										
Post-conditions:	The information of Customer is displayed										
Frequency of Use:	Several times a month.										
Flow of Events:	<table border="1"> <thead> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> </thead> <tbody> <tr> <td>1</td><td>Enter Customer ID in Search Customer box.</td><td>System returns Customer information from database.</td></tr> <tr> <td>2</td><td>View Customer Information.</td><td></td></tr> </tbody> </table>			Actor Action	System Response	1	Enter Customer ID in Search Customer box.	System returns Customer information from database.	2	View Customer Information.	
	Actor Action	System Response									
1	Enter Customer ID in Search Customer box.	System returns Customer information from database.									
2	View Customer Information.										
Variations:	1. The queried Customer information does not exist in database										
Exceptions:											
Developer Notes:											

- **Activity Diagram:** The activity diagrams shown below depict the workflow of their respective use cases mentioned in the diagram.

This activity diagram combines two use cases which complement each other and shows the full workflow of how a user request for new media is addressed.

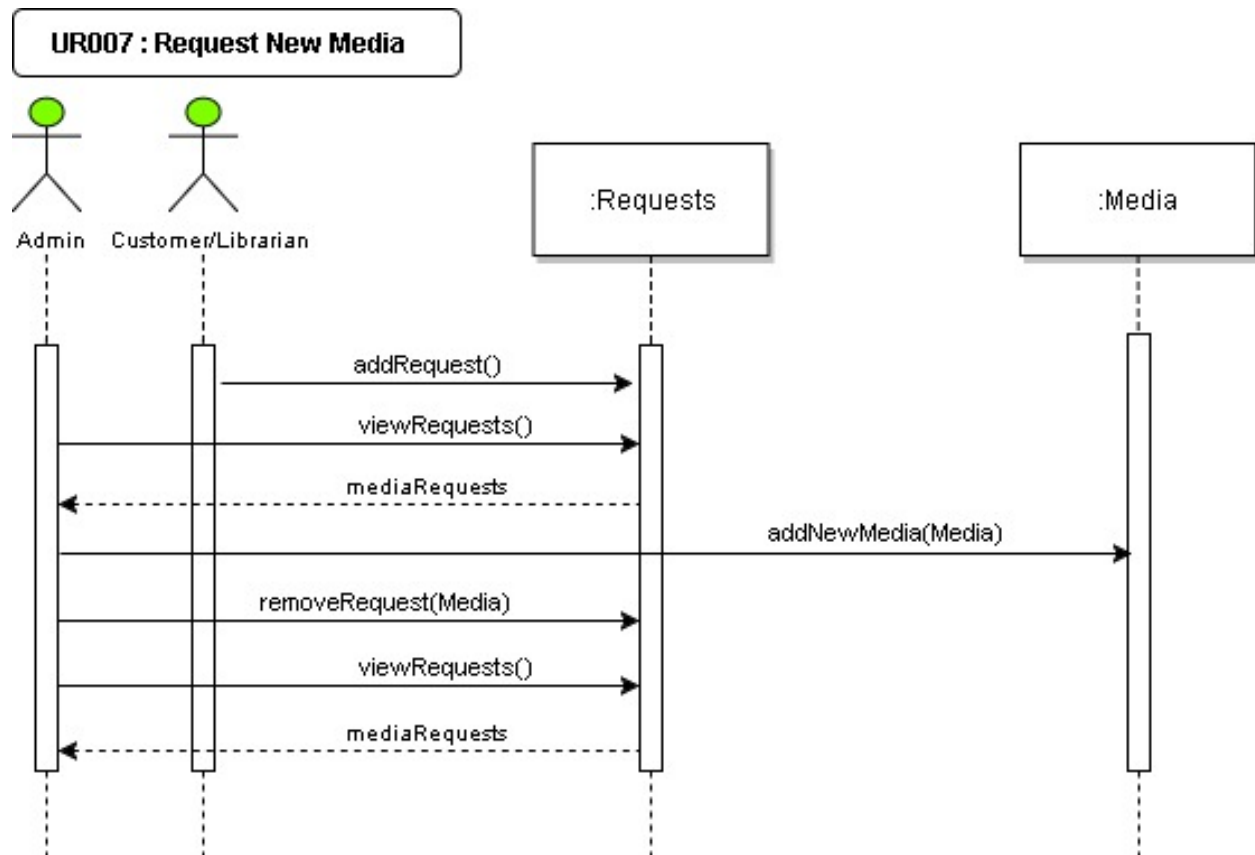


This activity diagram combines two complementing use cases of searching customer details and altering customer information and shows the workflow of how the customer information is updated.

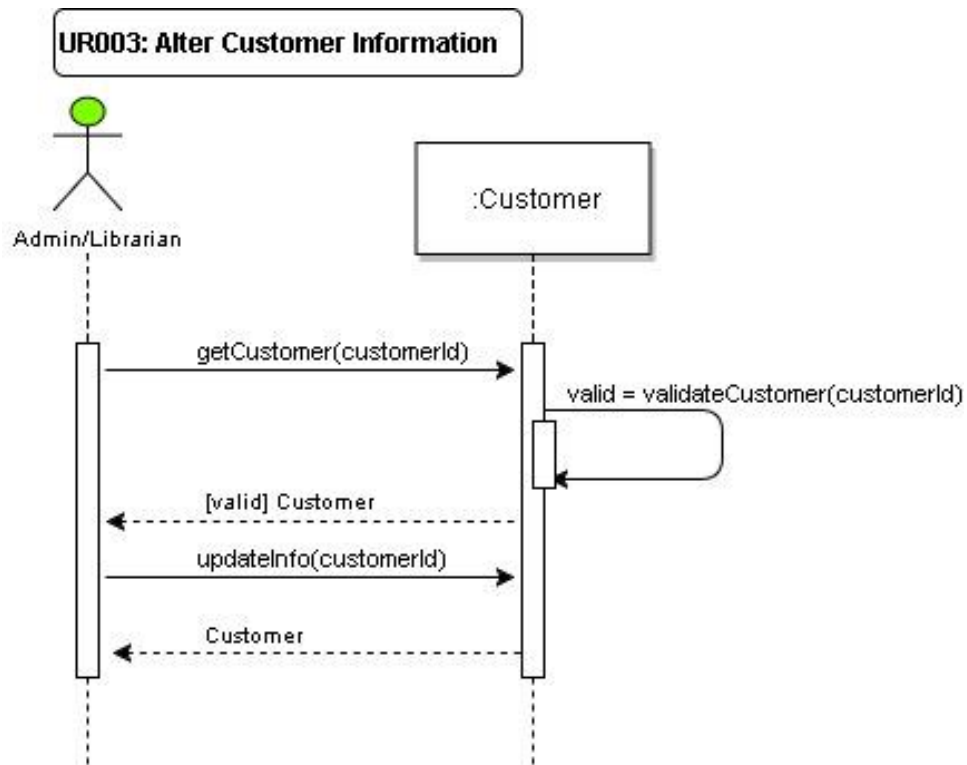


- **User Interactions:** The sequence diagram shows the behavior of the system with the objects involved in a specific use case mentioned in the diagram.

The sequence diagram below shows the messages and classes involved in requesting a new media.



The sequence diagram below depicts the interactions between classes required for altering a customer's information.



These sequence diagrams can be easily mapped to class diagram and activity diagrams.