Bug Report & Test Summary Report

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1. Tips for Software Testing Documentation

Projects that have documents have a high level of maturity.

Lack of documentation is becoming a problem for acceptance.

1) QA should involve in the very first phase of the project so that QA and Documentation work hand in hand.

2) The process defined by QA should be followed by technical people, this helps to remove most of the defects at a very initial stage.

3) Just creating and maintaining Software Testing Templates is not enough, force people to use them.

4) Don't just create and leave the document, Update as and when required.

5) Change requirement is an important phase of the project, don't forget to add them to the list.

6) Use version control for everything. This will help you to manage and track your documents easily.

7) Make defect remediation process easier by documenting all defects. Make sure to include a clear description of the defect, reproduce steps, affected area and details about the author while documenting any defect.

Software Testing Documents

List some software testing documents that we need to use/maintain regularly:

1) Test Plan
2) Test Design and Test Case Specification
3) Test Strategy
4) Weekly Status Report
5) User Acceptance Report
6) Risk_Assessment
7) Test Log
8) Bug Reports
9) Test Summary Reports

…….

2. Bug Report

- A bug report is **a document that outlines information about what's wrong with the software**.
- It lists the reasons or seen errors to point out what exactly is viewed as wrong, and also includes a request and/or details for how to address it.

- A bug report needs to be clear, actionable and simple to complete.

> "This is what we have, this is what we should have instead, so fix it."

- **The point of writing a defect report (bug report) is to get bugs fixed.**

Bug Report

A good bug report:

- Contains the information needed to reproduce and fix problems
- Is an efficient form of communication for both bug reporter and bug receiver
- Can be and is resolved as fast as possible
- Is sent to the person in charge
- Is filed in a defined way
- Establishes a common ground for collaboration

Important Features in Bug Report

1) Bug Number/id

A Bug number or an identification number The developer can easily check if a particular bug has been fixed or not. It makes the whole testing and retesting process smoother and easier.

2) Bug Title

The Bug title should be suggestive enough that the reader can understand it. A clear bug title makes it easy to understand and the reader can know if the bug has been reported earlier or has been fixed.

3) Report Type

One or more field which will describe the bug type, including:

- Coding error
- Design error
- New Suggestion
- Documentation issue
- Hardware problem

Important Features in Bug Report

4) **Severity:** This describes the impact of the bug.

Types of Severity:

- **Blocker:** No further testing work can be done.
- **Critical:** Application crash, Loss of data.
- **Major:** Major loss of function.
- **Minor:** Minor loss of function.
- **Trivial:** Some UI enhancements.
- **Enhancement:** Request for a new feature or some enhancement in the existing one.

5) Priority: When should a bug be fixed? Priority is generally set from P1 to P5. P1 as "fix the bug with the highest priority" and P5 as " Fix when time permits".

Important Features in Bug Report

6) Status: By default the bug status will be ‘New’. Later on, the bug goes through various stages like Fixed, Verified, Reopen, Won’t Fix, etc.

7) Assign To: If you know which developer is responsible for that particular module in which the bug occurred, then you can specify the email address of that developer. Else keep it blank as this will assign the bug to the module owner, if not the Manager will assign the bug to the developer.

Important Features in Bug Report

8) Platform/Environment

- **OS and browser configuration** is necessary for a clear bug report. It is the best way to communicate how the bug can be reproduced.
- Without the exact platform or environment, the application may behave differently and the bug at the tester's end may not replicate on the developer's end.

9) Description

- Bug description helps the developer to understand the bug. It describes the problem encountered.
- It is a good practice to describe each problem separately instead of crumbling them altogether. Don't use terms like "I think" or "I believe".

Important Features in Bug Report

➢ Steps to Reproduce

A good Bug report should clearly mention the steps to reproduce. These steps should include actions that may cause the bug. Don’t make generic statements. Be specific on the steps to follow.

A good example of a well-written procedure is given below Steps:

- Select product Abc01.
- Click on Add to cart.
- Click Remove to remove the product from the cart.

Important Features in Bug Report

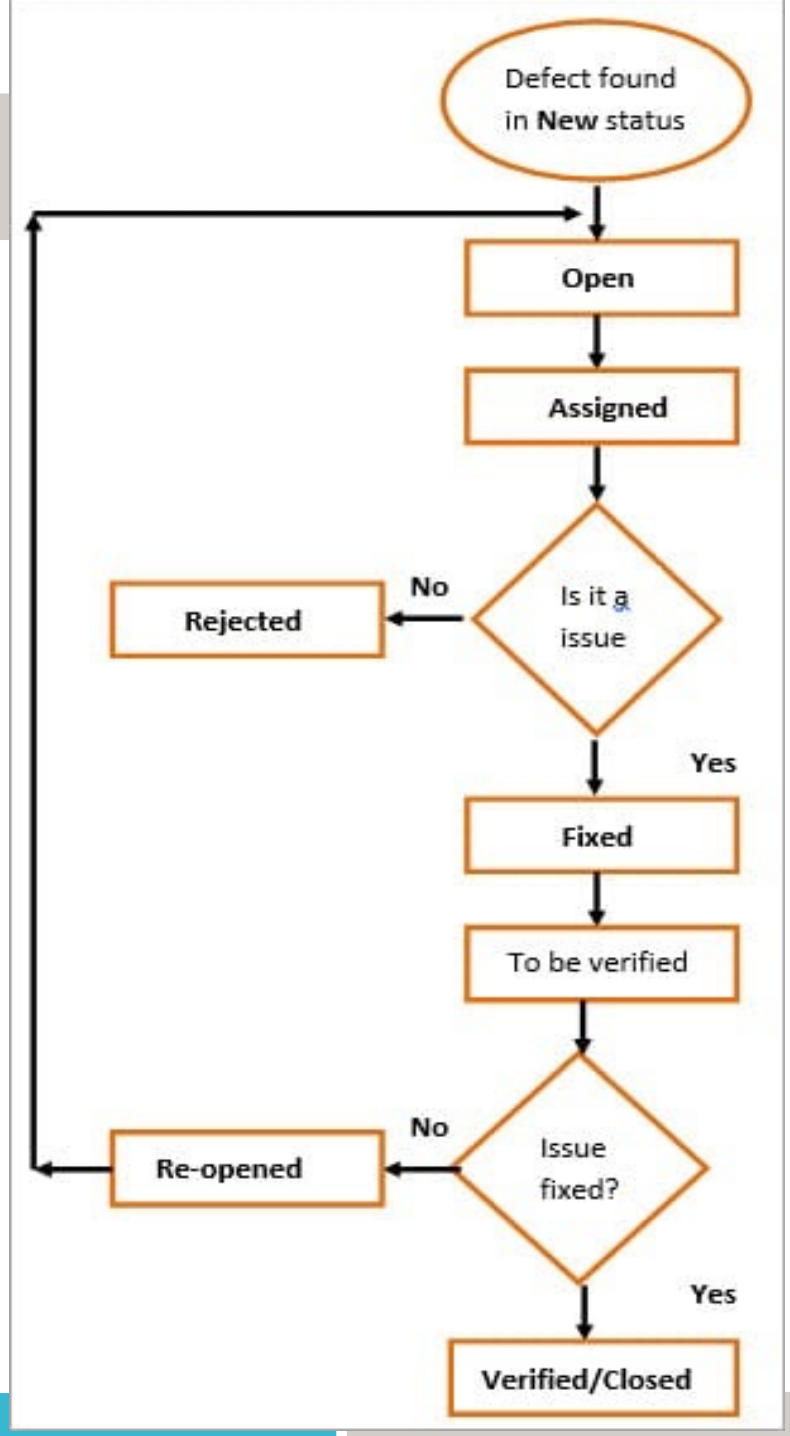
➢ Expected and Actual Result

- A Bug description is incomplete without the Expected and Actual results.
- It is necessary to outline what the outcome of the test is and what the user should expect.

➢ Screenshot

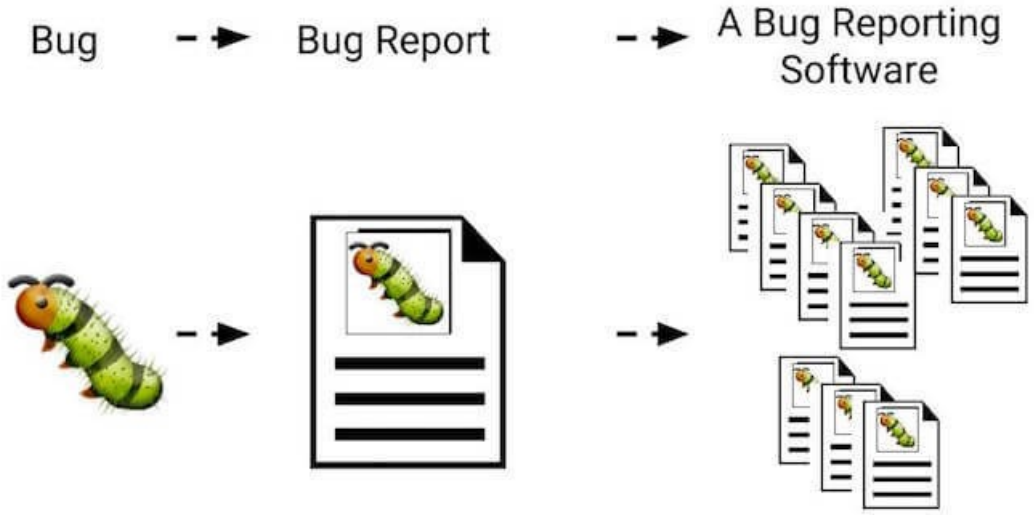
- A picture is worth a thousand words. Take a Screenshot of the instance of failure with proper captioning to highlight the defect.
- Highlight unexpected error messages with light red color. This draws attention to the required area.

Bug life cycle covers all possible status



What is a bug reporting system?

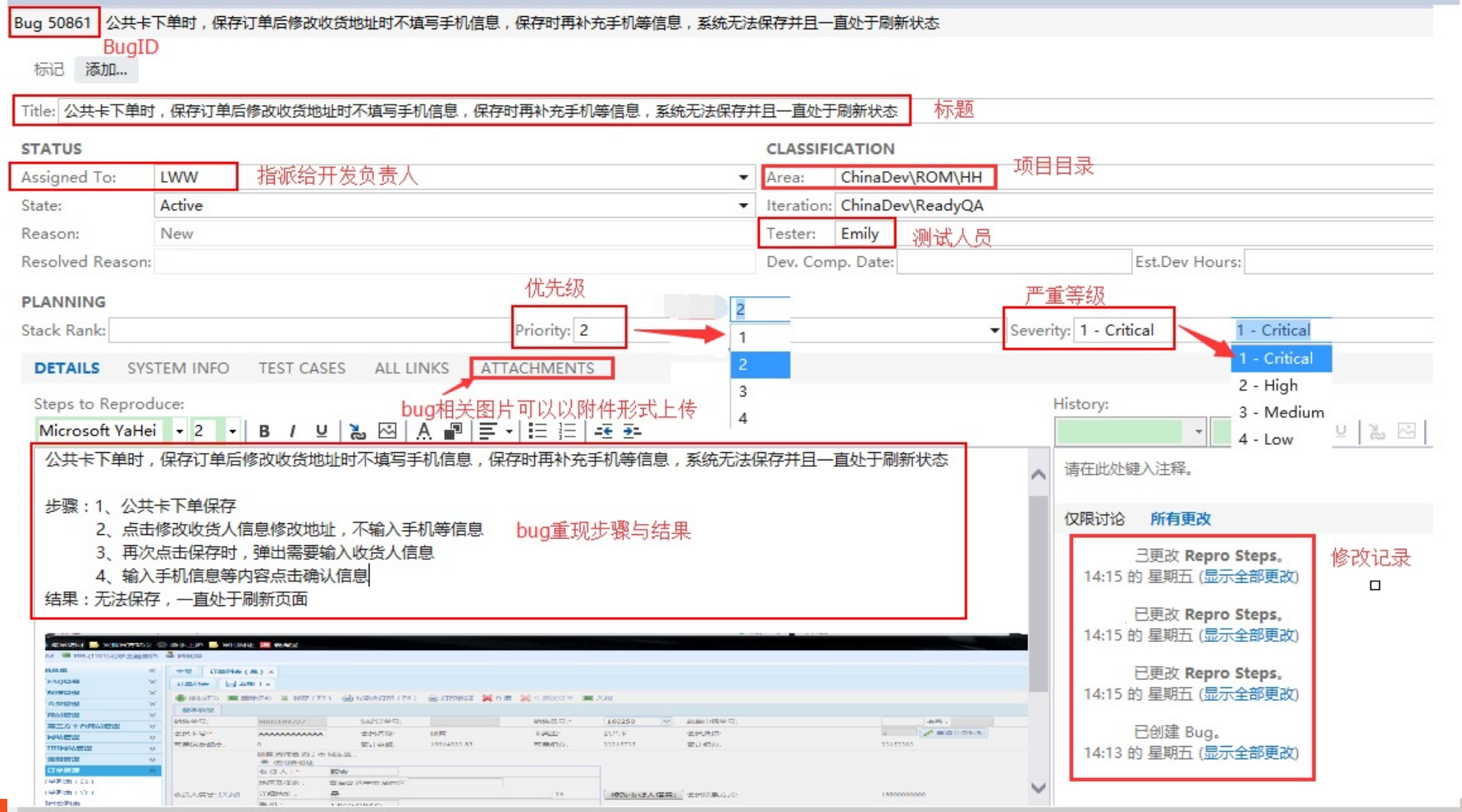
- Bug Reporting System
- Bug Tracking Software
- Issue Tracking Software
- Issue Management Software
- Defect Tracking System



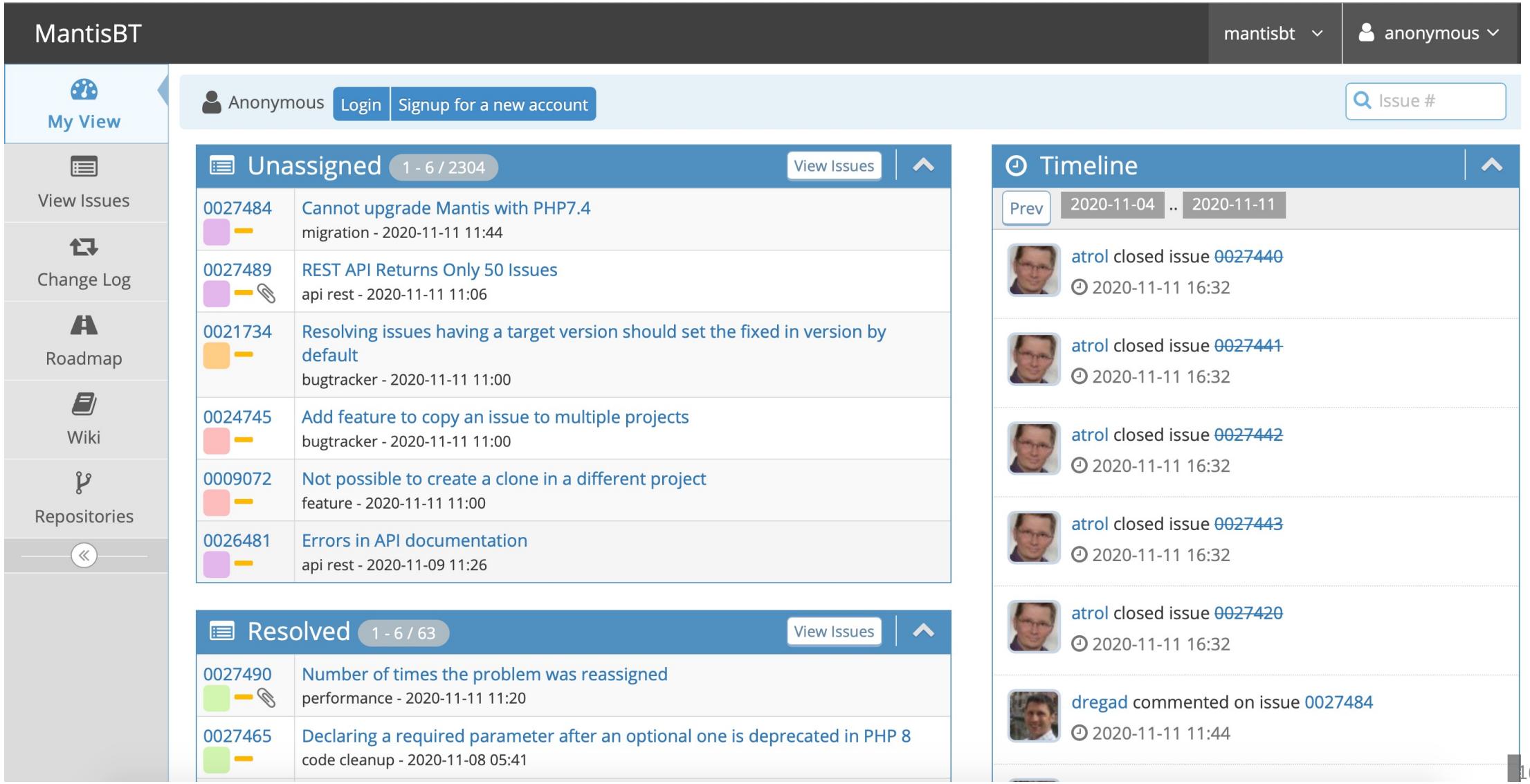
A bug reporting system is an application "*that keeps track of reported software bugs*". Therefore, a bug reporting software allows you to report, document, store, manage, assign, close & archive the reports.

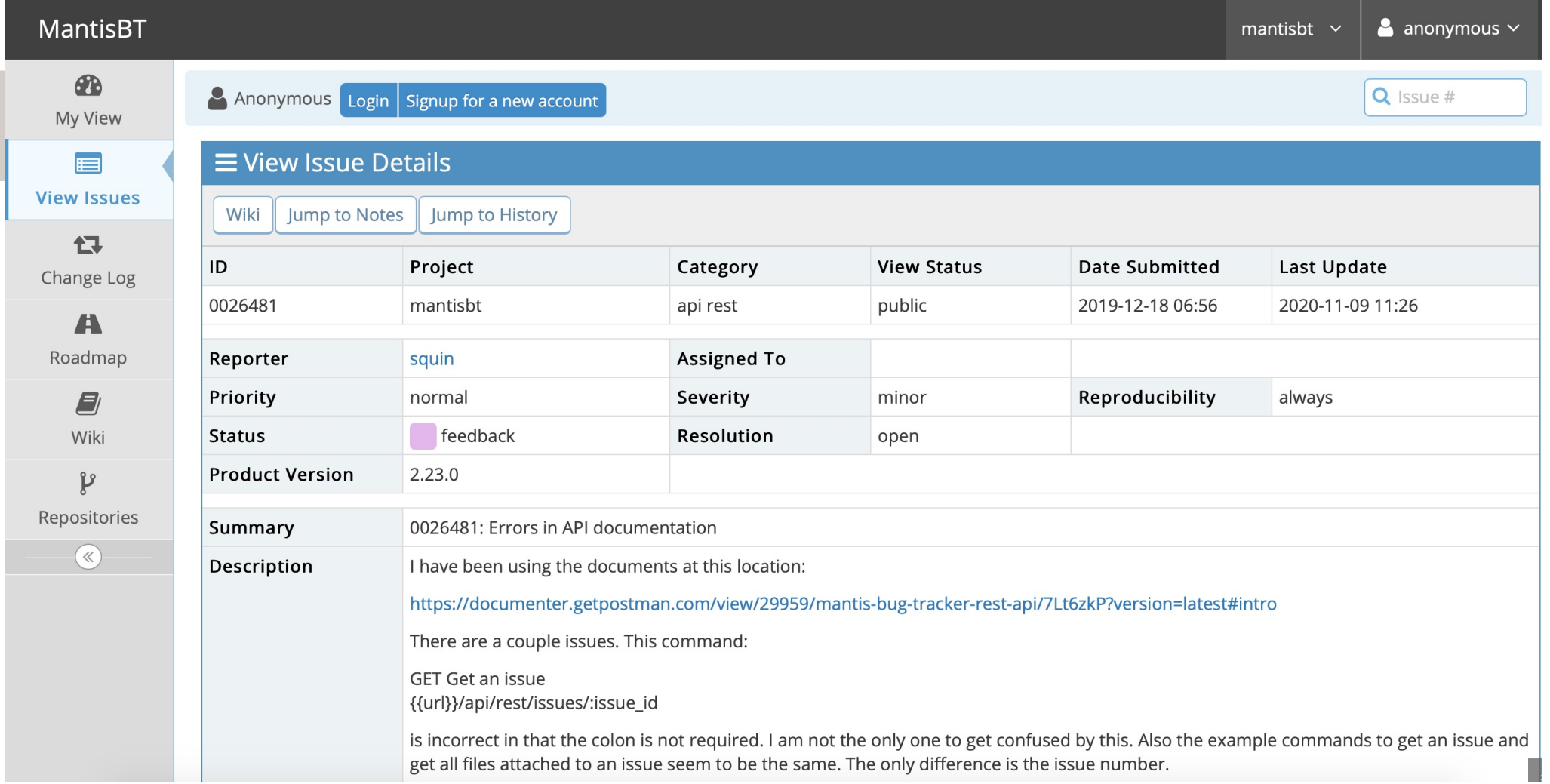
Bug reporting system

Such as: QC(Quality center)、禅道、Mantis、JIRA、TestLink、Bugzilla



Bug reporting system





Issue History

Date Modified	Username	Field	Change
2019-12-18 06:56	squin	New Issue	
2019-12-18 11:51	dregad	Status	new => feedback
2019-12-18 11:51	dregad	Note Added: 0063313	
2020-11-09 11:26	wutsdis	Note Added: 0064618	

3. Test Summary Report

- Test Summary Report is an important deliverable which is prepared at the end of a Testing project, or rather after Testing is completed.

- The prime objective of this document is to explain various details and activities about the Testing performed for the Project, to the respective stakeholders like Senior Management, Client, etc.

- After performing exhaustive testing, publishing the test results, metrics, best practices, lessons learned, conclusions on 'Go Live' etc. are extremely important to produce that as evidence for the Testing performed and the Testing conclusion.

What Test Summary Report Contains?

- **Application Overview**

  < Brief description of the application tested>

- **Types of testing performed**

  <Describe the various types of Testing performed for the Project. This will make sure the application is being tested properly through testing types agreed as per Test Strategy.>

- **Test Environment & Tools**

  <Provide details on Test Environment in which the Testing is carried out. Server, Database, Application URL, etc>

What Test Summary Report Contains?

➢ **Testing Scope**

1.In Scope
2.Out of Scope
3.Items not tested

<This section explains the functions/modules in scope & out of scope for testing; Any items which are not tested due to any constraints/dependencies/restrictions>

•**In-Scope:** Functional Testing for the following modules are in Scope of Testing
- Registration
- Booking
- Payment

•**Out of Scope:** Performance Testing was not done for this application.

•**Items not tested:** Verification of connectivity with the third party system 'Central repository system' was not tested, as the connectivity could not be established due to some technical limitations.

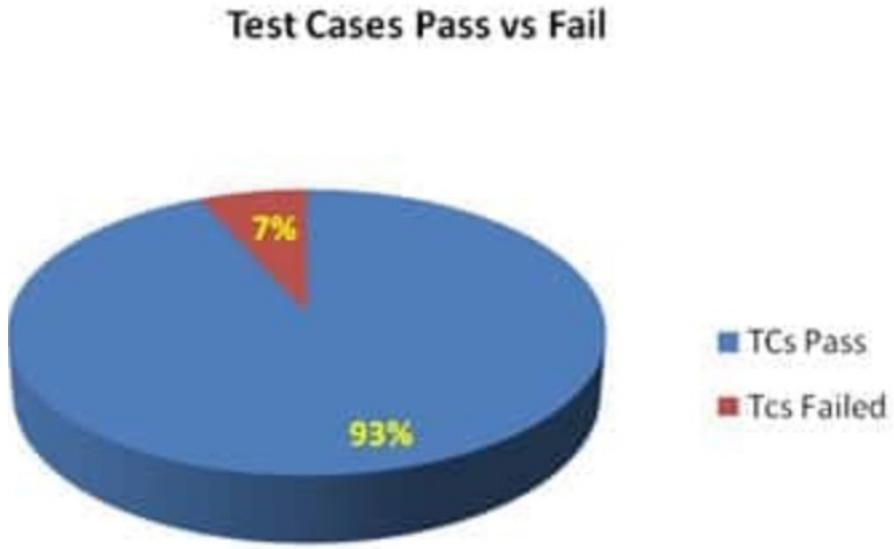
What Test Summary Report Contains?

➢ **Metrics**

<Metrics will help to understand the test execution results, the status of test cases & defects, etc. Required Metrics can be added as necessary.
Example: Defect Summary-Severity wise; Defect Distribution-Function/Module wise; Defect Ageing etc.. Charts/Graphs can be attached for better visual representation>

- **No. of test cases planned vs executed**
- **No. of test cases passed/failed**

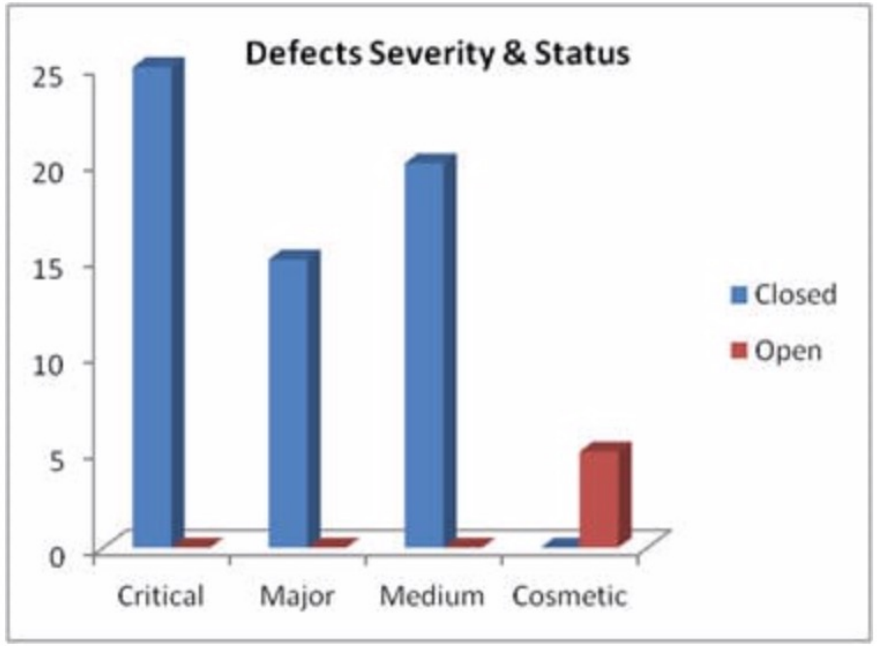
Test cases planned	Test cases executed	TCs Pass	Tcs Failed
80	75	70	5



What Test Summary Report Contains?

- **No of defects identified and their Status & Severity**

	Critical	Major	Medium	Cosmetic	Total
Closed	25	15	20	0	60
Open	0	0	0	5	5
					65



- **Defects distribution – module wise**

	Registration	Booking	Payment	Reports	Total
Critical	6	7	5	7	25
Major	4	5	2	4	15
Medium	6	8	2	4	20
Cosmetic	1	2	1	1	5
Total-->	17	22	10	16	65