

**Team:** Nuha Albadi  
Mukund Madhusudan Atre  
Karthik Handady

**Title:** Library Checkout System

**Project Summary:** The Project focuses on implementing an online interface that allows users to make use of a real world library which contains various forms of Media, Books and journals. The design of the system will be such that it will create a database for various class of users and give them different access levels and authority. The three access levels will be Admin, Librarian and Customer. The system will contain many of the functions that are expected in a library such as searching and checking out media.

The system will have a login step for all users and depending on the account level the user will have corresponding functions they can access. Once logged in customers can search for media, add media to their shopping cart, checkout media, review media, view their orders, request a return, and request new media. The admin and librarians can search for users by name, edit user's details, and view the user's orders. Librarians can process and approve refund requests. The admin can add librarians and has the ability to add or remove media.

**Data Storage:** We will be using MySQL as our data storage tool. There will be separate tables for users, media, and orders.

**Project Requirements:**

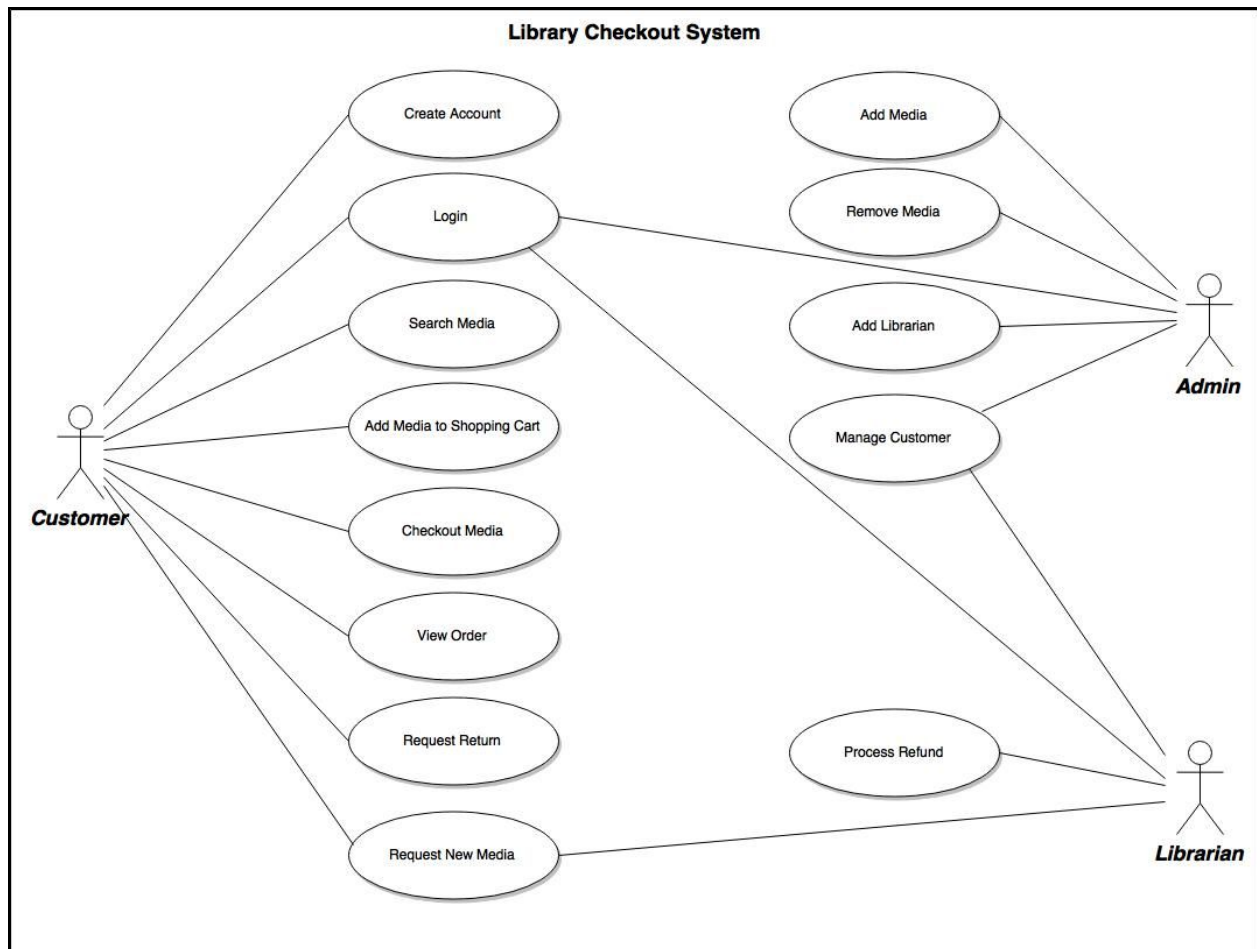
Business Requirements				
ID	Requirement	Topic Area	Actor	Priority
	No Business Requirements			

User Requirements				
ID	Requirement	Topic Area	Actor	Priority
UR-001	A customer must be able to sign up for the system.	Accounts	Customer	Critical
UR-002	The admin must be able to add a librarian to the system.	Accounts	Admin	Critical
UR-003	The Librarian and Admin must be able to alter a customer's information.	Accounts	Admin, Librarian	Medium
UR-004	The admin can add media	Database	Admin	Critical
UR-005	The admin can remove media	Database	Admin	Critical
UR-006	The customer can search for media.	Database	Customer	High
UR-007	The customer or librarian can file a request for new media.	Requests	Customer, Librarian	Low
UR-008	The admin and librarian can search for a customer's account	Database	Admin, Librarian	Medium
UR-009	The customer can add media to their shopping cart.	Orders	Customer	Medium
UR-010	The customer can checkout media in their shopping cart	Orders	Customer	Medium
UR-011	The customer and librarian can view customer's order	Orders	Customer, Librarian	Medium
UR-012	The customer can request a return	Returns	Customer	Medium
UR-013	The librarian can process a refund	Returns	Librarian	Low

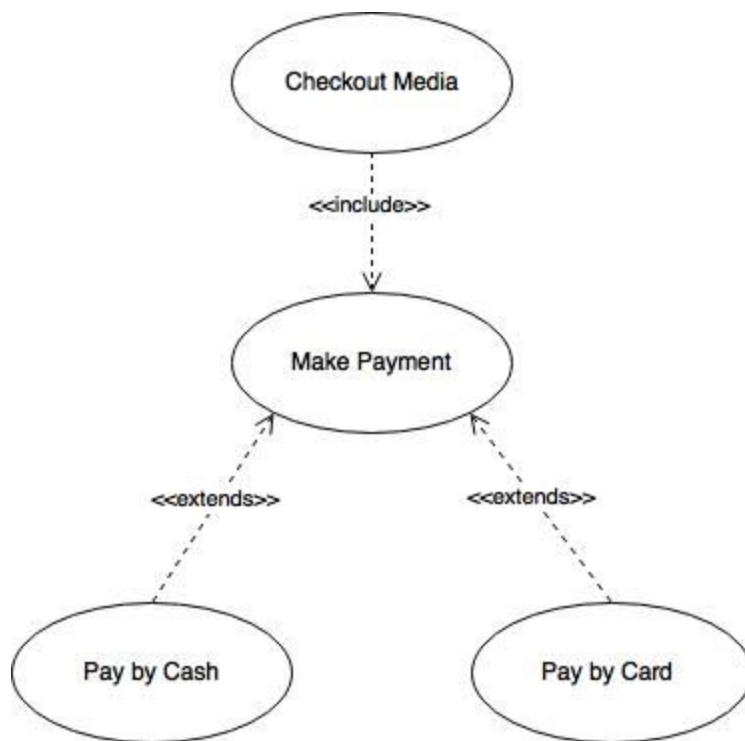
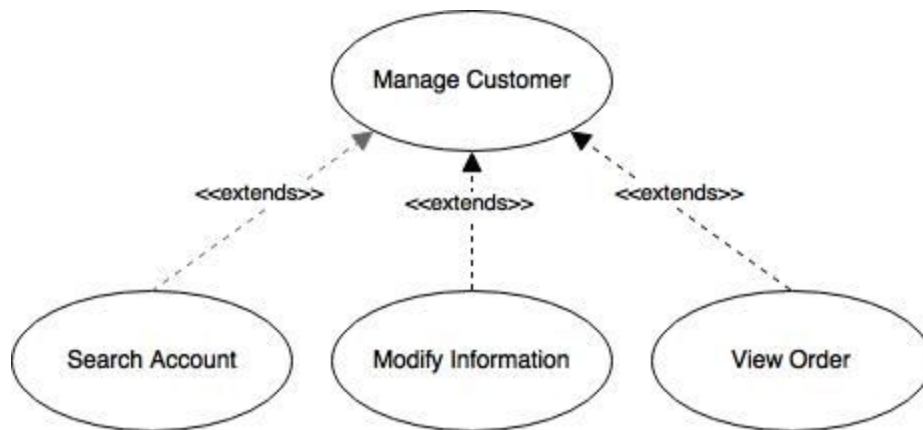
Non-Functional Requirements			
ID	Requirement	Topic Area	Priority
NR-001	The system must be backed-up daily at midnight	Reliability	Critical
NR-002	Users can only access functions corresponding to their user level	Security	Critical
NR-003	The system must be available 24 hours a day for all 7 days of the week.	Availability	Critical
NR-004	The system should only contain legal media.	Legal	Medium
NR-005	The system should respond to requests within 5 seconds	Responsiveness	Medium

## Use Cases:

- Use Case Overview:



- Sub diagrams:



## UI Mockups:

### Mockup 1: Search Page

Library Checkout System		Hello, userName	<a href="#">Sign Out</a>
Category	Library Search		
<input type="text" value="All"/>	<input type="text"/>	<input type="button" value="Search"/>	
For queries, Contact : +1 720 711 2244 Email : librarysystem@gmail.com			

### Mockup 2: Request New Media Page

Library Checkout System		Hello, userName	<a href="#">Sign Out</a>
Request New Media			
Media Name :	<input type="text"/>		
ISBN/ISSN :	<input type="text"/>		
Notify when added		<input checked="" type="checkbox"/>	
<input type="button" value="Request"/>		<input type="button" value="Cancel"/>	

## Update Customer Information

Library Checkout System

Admin/Librarian ID Sign Out

### Update Customer Info

Customer ID: 798764

Name :

Address :

Contact No.:

Email :

Save

Cancel

## Class Diagram:

