Automatic bug traige using text categorization

Davor Cubranic, Gail C. Murphy

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About Paper

The work *Automatic bug traige using text categorization by Davor Cubranci and Gail. C. Murphy is mentioned in the related work in their work* Who should fix this Bug?. This work is one of the previous works of G. C Murphy.

1 What they have done ?

In this current paper, authors have proposed an automatic method for bug triage. In simpler words an algorithm or method which takes the description and summary as the features and classified the bugs on the basis of developer (assigned to/ who can solve the bug). They have used supervised machine learning algorithm for building the model. Here they have predicted only one developer. They have extended this work in their other work [1] where they have made a semi automated model which recommends a set of developers instead of a single developer.

In the current work, authors have used Naive Bayes classifier for classification. They have made the experiments on Eclipse Bug tracking system. The classification rate is taken as the metric and 30% classification accuracy was acheived.

How we can relate this problem to current problem ?

In this work author has classified the bugs on basis of 'assigned to '(developer). They have used Summary and Description as features. By using the same features we can classify them on basis of 'component'. As the problem in Bosch is the bug is assigned to wrong component.

This is exactly the same problem that we are trying to solve but with different class.

References

[1] John Anvik, Lyndon Hiew, and Gail C. Murphy. 2006. Who should fix this bug?. In "Proceedings of the 28th international conference on Software engineering " (ICSE '06). ACM, New York, NY, USA, 361-370. DOI: https://doi.org/10.1145/1134285.1134336