Preface

While the original World Wide Web was mainly a Web of documents, today’s Web is characterized by an ever-growing amount of data that is published and linked in structured formats. Data about products or services is increasingly made available for public access by companies (e.g., Amazon A2S API, Google Maps API, etc.). Governments and organizations publish more and more often statistics and other data on the Web, usually with the aim to increase transparency and empowering the public to utilize this data (e.g., data.gov, data.gov.uk, etc.). In other attempts, structured data is extracted from Wikipedia (e.g., DBpedia) or from multiple Web sources (e.g., Freebase). Last but not least, huge amounts of data and metadata are created by the Web users themselves, either indirectly (e.g., via social tagging) or in directed community efforts (e.g., Open Directory Project, OpenStreetMap, etc.). These are just a few of the many examples where data is published on the Web nowadays.

Several standards and best practices for the description, publication, linking, and exchange of Web data have been developed in the past. Popular examples are W3C specifications such as XML, SOAP, RSS, and RDF, the recommended best practices of the Linked Data initiative, and various vocabularies that emerged from these approaches (e.g., Dublin Core, SKOS, etc.). A similar line is taken in less formal attempts to structure data, such as microformats or advanced tagging approaches (e.g., geotagging, hashtags, etc.).

However, the full potential of the data can only be exploited with well-designed user interfaces and powerful interaction techniques that allow an efficient exploration and utilization of the data. Although some early attempts to investigate the interaction with this data have been made in the past, there is still a large number of research questions and practical challenges that are not yet sufficiently addressed. Reoccurring interaction problems are differently solved and more general design recommendations and guidelines are just beginning to emerge. A need for reusable design patterns and interaction techniques as well as novel ideas, tools, and methods to present Web data to the users is clearly recognizable. These and related issues of data-centric interactions on the Web were addressed by the workshop. This volume contains revised versions of the peer-reviewed papers that were presented at the workshop.

Novak and Preusse discuss the importance of providing different views on the same data to support sensemaking and social interaction. They present an approach that aims to support collaborative interaction and sensemaking between citizens and municipal administrations through visual tools. Ravendran et al. discuss possibilities for online banking customization through tag-based user interfaces. They introduce a customization framework derived from a literature study and present a prototype that illustrates their idea for some key resources of online banking. Brunk and Heim present iFacet, a tool that uses well-known interaction concepts to facilitate faceted exploration of semantic data. It implements features for hierarchical-faceted navigation and easy customization of the presented results by a combination of table and tree components. Another tool that accesses Web data is presented by Parrra et al. More! can be used on mobile devices to gather and display information about speakers at scientific events, such as conferences or workshops. The approach is based on the SWRC and FOAF ontologies and follows REST and Linked
Data principles to structure and access the data. Finally, Stegemann et al. describe X3S, a component-based approach to filter and present semantic data from the Web. They demonstrate the applicability of their approach by an editor that is able to create, edit, and preview X3S stylesheets, and report a comparative user study that evaluates their approach.

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