The following four classes will be used for the CRC Analysis

1. Library: Manages the collection of books and member transactions.
2. Member: Represents a library member who can borrow or return books.
3. Book: An individual book stored in the library system
4. Transaction: Represents the action of borrowing or returning a book

| Library | |
| --- | --- |
| Responsibility | Collaborator |
| Store books  Manage book availability  Track member transactions | Book  Member  Transaction |

| Member | |
| --- | --- |
| Responsibility | Collaborator |
| Borrow and return books  Maintain transaction history  Check book count and limit | Book  Transaction |

| Book | |
| --- | --- |
| Responsibility | Collaborator |
| Stores book information(Title, Author, ISBN, and Status)  Stores book status (borrowed and returned) | Library  Transaction |

| Transactions | |
| --- | --- |
| Responsibility | Collaborator |
| Stores borrowing and returning events  Identifies books borrowed by member | Member  Book |