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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:

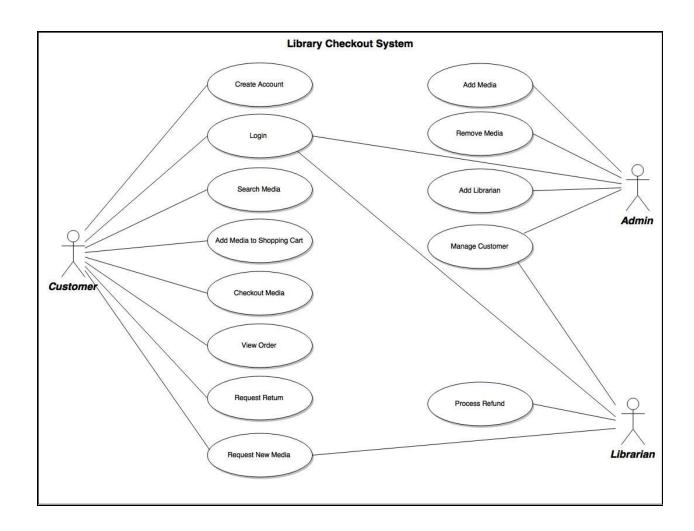
| Busines | Business Requirements | | | |
|---------|--------------------------|------------|-------|----------|
| ID | Requirement | Topic Area | Actor | Priority |
| | No Business Requirements | | | |

| 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 |

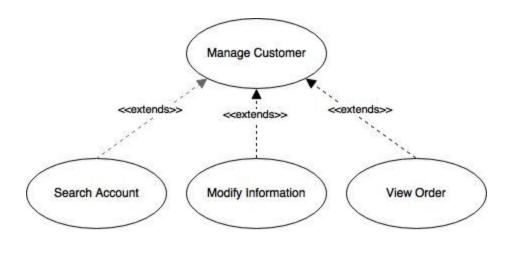
| Non-Fun | Non-Functional Requirements | | |
|---------|---|----------------|----------|
| ID | Requirement | Topic Area | Priority |
| NR-001 | The system must be backed-up daily at midnight | Reliability | Critical |
| NR-002 | Users can only access functions corresponding to their user level | Security | 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 |

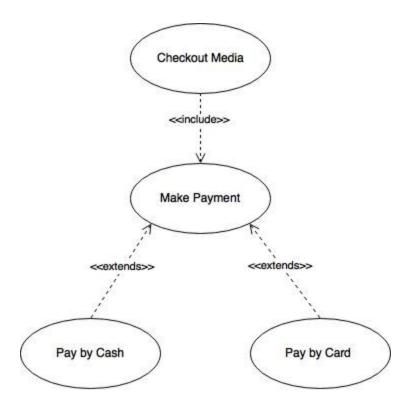
Use Cases:

• Use Case Overview:



• Sub diagrams:





UI Mockups:

| Library Checkout Systems | Hello, user Name <u>sign au</u> |
|--------------------------|---------------------------------|
| Category Library Searce | Seasich. |
| | |

Mockup 2: Reguest New Media Page

| Library Checkout System | Hello, user Name Sign Out |
|-------------------------------|---------------------------|
| Request New Media | |
| Media Name: 1 ISBN/ISSN: [| |
| Notify when added & | |
| (Requet!) | [Cancel] |
| | |
| | |

| Library Checkout System Update Customer Info Customer ID: 798764 | |
|--|----------------|
| Name : [Address : [| |
| | |
| contactNa: [Email: [| |
| | (Save Teancel) |

Class Diagram:

