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| **Total Marks:** | **04** |
| **Obtained Marks:** |  |

**Software Engineering**

**Assignment # 03 Section-B**

**Last date of Submission: May 16th, 2025**

**Submitted To: Mr. Awais Nawaz**

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**Student Name: Ubaid Bin Waris**

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**Reg Number: 2212416**

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**Q.No.1:**

**The university is automating its library services by developing a Library Management System (LMS). This system will allow students to search books, issue books, and return books via a web portal. Library staff will manage the catalog, issue/return operations, and overdue fine records.**

**A common use case in the LMS is “Borrow Book”. The system must handle the following process:**

**1. The student logs into the system.**

**2. The student searches for a book using title or author.**

**3. If the book is available, the student requests to borrow it.**

**4. The system checks if the student is eligible (e.g., has no pending fines or overdue books).**

**5. If eligible, the system marks the book as issued.**

**6. The system updates the inventory and the student's borrowed books list.**

**7. A confirmation message is shown to the student.**

**What to do**

**Using the above scenario, draw a UML Sequence Diagram for the "Borrow Book" use case.**

**Instructions:**

**1. Due date & time for the assignment is 16th May 2025 till 11:55 PM.**

**2. You have to submit this assignment on Google Classroom**

Use case diagram 1

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AI-generated content may be incorrect.