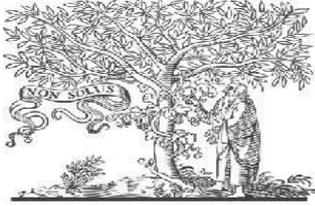


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Title: **PLANNING ERROR REPORTS ON RELATED FILES USING FEATURE EVALUATION SCHEME**

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PLANNING ERROR REPORTS ON RELATED FILES USING FEATURE EVALUATION SCHEME

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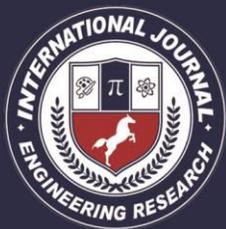
Abstract: When a new report is received, developers usually need to perform a review to re-create bug and find the code. That's why, there is a process that's causing trouble and time. A source of submitting all resource files that is likely to be possible. The reason for the bug consists that developers will help reduce their search and improve productivity. This paper has introduced one. The approach of adaptive rating that takes the knowledge of the project through the active costs of the code, API specifications. Library components, bug fixing history, code change history, and file dependence graph. Ranked a bug report each file's score is calculated as a combination of features of a row of features, where weights are automatically trained. Previously resolved bug reports using more than learning techniques. We will review the rating system on a six-scale open source Java Using the fixed version before the project for the projects for each report. Experienced results show that learning classification to remove art modes of three recent states. Specifically, our methods make accurate recommendations at the top Ten-level source files have been rated for more than 70% bug reports in the National Eclipse Platform and Tomcat projects.

Keywords: Fine Grained Bench Mark, Bug Report, Feature Evaluation.

I. INTRODUCTION

A software Bug or Error coding error that may occur. Due to unorganized or unexpected behavior. Software component [1]. Unusual discovery. Software project behavior, a developer or a user will do. Report it in a document, a bug report or report released. A bug report provides information that can help fixing a bug, with the overall goal of improving software quality. Big reports can be opened during a large number of reports. Life of a software product development life. For example, the clips ready were 3,389 bug reports only platform products in 2013. In the software team, bug Reports are widely used by both managers and developers in his daily

development process. A developer who has reported a problem is usually needed [3] and code to recreate extraordinary behavior. Reviews to find the reason. However, diversity and the exceptional quality of bug reports can do this nontrivial. The essential information is often disappeared a bug report. Bacchelli and Bird surveyed 165 managers and 873 programmers, and its discovery. Error requires advanced understanding of the code. Integration with relevant source code files. In the survey, 798 respondents replied that it takes time to take care of it. Files. While there is a number of source files in the project usually the number of large, bug files contained. Usually very small. So, we believe that automatically. The source files were ranked in respect of them



Big report may find a high speed compression bug Probably by limiting the search for small numbers Unread files If a bug report is configured as a question and source Software store code files are viewed as a combination Documents, then finding source files It can be sampled as if it is related to a single bug report Standard work in Information Retrieval (IR) [4]. Thus, we to present its perspective as a rating issue, in which Source files (documents) are rated in relation to their compatibility in a given bug report (question). In this context, compatibility it is likely to have a special source file Bug report contained in the bug report. Classification is described as a weight loss Features where the features trust knowledge Specific for software engineering domain to measure Related relations between Big Report and Source code file Although a bug report can share technical token Usually it's important to have files related to it Negative disorder employee between natural language Big report is used in and programming language Code. Classification methods that are based on simple leaks matchingscore has a partial mental part Lexicalgap diseases between natural language statements In Big Reports and Technical Terms in the Software System. Our This system includes features that feed relevant leaks From space using project specific API documents Apply to natural language terms in a Big Report with programming Language in code other than that, methods and the features are designed to exploit method level measures of relevance for a bug report. It has been previously observed that software process metrics (e.g., change history) are more

important than code metrics (e.g., size of codes) in detecting defects. Consequently, we use the change history of source code as a strong signal for linking fault-prone files with bug reports. Another useful domain specific observation is that a buggy source file may cause more than one abnormal behavior, and therefore may be responsible for similar bug reports. Source code may contain a number of modes which can only be a small number due to a bug. Similarly, the source code is presented artificially.

II. LITERATURE WORK

It's already See that software process metrics (for example, change History) is more important than code matrix (for example, size Codes) detecting defects [5]. As a result, we use it Change source code history as a strong signal to connect Bad files with bug reports. Another useful domain the specific observation is that a small vehicle may be due to a source file multiple unusual behavior, and therefore may be Responsive for similar bug reports. If we equate a bug report One source code file by user and by user Whether or not, then we can attract a frequency with a recommendation System [6] and got an idea of mutual cooperation Filtering This way, if default bug reports are proportional Combined with the current bug report, then there are files Connecting with similar reports may also be related For the current report. We expect more than a complex code Simple code bugs. Similarly, we design The code of freedom of question captures the complexity of the code Through proxy features obtained from file dependency GroundRead, such as PageRank score of a source file Or number of file dependencies. The resulting ranking is a

linear combination Features, whose weight is automatically trained Bug Reports using learning classification techniques. We've done extensive experimental diagnosis Maximum massively, on open source software projects in total 22,000 bug reports. To avoid contaminating Training data with bug fixing information from the future previous reports, we made frozen fine standards Check for the fixed version before each project for each Description of errors. Experimental results on the default version please indicate that our system increases many numbers Art of strong foundations and three recent states point of view. Specifically, when the clips were estimated The 6,400 solution bug containing platform UI database Successful success of the system to learn, reports Find real small cars within the top 10 recommendations For over 70% of the Big Reports, same Mean more than 40% of average health (mapping) means. Overall, we see our adaptive rating as being usually the software applies to projects which are sufficient for them the amount of project specific knowledge, as Version control history, bug fixing history, API documents, and synthetic money codes are easily available [7]. If a bug report is configured as a question and source Software store code files are viewed as a combination Documents, then finding source files It can be dealt with as a bug report is related to Information Retrieval (IR) in maintenance of information.

III. FINE-GRAINED BENCHMARK

The main part of this paper includes: Classification To solve problem-related problem issues problem issues Enables

smooth integration of diversity widely in reports Features; As previously exploited bug reports Training example for the proposed level rating With learning classification; using file dependence Capture the graph code to define the graph Complexity; created by the woven benchmark database Check the default version before the source code package For each bug report; wide diagnostics and comparisons With current state-of-the-art modes; and a complete evaluation Its effect is on the accuracy of the rating [8].

The previous paths use only one code to bug localization Modify the system performance over multiple Big Reports However, software insects are often found in different Source code package analysis using a set Revision during assessment is a problem for at least two important reasons:

- 1) Fixed amendment used for evaluation Older bug includes future fake information Reports.
- 2) Cannot exist in a related buggy file Fixed revised, if deleted after this bug Reported. As a result, using only one modification of the source code the package for evaluation can lead to performance evaluation it understands the actual performance of the system as much as possible when used

For example, the dataset from associates 3,075 bug reports with a fixed version of the Eclipse 3.1 source code package.5 Fig. 9 shows a bug report in which the author recommends adding a method called isVarargs one of the files that were fixed for this bug report is MethodBinding.java. At the time the bug report was submitted, this class did not contain an isVarargs () method.

However, the fixed revision of Eclipse 3.1 used in the dataset contains a future version of Method Binding.java in which the method is Varargs() has already been added, as shown in Fig. 10. The presence of future bug-fixing information in the fixed revision dataset is likely to lead to an unrealistic estimate of the system performance, as the bug report has a larger textual similarity with the future version of the MethodBinding.java file than with the current version (the version at the time when the bug report was submitted) [9].

A somewhat smaller problem with the dataset above is caused by the decision to use the package name plus the class name to indicate a file that was fixed for a bug report. There are feature locations benchmarks, such as the one proposed by Dit et al. that suffer from the same major issue identified above: a fixed version of the course code package is used for evaluation with multiple bug reports.

SYSTEM ARCHITECTURE

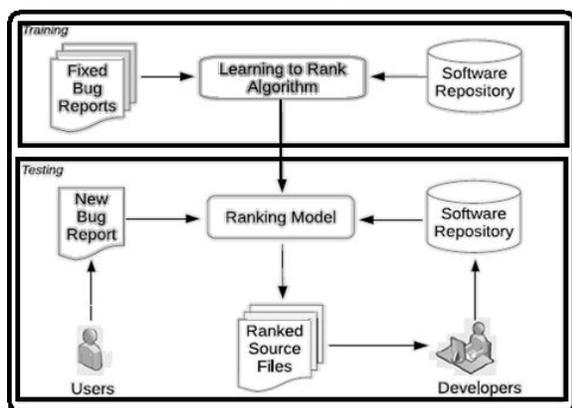


Fig.1 System Architecture

Fig.1 shows the high-level architecture of the system. A ranking model is trained to compute a matching score for any bug report r and source code files combination.

IV. CONCLUSION

To detect the bug, developers not only use this content big report but also software-related domain information the project introduced us a rating Developers' bug search process stabilizes by developers. The rating model describes useful relationships Between Big Report and source code files by Leveraging Domain knowledge, such as API specifications, compatibility Code structure, or tracking data problem. Expert diagnosis Six java projects show that in our viewpoint Find relevant files within the top 10 recommendations For over 70% bug reports in the Girls' Girls Platform And tomatoes. In addition, the model of the analyzed rating exits three recent extraordinary views. Mention it Assessment experiments using greedy backward feature the elimination demonstrates that all features are useful. When combined with runtime analysis, feature diagnosis Results can be used to use the results to achieve the results the accuracy of the system and to achieve a target trade off Runtime complexity. The proposed adaptive rating perspective is usually Software is available on projects which are sufficient for you Project specific knowledge quantities, such as Comprehensive API Documents and Initials Number of fixed bug reports first. Other than that, Classification performance can benefit from information big reports and well documented a result of the code Better Lexical Equations and source code Files already have bug fixing history.

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