Using stereotypes to help characterize commits

Natalia Dragan
Michael L. Collard
Maen Hammad
Jonathan I. Maletic

Individual commits to a version control system are automatically characterized based on the stereotypes of added and deleted methods. The stereotype of each method is automatically reverse engineered using a previously defined taxonomy. Method stereotypes reflect intrinsic atomic behavior of a method and its role in the class. The stereotypes of the added and deleted methods form a descriptors are then used to categorize commits, into types, based on the impact of the changes to a class (or classes). The goal is to gain a better understanding of the design changes to a system over its history and provide a means for documenting the commit.

Published in: