

# Journal Software: Evolution Process

05 de marzo 2020.

## End-User Modelling of Quality for Web Components.

David Lizcano, Andrés-Leonardo Martínez-Ortíz, Genoveva López and Arnaud Grignard.

ISSN 2047-7481

Journal Software: Evolution Process

### RESUMEN:

With years of frantic development, when release fast and release often was the mandatory rule for web technologies and services, the open source paradigm and online distribution repositories have imposed de facto standards for quality assessment in fast-paced innovation processes. Nowadays, however, in pursuit of productivity, security, and user satisfaction, the industry is beginning, through the introduction of new standards such as ECMAScript 6 or web components, to consider software engineering mandates for web technologies. This article reports a quality model aligned with international standard ISO/IEC 25010, covering web components technology, which ultimately aims to improve adoption by the software engineering industry, traditionally wary of agile Internet practices, the open source paradigm, and public repositories.

Our research also presents an experimentation platform on which end users have validated the quality properties, highlighting the implicit connection with the perceived quality. The key result of our research convinces us that user ratings are suitable as a testing mechanism for product quality and quality-in-use metrics in order to define an absolute scale of comparison for web component quality.

### PALABRAS CLAVE:

End-user programming, End-user software engineering, Human-computer Interaction, Human-inspired metrics, Reliability, Software quality.