Library Management System

It is the library management system in which librarian can perform several Actions, Mention below:

1. *Search for a Book*
   There are 3 options provided to a librarian for searching a book Like Search book by book title, search book by author name and search by a key which includes both author name and book title.

2. *Check in book for borrower*
   After searching for an appropriate book, Librarian can see the list of books and by selecting book librarian can assign it to a borrower.

3. *Check out the book*
   Librarian having 2 choices to return the book.
   A. Enter Book ISBN and check out a book.
   B. Enter borrower card id, select book from the list and check out.

4. *Pay Due*
   If a borrower returns his book after a due date, then he is eligible for payment and by using his card id librarian accept fine amount. Fine amount is $0.25 for each book after due date.

5. *Add new borrower*
   A librarian can add new borrower. If Social Security Number is duplicated Browser will show an error message.

6. *Add new Book*

   A librarian can add a new book into the database. If book is present with same ISBN, Browser will show error message.

Technical Description

1. ***Sprint boot*** (Framework 1.4.1.RELEASE)
   Spring Boot makes it easy to create stand-alone, production-grade Spring based Applications that you can "just run". Spring Boot makes it easy to create Spring-powered, production-grade applications and services with the absolute minimum fuss. It takes an opinionated view of the Spring platform so that new and existing users can quickly get to the bits they need.

2. ***Hibernate***
   Hibernate is an object-relational mapping framework for the Java language. It provides a framework for mapping an object-oriented domain model to a relational database. Hibernate solves object-relational impedance mismatch problems by replacing direct, persistent database accesses with high-level object handling functions.

3. ***Java 8*** (Back-end, REST API)
   The core features of the Spring Framework can be used in developing any Java application, but there are extensions for building web applications on top of the Java EE platform. Spring framework targets to make J2EE development easier to use and promote good programming practice by enabling a POJO-based programming model.

4. ***AngularJs and bootstrap*** (AngularJS v1.5.7 Bootstrap v3.3.7)
   Front end frameworks can be either JS frameworks or CSS frameworks. Bootstrap is a CSS framework which has various pre-defined CSS classes and markup that can be used as UI Components in your web project. It uses Jquery (A JS library) for adding dynamism to its components. Whereas, Angular JS is a JS framework. It does not have any UI components. It is purely JavaScript.

5. ***HTML and CSS*** (Front End)
   Use CSS to define styles for your documents, including the design, layout and variations in a display for different devices and screen sizes. CSS is in the <head> of a document with an embedded style sheet, or attach a separate file that defines styles with an external style sheet.

6. ***Maven*** (Maven 3.2.5)
   Apache Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information.