**Team 5 - Sprint 7 Review Report**

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**What Was Accomplished in Sprint 7:**

- **User Acceptance Test (UAT) plan updated** to reflect the latest development progress.

- **12 UAT test cases** created based on the product backlog.

- **UAT testing executed**:

    o 10 tests **passed successfully**.

    o 2 tests **failed** and documented for fixes.

- **Test results recorded** systematically in an Excel tracking sheet.

- **Heuristic Evaluation** performed:

    o Identified usability issues and areas for improvement.

    o Compiled findings into a structured report with actionable suggestions.

- **Codebase cleanup completed**:

    o Final SonarQube and Checkstyle checks passed.

    o Code is stable and ready for final sprint and UAT completion.

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**Highlights:**

- UAT Tests: 83% Passed (10/12), 17% Failed (2/12).

- Heuristic Evaluation Report finalized, highlighting 18 key usability findings.

- SonarQube & Checkstyle checks completed — Codebase is clean and ready for production testing.

- Test documentation and bug reports shared with development team for next actions.

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**Covered User Stories:**

- As a QA engineer, I want to update the User Acceptance Test (UAT) plan, so that we can align testing with the latest development progress.

- As a QA tester, I want to design 12 functional test cases based on the initial product backlog so that we can evaluate system behavior under real user scenarios.

- As a team member, I want to document the results of test executions in an Excel spreadsheet so that we can track outcomes and identify areas needing fixes.

- As a QA lead, I want to compile a report summarizing test results, discovered bugs, and their severity so that we can prepare for the final sprint.

- As a QA engineer, we want to conduct a heuristic evaluation, so that we can identify usability issues and recommend improvements.

- As a development team, we have completed SonarQube and Checkstyle checks, so that our codebase is clean and ready for UAT testing.

**UAT Test Results:**

| Test Case | Result |
| --- | --- |
| Verify that users can browse books with filters | Passed |
| Ensure users can reserve books | Passed |
| Extend a book reservation | Passed |
| Notification generated when book is reserved | Passed |
| Reminder notification before due date | Passed |
| Language switching available | Passed |
| Guests cannot reserve books | Passed |
| Book is already reserved by someone else | Passed |
| Ensure both student and teacher roles can use features | Passed |
| Ensure that the student cannot reserve more than 5 books. | Passed |
| **2 users reserving same book simultaneously** | **Failed** |
| **Session timeout does not redirect to login page** | **Failed** |

**Heuristic Evaluation Summary:**

**Strengths**:

- Consistent UI with standard button and label styles.

- Localization implemented for user-friendliness.

- Visual feedback (notifications) provided for actions.

**Identified Usability Issues** (examples):

- Session timeout leads to stale screen without a redirect.

- "Invalid Token" message is vague — needs actionable feedback.

- Lack of "Cancel" buttons after accidental clicks.

- Navigation after using search filters is tedious.

- No keyboard shortcuts for power users.

- Missing help section or tooltips for user guidance.

- Users must re-login every time — no "Remember Me" option.

**Suggested Improvements**:

- Implement European date format.

- Show auto-logout alert with options to re-login.

- Add confirmation modals for important actions (reserve/return/extend).

- Improve error messaging for session expiration.

- Introduce help sections and tooltips.

- Lock book IDs to prevent double-booking.

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**Sprint Success Measurement:**

- **Task Completion**: 100% of planned Jira tasks either completed or in progress.

- **Time Tracking**: Updated time logs submitted by all team members.

- **Sprint Backlog Status**:

  - Completed User Stories: 6

  - No stories postponed.

- **Obstacles Identified**:

  - Handling simultaneous book reservations needs backend locking mechanism (to be addressed in Sprint 8).

  - Session timeout handling improvement required.

- **User Feedback Integration**:

  - Feedback from UAT and heuristic evaluation incorporated into Sprint 8 planning.

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**Useful Links:**

- [Jira Board](#)

- [Project Plan](#)

- [Product Vision](#)

- [Figma UI Blueprint/Prototype](#)

- [GitHub Repository](#)
- [Time Tracking Sheet](#)