Team Contribution Report

Project: Blog Application Testing

Team Members: Amna Shahid, Ushna Nadeem, Fatima Qurban

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1. Test Plan

Contributor: Amna Shahid

Summary:
A comprehensive test plan was developed in adherence to the IEEE 829 standard. The plan includes detailed sections such as:

- **Test Plan Identifier:** Unique ID for the test plan document.
- **Introduction:** Overview of the objectives and scope of the testing activities.
- **Test Items:** Components of the application to be tested.
- **Features to Be Tested:** Critical functionalities like login, profile management, and blog interactions.
- **Features Not to Be Tested:** Out-of-scope features specified in the plan.
- **Test Approach:** Strategies for white-box and black-box testing.
- **Pass/Fail Criteria:** Metrics to determine test success or failure.
- **Testing Deliverables:** List of test cases, defect reports, and automation scripts.
- **Testing Environment:** Tools, software, and environment configurations.
- **Roles and Responsibilities:** Allocation of tasks to each team member.
- **Risks and Contingencies:** Potential risks and mitigation strategies.

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2. Test Cases

Contributor: Ushna Nadeem

Summary:
Detailed test cases were created, covering both **white-box** and **black-box** testing techniques. The key testing methods applied include:

1. **White-Box Testing:**
    - **Statement Coverage:** Ensuring all lines of code are executed at least once.
    - **Decision Coverage:** Ensuring all decision branches are tested.
2. **Black-Box Testing:**
    - **Equivalence Partitioning:** Dividing inputs into valid and invalid partitions.

- **Boundary Value Analysis:** Testing the edges of input ranges.

Fields Included:

- **Test Case ID:** Unique identifier for each test case.
- **Objective:** Purpose of the test.
- **Pre-conditions:** Setup required before executing the test.
- **Steps to Execute:** Step-by-step instructions.
- **Expected Results:** What should happen if the test passes.
- **Actual Results:** What actually happened during execution.
- **Status:** Pass or Fail.

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3. Defect Reports

Contributor: Fatima Qurban

Summary:
Defects were identified and documented using a defect-tracking tool like Jira. Each defect includes:

- **Defect ID:** Unique identifier for each defect.
- **Summary:** A brief description of the issue.
- **Steps to Reproduce:** Clear steps to replicate the defect.
- **Expected and Actual Results:** Comparison of expected vs. actual outcomes.
- **Severity and Priority:** Level of impact and urgency.
- **Status:** Current status of the defect (e.g., New, Open, Fixed).

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4. Automation Scripts

Contributor: Fatima Qurban

Summary:
Key test cases were automated using frameworks like **Cypress**. Scripts were well-documented, with comments explaining the logic and steps performed. This ensures ease of maintenance and understanding for future testers.

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5. Static Analysis Review

Contributor: Amna Shahid

Summary:
A static analysis review was conducted on project artifacts (source code) manually

- Code directory structure
- Strengths of the code
- Potential bugs

Recommendations were provided to improve code quality and maintainability.

Team Contribution Summary Table

Task	Description	Contributor
1. Test Plan	Developed test plan (IEEE 829)	Amna Shahid
2. Test Cases	Created detailed white-box and black-box test cases	Ushna Nadeem
3. Defect Reports	Documented defects using tracking tools	Fatima Qurban
4. Automation Scripts	Automated key test cases with Cypress	Fatima Qurban
5. Static Analysis Review	Conducted static code analysis and recommendations	Amna Shahid