

Quality Assessment in Web (QAW 2009)

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Abstract. This paper summarizes the “Quality Assessment in Web” workshop held in conjunction with the 9th International Conference on Web Engineering (ICWE 2009). The objectives of the workshop, the main contributions of each paper as well as the conclusions of the workshop are presented.

1 Introduction

The growing demand of quality software has made the quality become a discriminator factor among software products, and therefore, a key factor for software success.

Advances in technology and the use of Internet have favored the appearance of a great variety of web software applications. As a result, over the past decade the number of organizations which make use of Web applications have grown dramatically. These web applications are used by different companies with the aim of giving several services to their clients. And on the other hand, different kinds of users use this web application in order to make deals. In both settings, the quality is relevant. In the first case, it is fundamental the quality of web applications in order to give a good service and assure the loyalty of users. In the second case, the quality is also important in order to users can achieve their objectives in a proper way.

With the first edition of this workshop, we wanted to promote all the areas related to the quality of web applications by giving to the researchers of the area the opportunity of sharing the works and a place for discussing. Moreover, we identified during the workshop possible future lines related to the topic of the workshop.

The main topics proposed were:

- Web Data Quality
- Web Quality in use
- Web Quality measurement

- Web Quality visualization
- Web Quality validation
- Web Quality reviews
- Quality in software development
- Web Quality requirements
- Web Quality Models
- Web quality frameworks
- Web quality methodologies
- Web quality tools
- New trends in web quality

2 Workshop summary

The main purpose of this section is to present a brief summary of the workshop. First of all, we would like to emphasize that all the received papers were two-blind reviewed. After the reviewing process, 80% of the papers were accepted and all of them were presented during the workshop.

The workshop was organized in two tracks. The former related to web application quality and the second one focused on Security requirements and Rich Internet Application Quality.

The first track included two papers. The first one, “Ensuring Quality of Web Applications by Client-side Testing Using TTCN-3”, proposed a framework for testing Web applications and Web services using TTCN-3 as language of choice. Authors developed a test adapter and codec that allowed seamless integration and usage of browser simulators while providing for functional testing as well as non-functional testing (e.g. distributed load-testing, security testing). In addition, a case study illustrated the relevance of the framework in the context of quality assessment and testing. In the second paper, “Model and Measurement for Web Application Usability from an End User Perspective”, a model for web application usability from an end-user viewpoint was presented, as well as the basis for measurement and data collection methods to collect user activity and behavior.

The rest of the papers was included into the second track. The first one (A Security Requirements Approach for Web Systems) proposed a web security model based on experiences with other quality models that were used in a security requirement engineering approach. The model provided a means for refinement and a requirement repository for reuse. Finally, the approach was illustrated with an example involving the Tomcat servlet container. In the second paper, entitled “The practical aspects of RIA Development and Quality”, the practical aspects of RIA (Rich Internet Application) development were presented and the major quality factors were chosen.

After the presentation of the papers, we had a discussion session where several issues arisen. The final concerns about web quality were summarized into a set of questions:

- The Usability is a part of the quality?
- Is usability the same as quality, are they related and how?
- What usability means when we try at different life cycle stages?
- Can be the software products' quality standards applicable to web quality?
- Are specific standards necessary in order to have a common terminology?
- What about quality?
- When is it necessary to pay attention to quality?
- Is it possible to have “total” quality?
- Is it possible to combine functional requirements with non-functional ones?
- Is the context important for the quality?
- Is web usability the same as quality in use?

During the debate, the speakers and the researchers who attended to the workshop participate actively to the discussion of the issues.

Although no answer was giving to the questions, we concluded that these were the “hot points” on web quality and more work is needed into them.

This will be reflected in new topics of interest of future editions of the workshop.

We would like to emphasize that in spite of the relatively low number of papers, the workshop had an adequate number of attendees, around fifteen and twenty people that participate actively during all the workshop duration.

At the end of the workshop all of them declared their interest in the second edition of the workshop.

3 About the organizers

Coral Calero is PhD in Computer Science. Full Professor at the Escuela Superior de Informática of the University of Castilla-La Mancha in Ciudad Real (Spain). She is responsible of the quality modelling line research into the Alarcos Research Group, in the same University. Her research interests are: database/data-warehouse quality, web/portal quality, software measurement, empirical software engineering, software visualization and data quality. She has organized successfully the 1st Web Services Quality Wokshop (WQW 2002) in conjunction with WISE 2002, the Workshop on Quantitative Approaches in Object-Oriented Software Engineering (QAOOSE) in conjunction with ECOOP from 2002 to 2007, the 1st Workshop on Database Maintenance and Reengineering (DBMR 2002) in conjunction with ICSM 2002 and the first workshop on quality, verification and validation in conjunction (WQVV2007) with ICWE 2007 and the Quality Assesment in Web Workshop (QAW2008) in conjunction with ICWE 2008. Her e-mail is: Coral.Calero@uclm.es

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