Abstract

Software effort estimation is one of the most critical and complex, but an inevitable activity that takes place during the early stages of SDLC. Software size estimate is one of the most popular inputs for software effort prediction models. Providing a good size estimate for the purpose of accurately estimating the development effort is a challenging problem. During estimation activities, the uncertainty has become a part in software engineering measurements. The implementation of size proxy for effort estimation, which is associated with uncertainty, is a challenging task. In earlier study, there is a conceptual framework for developing size proxy, which addresses uncertainty by providing estimate as a probability density function instead of
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certain value. Even though there are many estimation tools and size metrics, but none of the tool is provided as a service in cloud to addresses uncertainty issue satisfactorily. Here proposed a tool based approach by considering more predictors from various artifacts which can addresses the uncertainty issues and also providing tool as a service in cloud for users via a web browser. The tool provides output as a probabilistic value instead of certain value by considering more predictors and the results were encouraging. The tool is hosted by a vendor or service provider in the cloud and made available to customers over a network (typically the internet) having benefits like high adoption, lower initial costs, painless upgrades and seamless integration.

References

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