

Opti4Apps

Motivation

Scrum is widely adopted as an agile software development process. In recent years there has been a noticeable shift in attention toward lean software development. In lean software development the use of minimal viable products (MVPs) is propagated. A MVP is a product with just enough features to gather validated learning in continued development. The posing challenges are:

- Collection and processing of customer feedback inside a continuous delivery (CD) environment.
- Gaining insights from collected feedback data towards the quality and usability of the MVP and use them in subsequent development.
- Having an approach that does not enlarge the delivery times nor the costs and resources used.

Approach

The Opti4Apps approach is based on a semi-automated elicitation and analysis of mobile application data. On the one hand data is collected within the mobile device, e.g. from sensors, user interactions, or device-resident sources like log files. On the other hand, data is collected from software stores, e.g. Google Play Store or App Store, and user forums where explicit feedback is given. The idea is to identify failure patterns using data mining and natural language processing methods in a mobile application. Analyzing these patterns is intended to speed the development process, allowing problems to be identified and rectified quicker. Thus, it can provide a baseline for the effective further development as well as the focused quality assurance.

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