Constructing Developer Networks: An Overview

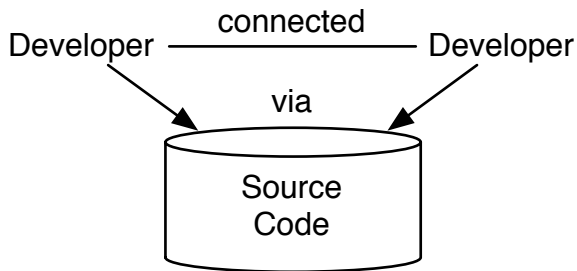Developer ——connected—— Developer
via
Source Code

Technical-based Networks:
Source code repositories were used to construct developer networks by leveraging technical dependencies from code [1,2,3,4]. Two developers are connected in a network if both changed the same file, module, or project.

Project-wide Networks:
Networks on a project-wide level[4,5,6,7,8] are build without a specific task focus. In these networks people are linked used any project-related communication. Communication can be mined from repositories, such as email archives and issue trackers.

Developer ——connected—— Developer
via
Project-wide communication
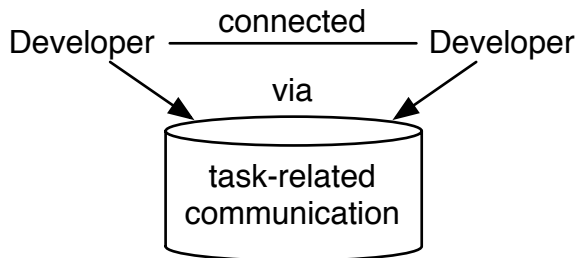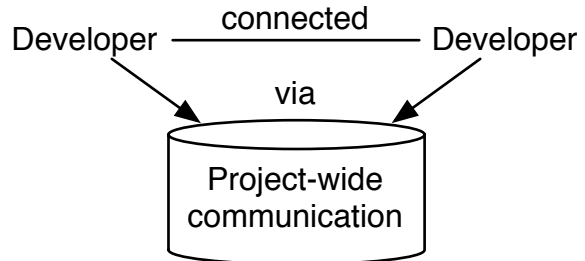
Task-based Networks:
We mine social networks that evolve around collaborative tasks, such as fixing a bug or implementing a feature. Similar to other approaches [10,11,12], we mine the communication directly related to a certain task, and thus build fine-grained networks. [8,9]

Developer ——connected—— Developer
via
task-related communication

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