Online Bug Tracking System on the Web

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Abstract

Online Bug Tracking System on the Web is a web-based code bug tracking system which runs on the web portal. It is a open source package which is written in the PHP scripting language and it works with the pre-requisites MySQL Database, Microsoft SQL Database and PostgreSQL databases and the webserver. It can be installed on the different operating system such as Windows and Linux. Almost all the web browsers will be able to work as a client for tracking system.

The Bug Tracking system generates the quick links to the auto generated individual searches such as like open issues, various Milestone to do-list, Most non-voted issues and the Project wish list for all the different projects in a tracking system. These all the quick searches can also be easily accessed from the different Issues in the system and whenever users or developers in the project space of the bug tracking system. It is the intelligent search that lets you to specify the number of every code debugged in seconds for finding the most recent issues in real-time.
The bug tracking system can easily debug the project codes in online user interface on the web. It is open source and easier for developers to work on it.

1. Introduction

All the various projects in the Online Bug Tracking System have their own separate spaces on the bug issue tracking portal, where all the issues, wikis, multiple files, etc. are kept in a space. Users can easily move between the various project spaces as well as the project space in various sections such as like jumping between current project wiki to another project issues. All the projects can have their own and customized statistics as specified by the developers, the different roadmap, multiple overviews and the all team pages with the relevant and clear information for the customized and the elected projects Most of the project code information is automatically generated on the bug tracking portal and it keeps the users project pages up to the date. GeSHi is also the referred code sample parser for the bug project, which also gives the information of builtin colored syntax which is highlighting the various languages, including the Java language, PHP language, C++ language, Python language, JavaScript language, HTML language and much more. All the custom line numbering and the line highlighting will lets users and developers to further improve the various code samples in the projects. All changes to the various articles can be tracked and the history view of the code and it also lets you to look at the specific revision in any point of the time. Revisions can be compared from the recent history and to restore on demand. With the vcs hooks bug tracking system will automatically update the issues based on different commit messages generated on the portal. It is the excellent issue detection algorithm and it is used in wiki portals.

With the help of the agile development techniques developers and users need an agile issue tracker to manage the bugs in the code. Online bug tracking system keeps developers and users on top of the team, the project back log system, the roadmap process and the issues which has the functionality tailored in keeping the agile teams as agile in the online bug tracking system.

2. The General Concepts

The standalone event system in the online bug tracking system uses the concept of the signals techniques and the hooked standalone events to drive the dynamic actions in a bug tracking parser. The Functions or the plugin methods can also be hooked during the runtime of the bug tracking system to get the actions of the defined events that can be signalled at the part of any point to initiate the execution of the hooked functions and the events are defined at the runtime by the name attribute and the event type attribute.

Depending on the different event types, parameters, signalling parameters and the return values of hooked functions and activities will be handled in the different ways to make the different types of the common communication which is simplified by the developer.

Table: 1 Requirements & Activity

Operating System	: Any Desktop OS
Server	: Apache Server
Database	: MySQL or MSQL or PostgreSQL
Environment	: Local or Remote host
Server Add-On	: Fast CGI
Language	: PHP or Html
Web Browser	: Supports all Web Browsers
Connectivity	: Minimum 128Kbps
Main Activity	: Code Debugging and Bug Tracking in online web site

3. Bug Tracking Functionalities

3.1 Project Bug Tracking dashboard

- With the help of the project dashboard, users and developers can compose the overview of current project and the bits which matters most. Users and developers can have the 30 different views to specify the choose from the dashboard of the administrator page and it also integrates with the custom searches and the different data types to produce the accurate and the updated statistics on the page.

3.2 Bug Tracking Timeline

- The automatic bug tracking timeline has the feature to give a complete overview of the users and developer's project recent history to the way back to beginning of the work. The Code checking of the bug issue comments, the descriptions and the changes to all show up as the users and developers are being committed, so that developers and users can always be informed in the tracking system.

3.3 Issue Tracking & Reporting

- Reporting a new issue in the online bug tracking system on the web is a simple and the uncomplicated process in its term. New issue can be reported by the developer and the user at any point of time on the page by Filing a report with no wizards in the system and there is no complicated to the technical jargon and has no hassle in tracking and reporting.

- The Online bug tracking system on the web doesn't clutter the issue pages in the system and it puts the information that developers and users need the right for Customizing the way of the issues that view ages the look with the fields which are presented and which is editable in the configuration of bug tracking system to keep the developers in the track.

- The bug tracking system is customizable in terms of issue types which ships with the standard set of the issue types which is ranging from the bug reports by the feature requests of the support tickets to the developer and the user stories in the project.

- The developers and users can find that you are missing a specific type of issue and just can add it via the configuration manager in the tracking system and users can set it up according to the user needs it.

- Users can add as many number of the custom fields to the user's issue types in the section and the issues can be edited with a custom text input

fields in the code box, can edit multiple choice of dropdowns, can also use the custom status fields in the system and can do many more.

• Users can add the custom fields to the issue type with different schemes in the system and use them in the searches of bugs and also can integrate them into the user and developer workflows in bug tracking system.

3.4 Interactive Issue Track Planning

• The Online bug tracking management system on the web is an interactive planning mode that lets users and administrators to manage new and the existing milestones of the project, create the issues of the project, features of the project, stories of the project.

• The various tasks on fly to estimate them, update them in pages, to assign them and to do much more. The interactive project planning mode for bug tracking is also integrates with the update of the bulk functionality in the system.

• It don't spend the time to navigate back and the forth for spending it in the planning mode of the admin system.

• The interactive bug track planning also lets users and developers to colour the issues as user want to do, that gives you with an easy overview of the different perspectives of issue categories in interactive mode.

• With the help of powerful workflow in the transition views of which it integrates with specified and defined project workflows, the issues will be able to do transition as you expected even when the other unexpected happens in the tracking system.

• It enforce the specific properties of the system to the specific values of the user's issues during the certain stages of tasks in the regular workflow and it keeps in the under control method.

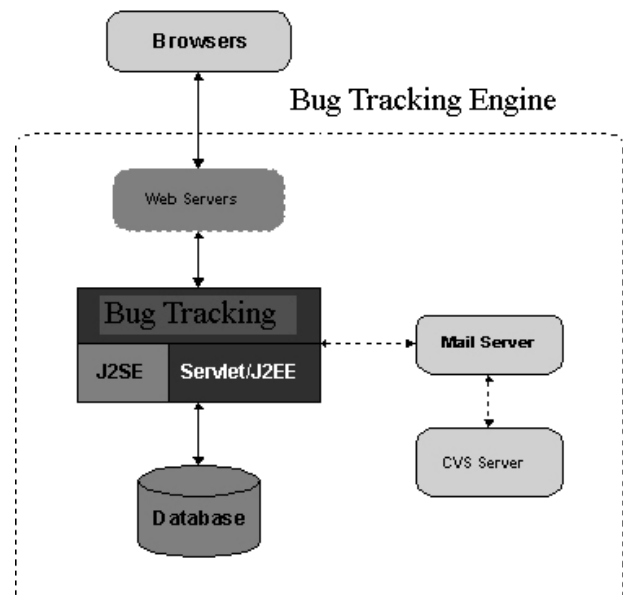## 4. Workflow of Bug Tracking & Bug Tracking Engine Architecture

Figure: 1 Bug Tracking Workflow & Bug Tracking Engine

5. Permission and Role Management

The online bug tracking system fully supports the operations like read - write - delete permissions in the system and the permissions can also be the set on a per namespace basis in tracking system and this also makes it fast and easy to set up the multiple teams and has the control over the permissions and roles.

• **Code at the Centre Stage**

It's all like the current code that developers write. The online bug tracking system, will automatically create the updated file lists in the issue that commit the comments and links to the different and the previous revisions from the current commits in the system. The commits also shows up the current project's timeline in the project admin dashboard to make sure that users never miss the critical kb fix.

- **Triaging - User Pain Method**

It is more even and more agile with the method called user-pain triaging method. User pain also support the complete built in system and the activity of showing the calculated and the real-time user for user pain method to score the issues of search results. It gets the user's daily user pain method results with built-in method of user pain search template to support the custom user pain thresholds in the current method.

6. Team and Client Management

All the developer teams and all the user clients have their custom dashboards, the overview of all the current projects, project issues and the project members who are associated with the teams or clients or users. It's a perfect starting point of the great resource for user and developer teams.

Developer's teams, users and clients can be associated with the current projects. To assign them with the multiple roles such as the Project Developer, Project manager and the project Tester to make the custom roles either based on the project-by-project basis for the entire system in bug tracking module. The multiple roles are linked with the permissions to keep the track with every individual's privileges.

The online bug tracking management system supports the complete project hierarchy with including the editions, the releases, the components as well as the parent, the child and the subprojects in the system. Access control features will let the developers and users to define that who can see and what parts of code can be viewed in the project.

7. Conclusion

Online Bug Tracking System on the Web is based on the big tracking management system. This is a open source web application which runs on the standalone Linux web servers which is written in PHP Programming Language. It can be deployed on any hosting environment. The bug tracking system is a web portal that runs the compilation of the source in a text area field of website's page box to detect the bugs detected in the system and it shows and highlights the bugs in the page box

window to process the debugging, this is also known as issue tracking system, It generates the reports of users activity of their projects and developers activity of the current project with recent history of the bugs which is found in the system, it's an excellent web tool which runs on web hosting environment with powerful bug detection system. It's an immediate code detection tool for tracking the bugs.

We here by conclude that Online Bug Tracking System tool on the web is specially designed for the developers and it is the easier and fastest way to track and detect the bugs in the project codes which is written in any language such as C, C++, JAVA, PHP etc.
This tool is useful for:
1) Developers
2) Students

8. References

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