

Abstract

Reviewing the quality models presented from 1970 to now, it is determined, that most of the quality models acknowledge the usability as a main factor of quality in software. The common aspect of multiple definitions of the term "usability", is that there is always three items included: the user, doing a specific task, an interface which the user interacts with to do the task. As a software engineer, decreasing the cost of the defects or change requests is a great challenge which requires a lot of effort. Being a software product that aesthetics, interface, and the communication protocols matter, web apps have a very widespread usage these days. It is proven that one of the main cons of web application, is their not-so-much user-friendly design, which leads to major costs in businesses. Hence, with a look into a few resources, including the UI design itself, is crucial for the success of every software product. But mockups and sketches, due to their artistic nature, are very hard to evaluate and the answer to a question like "Which UI is a good one?" will be a very challenging one. Besides, as time goes on, we will see major changes in the requirements. So static checklists and guidelines are not a good answer to these types of questions and therefore we inspired ourselves with crowdsourcing as a tool for this project. Conducting a comparative study on quality models being proposed from 1970, it is easy to say that they are multiple metrics introduced for usability in every quality model; One of the very recent ones, proposed in 2013 which we took it as a basis for this project due to it's focus on usability. Reviewing 83 top tools for measuring the usability of software products, we can see that none of these tools consider the metrics introduced in this model as a whole and instead they use only a partial model. So we have implemented a usability testing tool which considers all the metrics introduced in 2013 and gives the user the ability to perform the tests using crowdsourcing platforms. It also has the feature to set a custom quality threshold on answers which proves its novelty.

Key Words:

Usability, Quality Models, Crowdsourcing, Web Applications