**Name:** Mukund Madhusudan Atre

**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

• **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:** | | **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: | |

| | | 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: | | | |
| | | **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:** | |
| **Variations:** | 1. The queried Customer information does not exist in database |
| **Exceptions:** | |
| **Developer Notes:** | |

| | Actor Action | System Response |
|---|---|---|
| 1 | Enter Customer ID in Search Customer box. | System returns Customer information from database. |
| 2 | View Customer Information. | |

• **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.
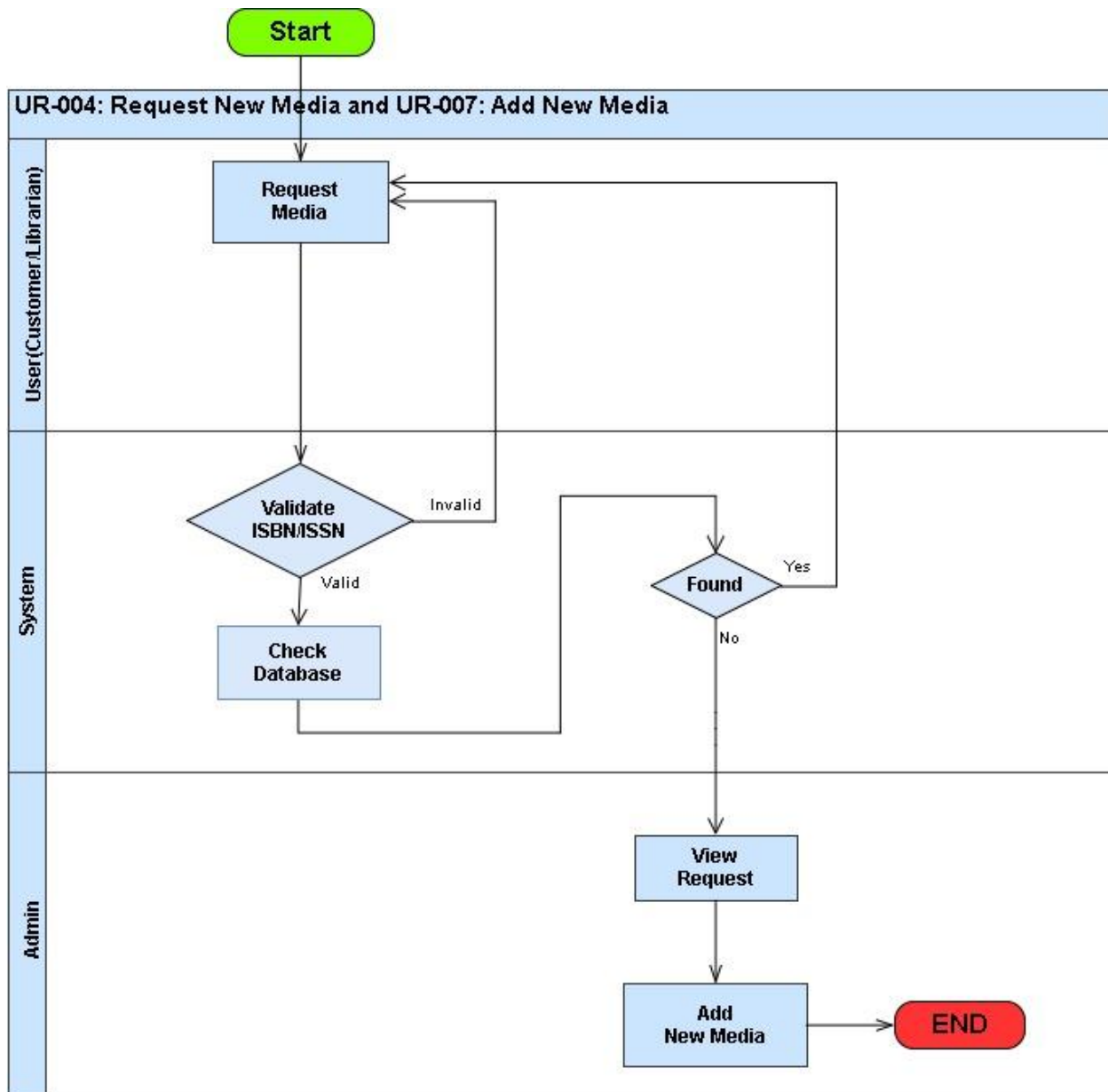
This activity diagram combines two complementing use cases of searching customer details and altering customer information and shows the workflow of how the customer information is updated.
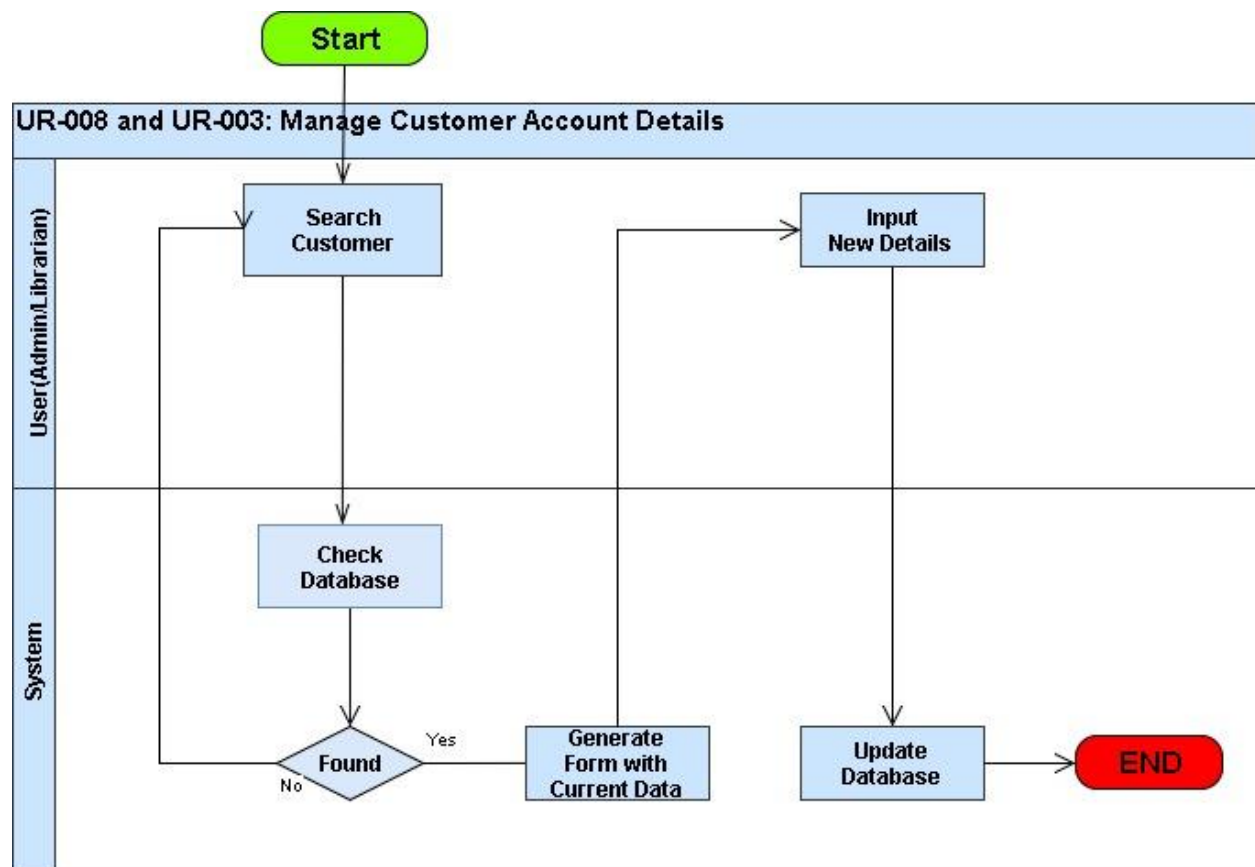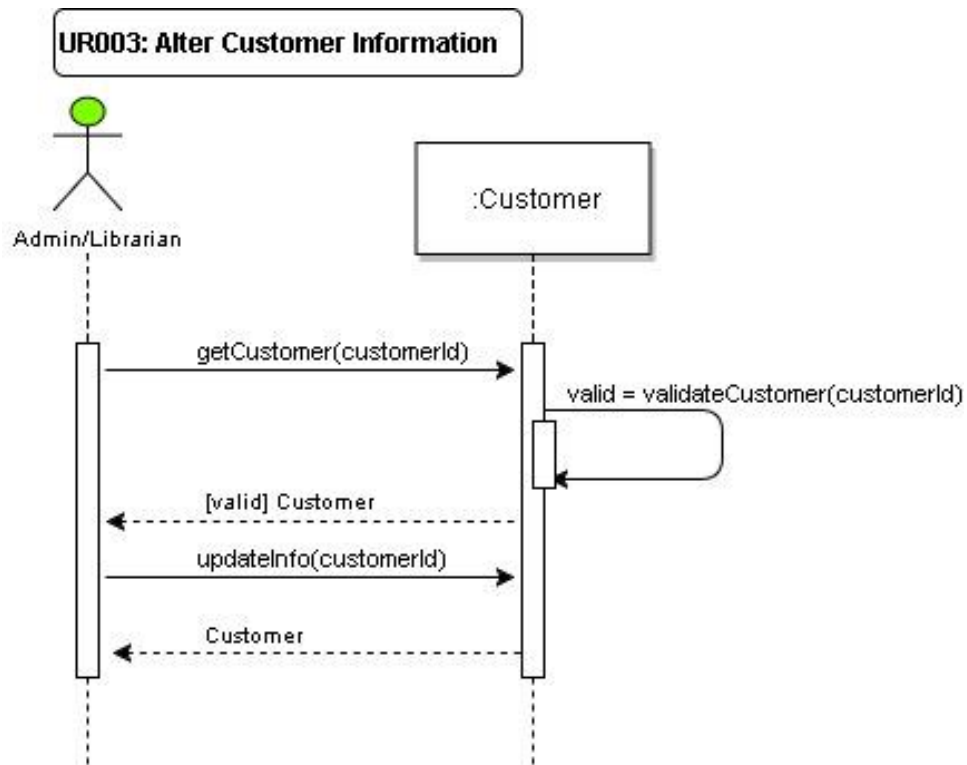
• **User Interactions:** The sequence diagram shows the behavior of the system with the objects involved in a specific use case mentioned in the diagram.

The sequence diagram below shows the messages and classes involved in requesting a new media.
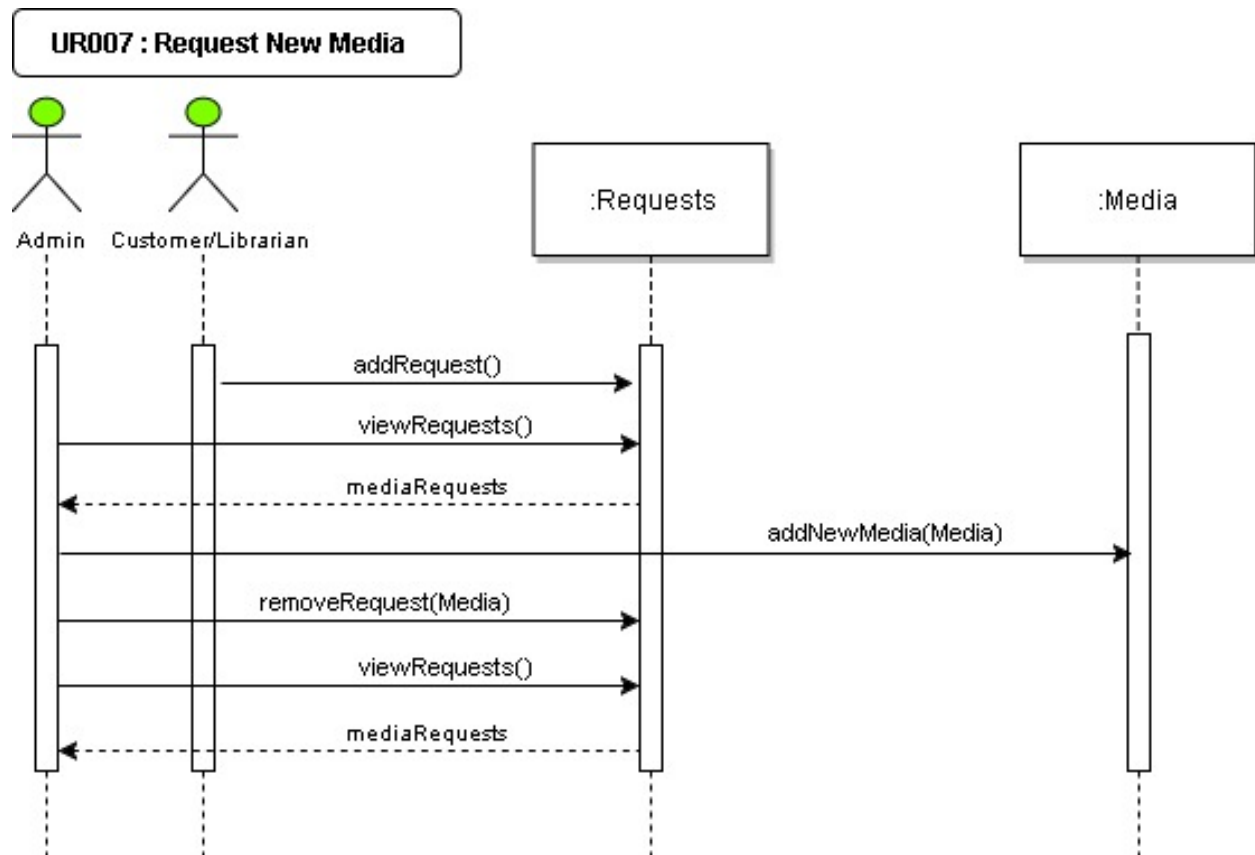
The sequence diagram below depicts the interactions between classes required for altering a customer's information.

UR003: Alter Customer Information

Admin/Librarian

:Customer

getCustomer(customerId)

valid = validateCustomer(customerId)

[valid] Customer

updateInfo(customerId)

Customer

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