



# Bugs Reporting

October 2017



# AGENDA

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- Bug Definition
- Bug Reporting Rules
- Bug Reporting Tips

# BUG DEFINITION

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What is bug or defect ?

# BUG DEFINITION

## Bug types

- Bugs in requirements
  - When requirement is incorrect, unambiguous, inconsistent or incomplete
  - When requirement contradict to business flow in case when it exists
- Functional bugs in application
  - Nonconformance to requirements
  - Something that does not correspond to valid Customer's expectations/common sense that are assumed but may be not described in product requirements.

# DEFECT LOCATION EXAMPLE

The screenshot shows the Booking.com homepage. At the top, there is a dark blue navigation bar with the logo 'B.com', currency symbols (€ and £), and buttons for 'List your property', 'New customer?', and 'Sign in'. Below this is a secondary navigation bar with icons for Accommodation, Restaurants, Rental cars, and Flights. A horizontal menu contains links for 'Find deals', 'Travel guides', 'How was your stay?', 'Holiday rentals', 'Booking.com for Business', and 'Booking.com for iPhone, iPad and Android'.

The main content area is split into two columns. The left column has a yellow background and features a search bar with the text 'Find deals for any season' and 'Discover boutique hotels, country homes, city flats and more'. Below this is a search input field with the placeholder text 'Destination, property name or address:'. The input field contains the text 'igakoauuotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu'. A dropdown menu below the input field shows a suggestion: 'Taumatawhakatangihangakoauuotamateapokaiwhenuakitanatahu, Poran...'. A small tooltip points to this suggestion with the text 'Taumatawhakatangihangakoauuotamateapokaiwhenuakitanatahu, Porangahau, Hawke's Bay, New Zealan'. Below the search bar, there is a '29-night stay' indicator, a question 'Are you travelling for work?' with 'Yes' and 'No' radio buttons, and a help icon. At the bottom of the search bar, there are dropdown menus for 'Rooms 1', 'Adults 2', and 'Children 0'.

The right column features a large image of Barcelona with the text 'Barcelona' and a Spanish flag. Below the image, it says 'Other travellers loved it here for: architecture, sightseeing, culture'. At the bottom of this section, there is a light blue box with the text 'Still interested in your previous searches for Barcelona?' and a 'View properties' button. Below this box, it shows '27 Jul - 25 Aug' and '1 room, 2 adults'.

# DEFECT LOCATION EXAMPLE

B.com

€



List your property

New customer?

Sign in

Accommodation Restaurants Rental cars Flights

Find deals Travel guides How was your stay? Holiday rentals Booking.com for Business Booking.com for iPhone, iPad and Android

## Find deals for any season

Discover boutique hotels, country homes, city flats and more

Destination, property name or address:

igakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu

Taumatawhakatangihangakoauauotamateapokaiwhenuakitanatahu, Poran...

powered by Google

29-night stay

Are you travelling for work?  Yes  No

Rooms 1 Adults 2 Children 0

## Barcelona

Other travellers loved it here for:  
**architecture, sightseeing, culture**

Taumatawhakatangihangakoauauotamateapokaiwhenuakitanatahu, Porangahau, Hawke's Bay, New Zealand

Still interested in your previous searches for Barcelona?

27 Jul - 25 Aug 1 room, 2 adults

View properties

# DEFECT LOCATION EXAMPLE

The screenshot shows a game's battle results screen. At the top, there are navigation icons for 'PERSONAL', 'TEAM', 'DETAILED', and 'AWARDS'. Below these are tabs for 'STATISTICS', 'EFFICIENCY', and 'CREDITS'. The 'CREDITS' tab is active, displaying a table of credit transactions. The table has two columns for credit amounts and a 'Total' row at the bottom. A defect is present in the URL for the 'ContributionIn' row.

	Premium	
Received	1 369	2 053
#battle_results:DetailsPage/CreditsExperiencePage/ContributionIn		0
#battle_results:DetailsPage/CreditsExperiencePage/ContributionOut		0
Auto-repair vehicle	-690	-690
Auto-resupply ammunition	-30	-30
Auto-resupply consumables	0	0
<b>Total</b>	649	1 330

# DEFECT LOCATION EXAMPLE

The screenshot shows a 'BATTLE RESULTS' screen with a navigation bar at the top containing icons for 'PERSONAL', 'TEAM', 'DETAILED', and 'AWARDS'. Below this is a sub-navigation bar with 'STATISTICS', 'EFFICIENCY', and 'CREDITS'. The 'CREDITS' section is active, displaying a table of credit transactions. A 'Premium' column header is highlighted with a red box. The table lists various credit events, with the 'Total' row at the bottom showing a final balance of 1,330 credits, also highlighted with a red box. Two rows in the table are highlighted with red boxes: one for a contribution in and another for a contribution out.

	Premium	
Received	1 369	2 053
#battle_results:DetailsPage/CreditsExperiencePage/ContributionIn		0
#battle_results:DetailsPage/CreditsExperiencePage/ContributionOut		0
Auto-repair vehicle	-690	-690
Auto-resupply ammunition	-30	-30
Auto-resupply consumables	0	0
<b>Total</b>	649	<b>1 330</b>



# BUG REPORT

Defect report is a technical document written to describe the symptoms of a bug to

- communicate the impact of a quality problem
- prioritize the bug for fixing
- help the programmer locate the underlying defect and fix it



# WHY DO WE NEED TO REPORT BUGS?

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- 1 Do not forget to fix and retest all found issues
- 2 Measure product quality
- 3 Define risky areas/configurations/testing types/etc.

# BUG REPORT PROVIDES INFORMATION TO

1

## Tester

- How to reproduce?
- Why is it a bug?
- Expected result

2

## Developer

- How to reproduce?
- Why is it a bug?
- What is expected result and why?

3

## Customer

- How bad is the bug?
- Affected area

# BUG REPORT OVERVIEW

- Bug report can contains sets of mandatory and optional fields
- What fields are mandatory and what are optional and filling rules are defined on each project
- Most bug tracking system allow to configure these fields and rules



# BUG REPORT: MANDATORY FIELDS

## Mandatory bug report fields:

- Summary
- Severity
- Priority
- Description
- Steps to Reproduce
- Actual and Expected Results
- Attachment

Summary\*

Priority  ?

Assignee

Description

Attachment

Update Cancel

# BUG REPORT: SUMMARY

Summary gives enough information to understand what the problem is and how you can reproduce it.

Good summary is built based on the following schema:

What - **Where** - **When**

## EXAMPLE OF A BAD SUMMARY:

It's impossible to save Concept

## EXAMPLE OF A GOOD SUMMARY:

It's impossible to save **Concept** with **long description** created via **HTML Editor**

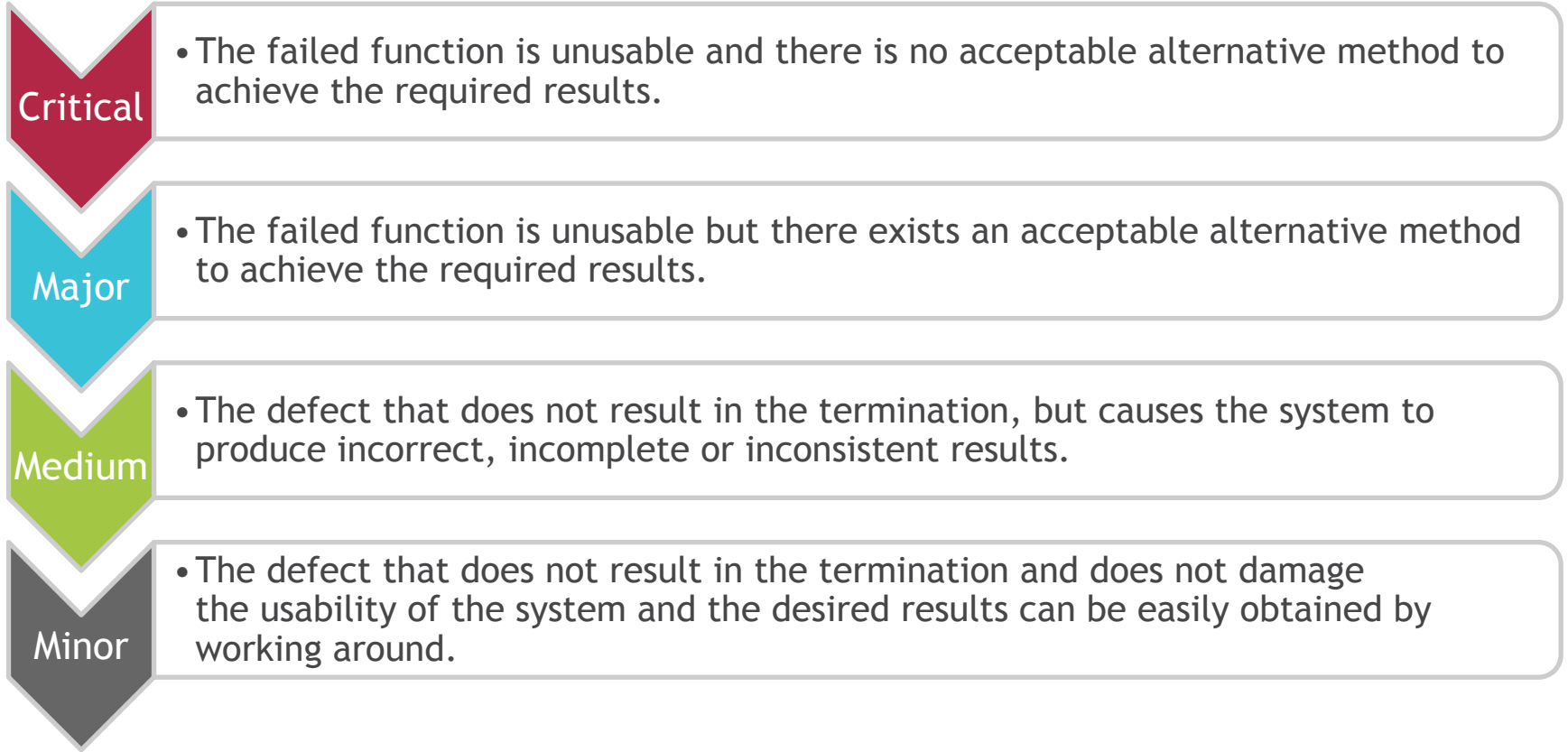
# BUG REPORT: SEVERITY & PRIORITY

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**Severity** defines the impact that a given defect has on the system, so how bad the defect is.

**Priority** is defined as the order in which a defect should be fixed in accordance to business value or other project/customer needs

# BUG REPORT: SEVERITY LEVELS





# BUG REPORT: PRIORITY LEVELS

## Critical

- should be resolved immediately

## High

- should be resolved as soon as possible in the normal course of development activity, before the software is released

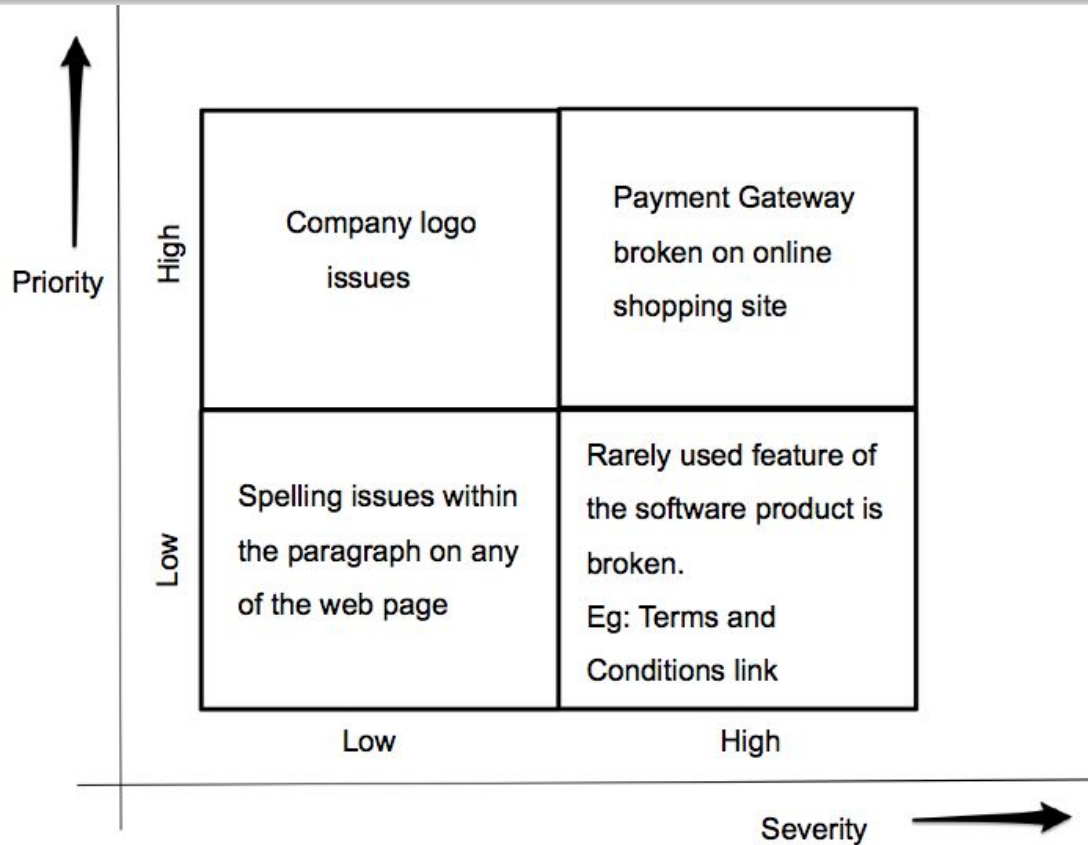
## Medium

- should be repaired after serious bugs have been fixed

## Low

- can be resolved in a future major system revision or not be resolved at all

# BUG REPORT: SEVERITY & PRIORITY EXAMPLES



# BUG REPORT: DESCRIPTION

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Description gives detailed and clear interpretation of a problem, explains why it is a bug, includes the following information:

- Description of application behavior (e.g. interpretation of test failures)
- Justifications of why this is a bug
- Any relevant links
- Interpretation of the specification
- Examples from other areas

Not copy of summary!

# BUG REPORT: STEPS TO REPRODUCE

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## General recommendations:

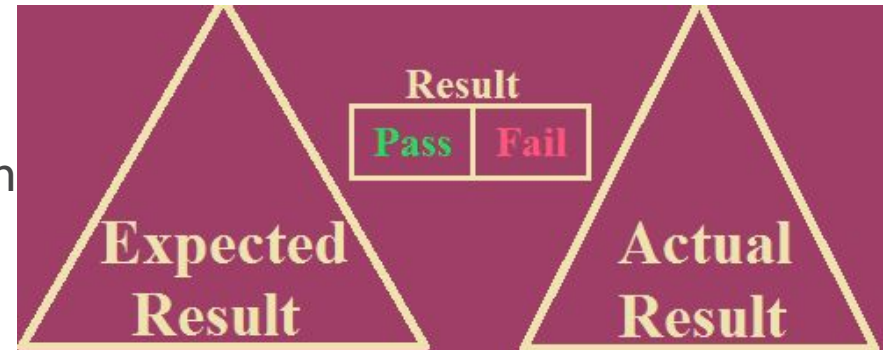
- Show the scenario how to recreate the bug on any system
- Check that steps provide clear instructions, so that others can consistently reproduce it
- Use the rule: new action = new step
- Include test data on which is reproduced
- Test your own instructions

# BUG REPORT: ACTUAL & EXPECTED RESULTS

The test results, including Expected Result and Actual Result, will show what's wrong.

**Actual Result** describes what actually happened, what currently happens when the bug is present.

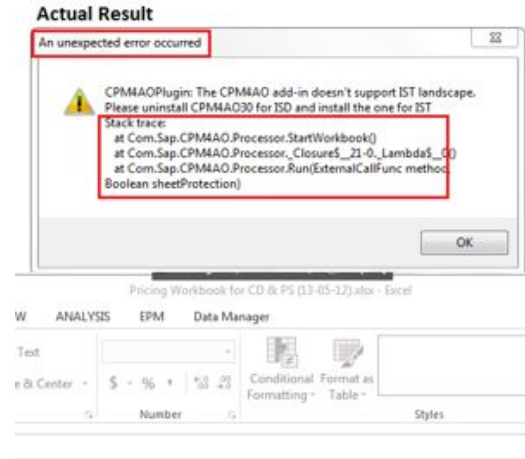
**Expected Result** describes what should happen if the bug was fixed.



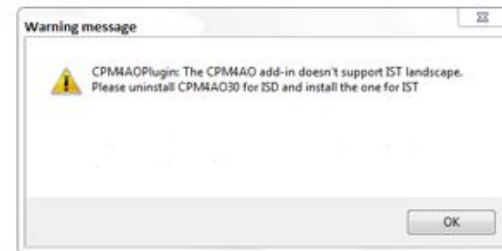
# BUG REPORT: ATTACHEMENT

Attachment can be like:

- Pictures (screenshots)
- Files (any kind of logs)
- DB query (to get test data);
- Documents
- Video (just in case of hard reproducible bug)



Expected result



# OPTIONAL BUG REPORT FIELDS

List of the most common and useful optional fields:

- Issue Type:
  - Regression issues/New Feature/Configuration/Integration/etc.
- Component:
  - Functional components/areas in application, e.g. payments, user login
- Environments:
  - QA, DEV, UAT, PROD
- Found Version
- Fix Version
- Labels
- ...

# BUG REPORT: A GOOD DEFFECT EXAMPLE

Summary	Special Location field doesn't become editable after selecting Company Code
Severity	Major
Priority	High
Steps to reproduce	<p>“Special Location” field is only available for editing after selecting appropriate “Company Code” and clicking “Refresh Rates &amp; Employee Data” button</p> <ol style="list-style-type: none"><li>1. Open Workbook that is not in read-only status</li><li>2. Create new resource</li><li>3. Type in resource's name</li><li>4. Select one of Resource Type, for example “Internal Resource”</li><li>5. Select appropriate Company Code, “0008” for our example</li></ol>
Expected Results	Special Location field becomes editable
Actual Results	Special Location field remains disable (see attachment-1) until “Refresh Rates & Employee Data” button is clicked (see attachment-2)



# BUG REPORT: A GOOD DEFFECT EXAMPLE



IT M-827

## Special Location field doesn't become editable after Company Code selecting

[Edit](#) [Comment](#) [Assign](#) [More ▾](#) [Reopen](#) [Blocked](#) [Workflow ▾](#)

### Details

Type:	<span>🚩 Bug</span>	Status:	<span>DONE</span> (View Workflow)
Priority:	<span>🚫 Very High</span>	Resolution:	Done
Component/s:	IT_Commercial Project	Version / Delivery:	RD2017.02
Labels:	<a href="#">AO.Plugin</a> <a href="#">VB.Net</a>		
Environment:	IST, ISD		
Epic Link:	<a href="#">Test Findings</a>		
Sprint:	Sprint27 (CW5-7)		
Rank:	0  5csrb:		

### Description

"Special Location" field is only available for editing after selecting appropriate "Company Code" and clicking "Refresh Rates & Employee Data" button.

#### Steps to reproduce:

1. Open Workbook that is not in read-only status.
2. Create new resource.
3. Type in resource's name.
3. Select Resource Type = "Internal Resource".
4. Select Company Code = "0008 (SAP AMERICA, INC.)".

#### Expected result:

Special Location field becomes editable.

#### Actual result:







Special Location field remains disabled (see attachment-1) until "Refresh Rates & Employee Data" button is clicked (see attachment-2).

# BUG REPORT: HINTS AND TIPS



# WHAT IS A BAD BUG REPORT?

Bad bug report is a bug report that duplicates already existing bugs

T	P	Key	Summary
		QP-3108	[Quality\Checksheet] Error on opening "Failure Mode" picker
		QP-1602	Checksheets: 'Failure Mode Picker List' picker opening causing the exception
		CR-1827	Checksheets - Failure Mode Picker Error

# WHAT IS A BAD BUG REPORT?

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Bad bug report is a bug report that contains just opinions or complaints

Examples:

- It doesn't work!
- My computer crashed!
- ...

# WHAT IS A BAD BUG REPORT?

Bad bug report is a bug report that doesn't clearly specify the problem

## Heat map view highlighting is not correct

### Description

1. log in
2. switch to Heat Map
3. hover over a customer (or different customers)

Actual result: highlighting is not correct

**Expected result:** highlighting must be correct

no any information about problem source anywhere

# WHAT IS A BAD BUG REPORT?

Bad bug report is a bug report that contains grammar or spelling mistakes, or written using not appropriate language

## Add Exception function not work

Environment: EI 11; Chrom, FireFox

**Description**

Add Exception function does not work.

**Preconditions:**

- Loading Exceptions Use setting should be checked.
- Error Type field should be filtered by 'Customer Part not Setup' or 'Customer Part/Rev not Setup' values.
- Search result appear

Steps:

1. Mark any record from search results table
2. Click **Add Exception** button
3. In pop-up window type any text in Note field
4. Click **OK** button

**Expected result:** Pop-up window is closed. Exception added.

**Actual result:** Pop-up window is not closed. Error message appear

# WHAT IS A BAD BUG REPORT?

Bad bug report is a bug report that contains several issues

**Exception!** Many UI issues on 1 page - can be reported in one bug report

## Inventory column incorrect behavior.

### Description

Issue 1  
Incorrect coloring when Inventory Display setting = 1  
Act res: picture 1  
Exp res: picture 2

Issue 2  
Incorrect column value in case when  
Inventory Display setting = 1  
and  
Units of Measure Select Display setting = FALSE  
Act res: picture 3  
Exp res: picture 4

Issue 3  
Text coloring should depend on Produced Display setting in case when Inventory Display setting >1.  
If Produced Display setting = FALSE:  
Act res: picture 5  
Exp res: picture 6

# BUG REPORT: PRACTICE

## Results found

 Comment

Agile Board

More ▾

### Details

Type:

Status:

OPEN

Priority:

🔴 Major

Resolution:

Unresolved

Affects Version/s:

None

Fix Version/s:

None

Component/s:

None

Labels:

None

Test steps:

1. log in
2. find some result

Expected result:

▾ auto-proposed result is displayed in the appeared list with results, no proposition to search in **Google** button available

Test Status:

Test run:

Folder:

Test requirement:

### Attachments




Drop files to attach, or [browse](#).



# BUG REPORT: A BAD DEFECT EXAMPLE

Results found - Unclear Summary

 Comment Agile Board More ▾

## Details

Type:		Status:	<b>OPEN</b>
Priority:	🔴 Major	Resolution:	Unresolved
Affects Version/s:	None	Fix Version/s:	None
Component/s:	None		
Labels:	None		
Test steps:	1. log in - no system name/address to log in 2. find some result		
Expected result:	✘ auto-proposed result is displayed in the appeared list with results, no proposition to search in Google button available - rush expected result		
Test Status:			
Test run:			
Folder:			
Test requirement:			

No actual result

## Attachments



Drop files to attach, or [browse](#).

No any attached examples

# BUG REPORT: PRACTICE

## Reaction to a space searching

Comment

Agile Board

More ▾

### Details

Type:

Status:

OPEN

Priority:

🔴 Major

Resolution:

Unresolved

Affects Version/s:

None

Fix Version/s:

None

Component/s:

None

Labels:

None

Test steps:

- 1. log in
- 2. press a space button on the keyboard (no searching starts)
- 3. press Enter

case b)

- 1. press a space button on the keyboard (no searching starts)
- 2. enter any correct name

case c)

- 1. press a space button on the keyboard (no searching starts)
- 2. enter any incorrect name

Expected result:

- system doesnt start searching on spaces for casea a and b
- case c - no results found, no 'Try search in Google' button available, cursor is in the field

# BUG REPORT: A BAD DEFECT EXAMPLE

## Reaction to a space searching - Unclear Summary

Comment

Agile Board

More ▾

### Details

Type:

Priority:

🔺 Major

Affects Version/s:

None

Component/s:

None

Labels:

None

Test steps:

- 1. log in
- 2. press a space button on the keyboard (no searching starts)
- 3. press Enter

case b)

- 1. press a space button on the keyboard (no searching starts)
- 2. enter any correct name

case c)

- 1. press a space button on the keyboard (no searching starts)
- 2. enter any incorrect name

Expected result:

- system doesnt start searching on spaces for case a and b
- case c - no results found, no 'Try search in Google' button available, cursor is in the field

Status:

OPEN

Resolution:

Unresolved

Fix Version/s:

None

- is this Case A?

- both expected and actual results are in Expected result section

# BUG REPORT: A GOOD DEFECT EXAMPLE



test / TEST-1

Incomplete tooltip data is displayed on b.com page if tooltip contains more then 122 symbols

- Edit
- Comment
- Assign
- To Do
- In Progress
- Done
- Admin ▾

## Details

Type:	🔴 Bug	Status:	<b>TO DO</b> (View workflow)
Priority:	↓ Low	Resolution:	Unresolved
Labels:	None		
Environment:	IE11, Chrome, FF		

## Description

B.com tooltip contains 'Location name, Location' data. Tooltip for the longest official placename in the world is displayed incompletely.

### STR:

1. Open <https://www.b.com> page
2. Set 'Destination, property name of address' = 'Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu' field data
3. Put mouse pointer over the proposed in ddl value
4. Observe tooltip data

**Actual result:** 'Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu, Porangahau, Hawke's Bay, New Zealan' is displayed

**Expected result:** 'Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu, Porangahau, Hawke's Bay, New Zealand' tooltip data should be displayed



# BUG REPORT: A GOOD DEFECT EXAMPLE



test / TEST-2

## Bullet marked 'powered by Google' value is displayed if 'Destination' field data is from Google Places API Web Service

- Edit
- Comment
- Assign
- To Do
- In Progress
- Done
- Admin ▾

### Details

Type:	Bug	Status:	<b>TO DO</b> (View workflow)
Priority:	↓ Low	Resolution:	Unresolved
Labels:	None		
Environment:	IE11, Chrome, FF		

### Description

B.com uses Google Places API Web Service. And if the service returns data then 'powered by Google' value is always marked by bullet.

#### STR:

1. Open <https://www.b.com> page
2. Set 'Destination, property name of address' = 'Taumatawhakatangihangakoauuotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu' field data
3. Observe drop-down list data

**Actual result:** Bullet mark is displayed for 'powered by Google' value (please see 'Bullet.png' for more details)

**Expected result:** no any marks/signs are displayed



# BUG VERIFICATION

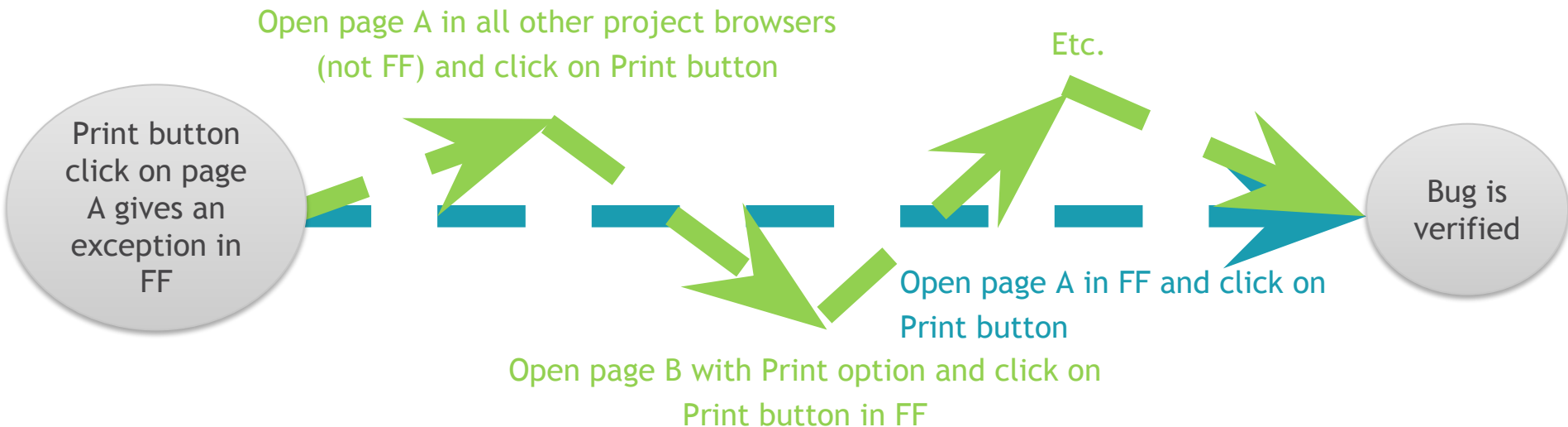
Bug verification based on around testing

Bug verification based on STR

Bug is fixed

Bug is verified

# BUG VERIFICATION EXAMPLE



# BUG VERIFICATION: GENERAL RECOMMENDATIONS

The following steps could assist you with bug verification:

- Verify that you test appropriate build with bug fix
- Insure that the bug is not reproduced on each environments that specified in bug report
- Set a comment about data that was used for bug verification
- Make screenshot that shows that bug is fixed
- Set bug to appropriate status



