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Wiki Development Environments.

Christoph Hannebauer
Paluno - The Ruhr Institute for Software Technology
Germany
christoph.hannebauer@paluno.uni-due.de

Keywords

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Abstract.

The doctoral thesis Wiki Development Environments analyzes contribution barriers to Free, Libre and Open Source Software (FLOSS) projects. Contribution barriers exist between particular subgroups within the community around a FLOSS project. Contribution barriers include social and technical factors. The hurdles that constitute the contribution barrier to become a co-developer receives special emphasis.

The doctoral thesis also describes a pattern language for maintainers of FLOSS projects. The patterns in this pattern language describe practices that lower the contribution barriers in FLOSS projects that employ the patterns. The doctoral thesis includes a novel approach that minimizes contribution barriers. This approach comprises the combination of a wiki system and an Integrated Development Environment (IDE) into a Wiki Development Environment (WikiIDE). A WikiIDE is a web-based code editor that allows anonymous users to edit source code and contribute it to a FLOSS project. From the pattern language perspective, a WikiIDE helps to realize some of the patterns described earlier and amplifies their effect.

Editing source code of software differs from editing text in a natural language. WikiIDE realizations must take these differences into account. This imposes challenges for WikiIDEs realization that exceed the requirements of IDEs and wiki systems for natural language text.

Biography.

In parallel with working as a consultant and field developer specialized on PKIs. for Glück & Kanja, Christoph studied computer science and mathematics at the university FernUniversität in Hagen. He received the degree Diplom-

Informatiker in computer science in 2008 and the degree Diplom-Mathematiker in mathematics in 2009. His emphasis in computer science lay on PKIs and email security. In mathematics, he focused on discrete mathematics and especially graph theory.

After receiving his computer science degree, he started working as a research associate at the Computer Science Faculty of the University of Leipzig, Germany, in 2008. In 2010, he moved to the newly founded paluno -The Ruhr Institute for Software Technology at the University of Duisburg-Essen in Germany.

His research interests include FLOSS development practices and wiki communities. This research centers around his doctoral thesis about WikiIDEs.

Supervisor: prof. Volker Gruhn, full professor for Software Engineering, esp. for Mobile Applications, at the University of Duisburg-Essen's Ruhr Institute for Software Technology (paluno).