Department of
Computer Science and Engineering

Title:Title: Bugzilla Bug- Tracking Tools Part II.

Software Testing & Quality Assurance Lab
CSE 434

Green University of Bangladesh

1 Objective(s)

- To Understand a Bug.

- To achieve the ability to edit, report, and search bugs.

2 Understanding a Bug

The main feature or the heart of Bugzilla is the page that displays details of a bug. Note that the labels for most fields are hyperlinks; clicking them will take to context-sensitive help of that particular field. Fields

marked * may not be present on every installation of Bugzilla.

- Summary: It is a one-sentence summary of the problem, which is displayed in the header next to the bug number. It is similar to the title of the bug that gives the user an overview of the bug.

- Status (and Resolution): These define status of the bug – It starts with even before being confirmed as a bug, then being fixed and the fix being confirmed by Quality Assurance. The different possible values for Status and Resolution on installation should be documented in the context-sensitive help for those items. Status supports Unconfirmed, Confirmed, Fixed, In Process, Resolved, Rejected, etc.

- Alias: An Alias is a unique short text name for the bug, which can be used instead of the bug number. It provides the unique identifiers and help to find the bug in case of Bug ID is not handy. It can be useful while searching for a bug.

- Product and Component: Bugs are divided by Products and Components. A Product may have one or more Components in it. It helps to categorize the bugs and helps in segregating them as well.

- Version: The "Version" field usually contains the numbers or names of the released versions of the product. It is used to indicate the version(s) affected by the bug report.

- Hardware (Platform and OS): These indicate the tested environment or the operating system, where the bug was found. It also gives out the details of the hardware like RAM, Hard Disk Size, Processor, etc.

- Importance (Priority and Severity): The Priority field is used to prioritize bugs. It can be updated by the assignee, business people or someone else from stakeholders with the authority to change. It is a good idea not to change this field on other bugs, which are not raised by a person. The default values are P1 to P5.

- Severity Field: The Severity field indicates how severe the problem is—from blocker ("application unusable") to trivial ("minor cosmetic issue"). User can also use this field to indicate whether a bug is an enhancement or future request. The common supportive severity statuses are – Blocker, Critical, Major, Normal, Minor, Trivial and enhancement.

- Assigned To: A Bug is assigned to a person who is responsible to fix the bug or can check the credibility of the bug based on the business requirement.

- QA Contact: The person responsible for quality assurance on this bug. It may be the reporter of the bug to provide more details if required or can be contacted for retest the defect once it is fixed.
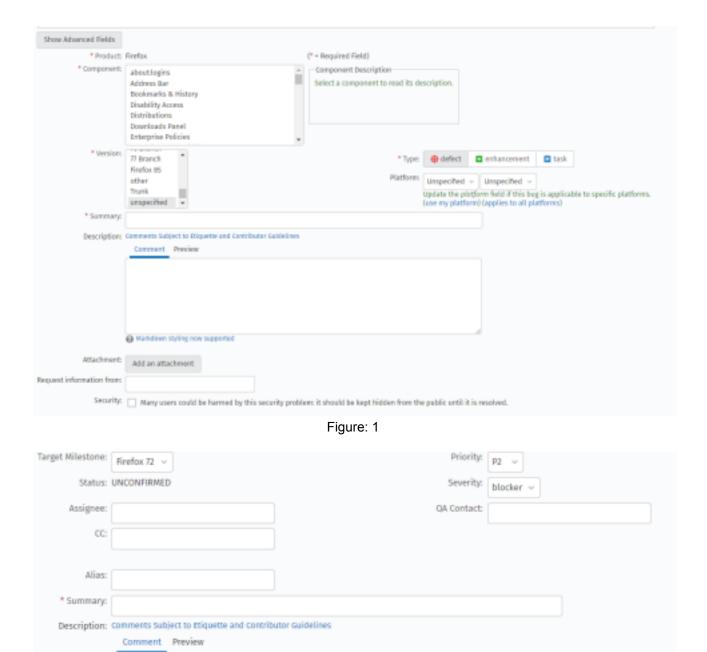
- URL: A URL associated with the bug, if any.

Figure: 1

Figure: 2

3 Edit, Report, and Search Bugs

- Bugzilla has a provision of editing an existing bug. A user can edit a bug during the life-cycle of any bug. Most of the fields have an edit hyperlink. It depends on administrator of Bugzilla to provide edit options with different fields.

  In the following screenshot, there are many fields that have an edit hyperlink such as – Status, Alias, Assignee, QA Contact, 'Depends on', Large Text box, Flags, CC list, etc.
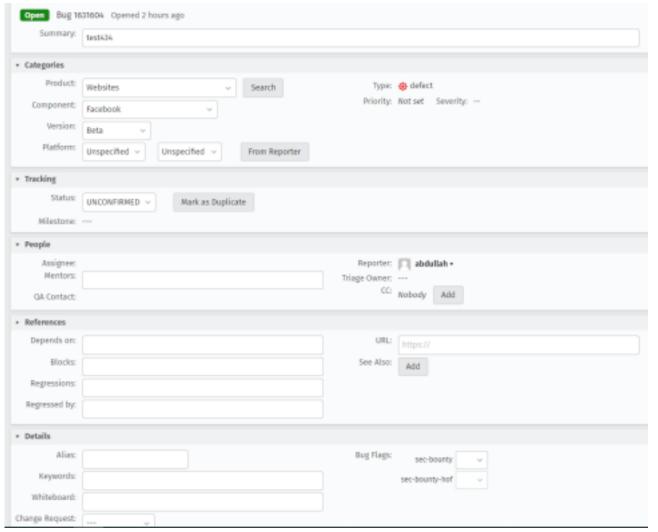
Figure: 3

- A report helps to analyse the current state of the bug. The purpose of a Defect Report is to see the behaviour, communication, analysis and the current stage of a defect at any stage of the defect life-cycle. Defect reports are even useful after closing the defect and analysis the product and development quality.

- To search for a specific bug that is already reported in bugzilla we can use the search option. There is another need for searching for a bug to verify the bug we want to report is already exists or not. There are four different types of search in Bugzilla.

  1. Simple Search: The Simple Search feature is useful in finding a specific bug. It works like the web search engines such as Google, Bing, Yahoo, etc. The user needs to enter some keywords and then search.

  2. Quick search: The Quick Search feature uses Meta characters to indicate what is to be searched. For example, typing bug|login into Quick Search would search for "bug" or "login" in the summary and whiteboard of a bug. The user can also use it to go directly to a bug by entering its number or its alias.

  3. Advance search: The Advanced Search page displays a list of all the bugs, which are filtered exactly with different criteria that have been loaded by the users.

     This Advanced Search feature selects different possible values for all of the fields in a bug. For some fields, multiple values can be selected. In these cases, Bugzilla returns bugs where the content of the field matches with any one of the selected values. If none is selected, then the field

can take any of values. Multiple values selection for one field is based on the "OR" functionality. If either one or any other value is matched among the user selection, the bug will be displayed.

4. Custom search: Custom Search is an extended feature of the Advanced Search. It works on the principle of – "Did not find what you are looking for above? I.e. in advanced search". This area allows words like AND, OR, and other more complex searches.

Navigation of custom search is as follows: Search → Advanced Search → Go Down and click on Custom Search as depicted in the following screenshot.
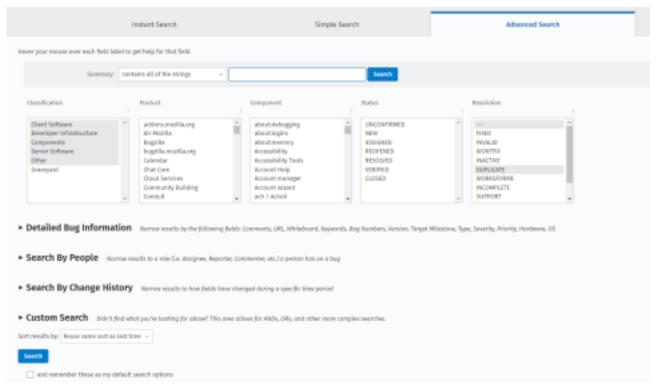

Figure: 4

4 Lab Task (Please implement yourself and show the output to the instructor)

1. Create a new bug with it's Priority and Severity .

2. Edit a existing bug.

5 Lab Exercise (Submit as a report)

1. Create a new bug for 'DevTools' with it's Priority and Severity .

2. Edit a existing bug for 'DevTools'.

6 Policy

Copying from internet, classmate, seniors, or from any other source is strongly prohibited. 100% marks will be *deducted* if any such copying is detected.

7 Resources

https://www.tutorialspoint.com/bugzilla/