Mid Semester Assignment, Course: - Software Verification and Validation

Deadline: - Mentioned on SIC Marks: - 30

Program: - BS (CS), BS-SE Dated: 13 April 2020

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Class and Section: 9th "A"

A. Choose any Testing tool from the list, and write downs its

- a) pros/cons
- b) Functionality
- c) Supporting Languages
- d) Supporting Tests
- e) Write a short(faulty) code, Test using this tool, and show the bugs in the code.

Q1:- Bugzilla?

Ans:-Bugzilla:-

Bugzilla is a "Defect Tracking System" or "Bug-Tracking System". Defect Tracking Systems allow individual or groups of developers to keep track of outstanding bugs in their product effectively.

Bugzilla is an Open Source Tool.

It is written in Perl and Uses MySQL database.

What does Bugzilla do?

- ✓ Track bugs and code changes
- ✓ Communicate with teammates
- ✓ Submit and review patches
- ✓ Manage quality assurance (QA

What is Bugzilla used for?

Bugzilla is an open-source issue/bug tracking system that allows developers to keep track of outstanding problems with their product. It is written in Perl and **uses** MYSQL database.

What is Bugzilla software testing tool?

Bugzilla is

a defect/bug tracking **tool**. Defect tracking systems allow developers and **testers** to track all the outstanding defects. **Bugzilla** can be linked to other **testing tools** like JIRA, QC or ALM, etc. **Bugzilla** is developed in Perl and runs on MYSQL server.

Who Use Bugzilla?

- Netscape/AOL
- Mozilla.org
- NASA
- Rock Linux
- Etc.

Part (a)

Advantages:-

- Whenever a bug is logged or its status is changed then an email notification is triggered to the concerned persons without any delay.
- Its interface is very easy to understand and work on instead of having any extra technical knowledge.
- It has a good documentation part where can filter out all bugs as per its status. And the report is very beautiful and very easily readable.
- It is an open source and free to use. SO great to have without purchasing any license.

Disadvantages:-

There should be some sort of association of the multiple affected test cases from

the bug which I cannot see.

There should be a place for a regression test suite in Bugzilla so that any bug found

after every regression suite execution can be termed as regression testing failure

result.

Documentation is limited to Bugs instead it should more of project-focused and

display the health of a project with the bugs being found or resolved.

It cannot be part of Agile methodologies as no sprint association can happen.

Part(b)

Functionality:-

Bugzilla is powerful and it has advanced searching capabilities. Bugzilla supports user

configurable email notifications whenever the bug status changes. Bugzilla displays the

complete bug change history. Bugzilla provides inter bug dependency track and graphic

representation.

Part(c)

Supporting Languages:-

Currently supported database systems are MySQL, PostgreSQL, Oracle, and SQLite. Bugzilla is

usually installed on Linux using the Apache HTTP Server, but any web server that supports CGI

such as Lighttpd, Hiawatha, Cherokee can be used.

Languages used: Tcl, Perl

Part (d)

Supporting Tests:-

To install and run Bugzilla on your server, the core requirement is to have Perl installed. This

means that Bugzilla can be installed on any platform where Perl can be installed, including

Windows, Linux, and Mac OS X. Linux is highly recommended and is our 1st-class citizen

operating system.

Part(e)

Write a short(faulty) code, Test using this tool, and show the bugs in the code.

Bug is created ID# 26320 is assigned to our Bug. You can also add additional information to the assigned bug like URL, keywords, whiteboard, tags, etc. This extra-information is helpful to give more detail about the Bug you have created.

- 1. Large text box
- 2. URL
- 3. Whiteboard
- 4. Keywords
- 5. Tags
- 6. Depends on
- 7. Blocks
- 8. Attachments

