Assignment #2

The Freddie Mac Library wants to create an automated system to keep track of books being taken out by employees. Currently, everything is being tracked by hand, which, due to human error, has resulted in a litany of overdue books.

The librarian of the Freddie Mac Library has given you some high-level requirements:

- Users should be able to view a list/table of all books that are in possession of the library. This list should be searchable and sortable. A user should also be able to optionally filter out any books that are already checked out.
- The list above should have an "Add to Cart" button if the book is available. If a user clicks this button, the book will be added to their shopping cart.
- The list should also have a "More Info" button next to all books that takes you to a page showing you more information about the book.
- When a user is done adding books to their cart, they can checkout by clicking a "View Cart" button somewhere on the page. When they click the view cart button, they will be shown all books in their cart and will be able to remove any books if they so desire.
- On the View Cart page, there should be a checkout button. When a user clicks this button, the books in their cart should be considered checked out by the user. A popup or toast should notify the user that they have successfully checked out their books.
- A user should also be able to return their checked-out books. There should be another page where a user can view all books they checked out with a button next to each book allowing the user to return it. Next to each book, the day the book is due should be displayed. If the book is overdue, there should be some indicator to bring this to the attention of the user.
- By default, books are checked out for 1 week, but an administrative user should be able to change this.
- Speaking of administrative users, there should be a separate page only accessible to admin users that allows them to:
  - Change the default checkout duration
  - View a list of all users with overdue books
  - Add or remove books from the inventory