**Lab Evaluation Assignment**

**19CSE314 – Software Engineering**

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**EduSpark**



**Selected Web Application**

**Application Chosen: EduSpark (*AI-Powered Smart College Dashboard)***This is a role-based educational platform for colleges. It supports Admin, Teacher, and Student accounts with features such as real-time timetables, attendance tracking, assignment uploads, AI-assisted tutoring, and resource sharing. Built using React.js (frontend) and Supabase (backend), it simulates real-world college portals and is ideal for testing.

**Bug Reports**

| **Bug ID** | **Description** | **Steps to Reproduce** | **Expected Behaviour** | **Actual Behaviour** | **Severity** |
| --- | --- | --- | --- | --- | --- |
| **B01** | Email not validated on login | 1. Go to login page2. Enter "abc.com"3. Click Login | Show "Invalid email format" | Login attempt proceeds | Medium |
| **B02** | AI Tutor summary fails | 1. Open AI Tutor2. Upload PPT3. Click "Summarize" | Return summarized content | Blank or endless loading | High |
| **B03** | Attendance sync delay | 1. Teacher marks attendance2. Student checks dashboard | Immediate update of attendance | Requires manual refresh | Medium |
| **B04** | Assignment submitted without file | 1. Open assignment2. Click Submit without file | Error: "File required" | Accepts blank submission | High |
| **B05** | Dark mode resets after reload | 1. Enable dark mode2. Reload page | Dark mode remains active | Defaults back to light mode | Low |

**Test Cases**

| **Test Case ID** | **Test Scenario** | **Preconditions** | **Steps** | **Expected Output** | **Actual Output** | **Status** |
| --- | --- | --- | --- | --- | --- | --- |
| **TC01** | Login with wrong password | Registered user exists | 1. Open login page  2. Enter valid email and wrong password  3. Click Login | Show "Invalid credentials" error | Error shown correctly | Pass |
| **TC02** | Upload PPT to AI Tutor | Teacher is logged in | 1. Go to AI Tutor  2. Upload .ppt file  3. Click Summarize | AI-generated summary appears | Blank summary | Fail |
| **TC03** | Create college-wide event | Admin logged in | 1. Go to Events 2. Click Create 3. Add details 4. Submit | Event visible on all dashboards | Works as expected | Pass |

**Summary of Key Observations**

* AI tools (summarizer, tutor) are functionally unstable.
* Basic validations (email, file uploads) are missing.
* Real-time update delay affects usability.

**Reflections on Industry Testing Standards**

 Using IEEE 829 format for test cases and structured bug reporting made the testing process clear, consistent, and easy to understand for both testers and developers.

 Industry-standard practices helped uncover functional and usability issues early, especially in critical features like AI summarization, timetable syncing, and input validation.

 The experience closely mirrored actual software testing in companies, where systematic test planning and documentation are essential parts of the development cycle.

 Well-documented reports and test cases made it easier to track issues, reproduce bugs, and communicate fixes across the team, increasing overall project quality.