

Communications in Global Software Development: An Empirical Study Using GTK+ OSS Repository

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Abstract

Effective communication is an important issue for global software development. Due to geographical limitations and travel challenges, face-to-face meetings are expensive to schedule and run. Web-based communication methods are thus the primary means of communication in global software development efforts. In general, two types of web-based communication mechanisms exist: synchronous and asynchronous communications: each serves a unique role. In this paper, we present an empirical study of the communication mechanisms in GNOME GTK+, a small-sized open-source distributed software project, in which Internet Relay Chat (IRC) and Mailing Lists are used as synchronous and asynchronous communication methods, respectively. The objective of this study is to identify how real time and asynchronous communication methods could be used and balanced across global software development projects.