**Library Management System**

**Title**: Puthaga, Intellects, Bookers

**Target Audience**: Book lovers, Students, Lecturers, Writers

**Type**: B2C

**Timeline**: 2 weeks

**Budget**: Rs.0

**Total Members**: 1

**Requirements**:

- Users can register using a sign-up page.

- Users can log in using their credentials.

- Users can search and filter books by various criteria.

- System shows real-time availability of books.

- Users can add books to favorites.

- Users can create notes on books.

- Users can borrow books with due date tracking.

- System calculates fines for overdue books.

- Users can make payments for fines.

- Credit system for loyal users.

- Detailed book information page.

- User profile management.

- Book return with feedback option.

**Data Model**:

User: Class

- UserId: String

- FirstName: String

- LastName: String

- Email: String

- Password: String

- Favorites: List<Book>

- Notes: List<Note>

- BorrowedBooks: List<BorrowRecord>

- CreditPoints: Integer

Book: Class

- BookId: String

- Title: String

- Author: String

- Genre: String

- ISBN: String

- Available: Boolean

- TotalCopies: Integer

- AvailableCopies: Integer

BorrowRecord: Class

- RecordId: String

- UserId: String

- BookId: String

- BorrowDate: Long

- DueDate: Long

- Returned: Boolean

- FineAmount: Double

Note: Class

- NoteId: String

- UserId: String

- BookId: String

- Content: String

- CreatedDate: Long

Payment: Class

- PaymentId: String

- UserId: String

- Amount: Double

- PaymentDate: Long

- PaymentMethod: String

Feedback: Class

- FeedbackId: String

- UserId: String

- BookId: String

- Rating: Integer (1-5)

- Comments: String

- Date: Long

SearchFilter: Class

- Title: String

- Author: String

- Genre: String

- AvailableOnly: Boolean

CreditSystem: Class

- UserId: String

- Points: Integer

- LastUpdated: Long