Bug Reporting & Tracking

To ensure effective tracking and resolution of defects, the following bug management approach will be used:

Bug Tracking Process

1. **Bug Identification**: When a defect is found, it is documented in the bug tracking tool (e.g., Jira, GitHub Issues, or an Excel sheet if no tool is available).
2. **Bug Logging**: The issue is recorded with detailed steps to reproduce, expected vs. actual results, and necessary screenshots/logs.
3. **Bug Assignment**: The bug is assigned to the relevant developer for resolution.
4. **Bug Fixing**: Developers investigate and resolve the issue.
5. **Regression testing**: QA verifies the fix to ensure it resolves the issue without introducing new bugs.
6. **Closure**: If the fix works as expected, the bug is marked as closed.

Bug Report Template

Field	Description
Bug ID	Unique identifier for tracking
Product Feature	The specific feature or module affected (e.g., Repository Management, Issue Tracking, Pull Requests)
Issue type	Functional, Data Validation , UI Enhancement, Performance , API
Title	Short and clear bug description
Description	Detailed explanation of the issue
Steps to Reproduce	Step-by-step actions leading to the bug
Expected Result	What should have happened
Actual Result	What actually happened
Severity	Critical, Major, Medium, Minor, Low

Priority	Urgent, High, Medium, Low
Environment	Dev, Staging, or Production
Attachments	Screenshots, logs, or videos for reference
Status	To do, In Progress, Retest, Regression test bugs, Need info, On hold , Not a bug , Reopened and Closed
Reported By	Name of the tester who found the bug
Assigned To	Developer responsible for fixing

Bug Status Definitions

To ensure clear communication in bug tracking, the following statuses will be used:

1. **To Do** – The bug has been logged and is pending assignment. No action has been taken yet.

2. **In Progress** – The bug has been assigned to a developer and is currently being investigated or worked on.

3. **Retest** – The developer has implemented a fix, and the QA team needs to verify whether the issue is resolved.

4. **Regression Test Bugs** – After retesting, if the issue persists or causes new defects in previously working features, it is marked as a regression test bug. Additional testing is required.

5. **On Hold** – The issue is acknowledged but is not currently a priority. Work on it will resume later.

6. **Need Info** – The developer or tester requires additional information or clarification before proceeding with the fix. This could involve reproducing steps, logs, or business requirements.

7. **Not a Bug** – The reported issue is not a defect but expected system behavior or a misunderstanding of functionality.

8. **Reopened** – A previously closed bug has reoccurred, requiring further investigation and resolution.

9. **Closed** – The bug has been verified as fixed and no longer exists in the system. No further action is required.

Example :

Bug Report Example (Repository Management Web App)

Bug ID: REPO-001

Title: Unable to create a new repository when clicking the "Create Repository" button

Description:
When a user tries to create a new repository by clicking the "Create Repository" button, nothing happens. The expected behavior is that the repository should be created, and the user should be redirected to the repository page. This issue affects all users trying to create repositories.

Steps to Reproduce:

1. Log in to the Repository Management Web App.

2. Click on the "New Repository" button.

3. Enter repository name and description.

4. Click on "Create Repository" button.

5. Observe that no repository is created, and there is no response from the system.

Expected Result:
The repository should be successfully created, and the user should be redirected to the repository page.

Actual Result:
 Clicking the "Create Repository" button does nothing. No repository is created, and there is no error message displayed.

Severity: High

Priority: Urgent

Environment: Staging

Attachments:
 [Screenshot of error log attached]

Status: To do

Reported By: Ifeoma Eze

Assigned To: Developer Team