

# O7 Services Test

Create an application as per your technology, Make Sure you implement most of the points mentioned below and after completion of the test submit the test to **o7services030@gmail.com**,

1. **Use of any copilot or any AI chatbot is not Allowed, if found you will be disqualified from the test**
2. **Use of Existing Code not Allowed**
3. **Test Duration is 2:30 hours**
4. **You can implement UI as per your preference.**

## Task: O7 Library Book Borrowing System

### Problem Statement:

Design and implement a **Library Book Borrowing System** that tracks the borrowing and return of books. Your task is to create a system with the following features:

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### 1. Book Borrowing Form (Borrow In): (1)

Create a form to **register a book borrowing event** that captures the following details:

- **Book ID**
  - **Book Title**
  - **Borrower Name**
  - **Borrower Contact**
  - **Borrow Date**
  - **Borrow Time**
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### 2. Book Return Pop-up: (1)

Implement a **pop-up page** that prompts the user to enter the **return date and time** for the book.

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### 3. Receipt Generation: (10)

Generate a **receipt bill** based on the **time difference** between the **borrow date/time** and the **return date/time**. The bill calculation should follow this logic:

- **₹5 per day** for the first 7 days
- **₹10 per day** for each additional day beyond the 7th day
- **₹1 per hour** for each additional hour (beyond full days)
- **Minimum fee of ₹5** if the book is returned on the same day

The **receipt** must contain the following:

- Borrow Date and Time
  - Return Date and Time
  - Total Time (days and hours)
  - **Total Bill**
  - **Bill Formula Used**
  - **Library Name**
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### 4. Daily Borrowing Report: (10)

Create functionality to **view a daily report** and **generate a PDF** of the report. The report should:

- **List all books** borrowed on the current day.
  - Show **high bill amounts on top** of the report.
  - Display **Total Books Borrowed** and **Total Earnings** for the day.
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### Bonus Task (Optional):

1. **Search Functionality:** Allow users to search for a book by **ID or Title** in the system.
  2. **Member Penalty System:** Track if a member has unpaid bills and notify the user on future borrow attempts.
  3. **Monthly Report Generation:** Generate a report for all borrowings in a month, showing the **top borrowers and most borrowed books**.
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### Submission Instructions:

- Submit the complete code with appropriate **comments** explaining the logic.
- Make sure the program **compiles without errors** and runs as expected.
- Submit both the **source code** and **PDF report** for daily borrowing.