Task 1: Writing User Stories (15 mins)

Project: Online College Library System

User Stories:

1. As a student, I want to search for books by title or author, so that I can quickly find the books I

need.

- Acceptance Criteria:

- The search bar allows partial matches.

- Results are shown with title, author, and availability status.

2. As a librarian, I want to add new books to the system, so that students can see them and borrow.

- Acceptance Criteria:

- All required fields (title, author, ISBN) must be entered.

- Confirmation message after successful addition.

3. As a student, I want to check the availability of a book, so that I know if I can borrow it now.

4. As a librarian, I want to see a list of overdue books, so that I can send reminders to students.

5. As a student, I want to renew a borrowed book online, so that I dont need to visit the library

physically.

Task 2: Agile Estimation (15 mins)Story Point Estimates (Using Fibonacci Series 1, 2, 3, 5, 8):

1. Search for books 3 points

- Reason: Moderate effort; needs filters and proper results display.

2. Add new books 5 points

- Reason: Requires form validation, database update, and confirmation.

3. Check availability 2 points

- Reason: Simple check using existing data.

4. List overdue books 5 points

- Reason: Needs backend logic to track and fetch overdue users.

5. Renew book online 3 points

- Reason: Reuse existing data, just update due date.

Tasks that may need refinement or splitting:

- Add new books Split into: (a) Frontend form, (b) Backend API

- List overdue books Split into: (a) Backend logic, (b) UI display

Task 3: Agile Metrics and Reporting (15 mins)

a. What is a Burndown Chart?

A burndown chart shows how much work (in story points) is left over time in a sprint.

It helps the team know if theyre on track to finish all tasks.

b. Mock Burndown Chart (5-day Sprint, Total Points = 18):Day | Remaining Story Points

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1 | 18

2 | 15

3 | 10

4 | 5

5 | 0

c. Two other useful Agile metrics:

1. Velocity Average story points completed in a sprint. Helps in planning future sprints.

2. Lead Time Time from task creation to completion. Useful for identifying delays in workflow.