# **Library Management System - Diagrams**

#### Diagram 1: DFD (Level 0)

Shows system, student, admin, and library database interaction.

[ Sketch of DFD (Level 0) ]

### Diagram 2: DFD (Level 1)

Details processes like Search Book, Issue Book, Return Book, Manage Users.

[ Sketch of DFD (Level 1) ]

### Diagram 3: ER Diagram

Entities: Student, Admin, Book, Transaction. Relationships: Issue, Return, Manage.

[ Sketch of ER Diagram ]

### Diagram 4: Use Case Diagram

Actors: Student, Admin. Use cases: Login, Search, Issue, Return, Manage Books, Reports.

[ Sketch of Use Case Diagram ]

## **Diagram 5: Sequence Diagram**

Scenario: Student searches for a book and issues it if available.

[ Sketch of Sequence Diagram ]

### **Diagram 6: Activity Diagram**

 $Workflow: Login \rightarrow Search \rightarrow Issue/Return \rightarrow Logout.$ 

[ Sketch of Activity Diagram ]

## Diagram 7: Class Diagram

Classes: User, Student, Admin, Book, Transaction. Relationships between them.

[ Sketch of Class Diagram ]