Foreword

Globalization, aided by technology innovation and newer, faster communication channels are changing the basis of competition across industries today. To compete, firms must rapidly respond and adapt to a changing market and create responsive, flexible links across their value chains.

In this environment, the advent of *Web-based systems* has created a range of opportunities for organizations. Web-based systems and applications are enabling businesses to improve workflow costs and efficiencies across their supply chains, streamline and integrate their business processes, and collaborate with value-chain partners to deliver a strong value proposition to their customers.

Ensuring the robustness and reliability of Web-enabled systems has, therefore, become an increasingly critical function. *Integrated Approach to Web Performance Testing: A Practitioner's Guide* addresses the realities of performance testing in Web systems and provides an approach for integrating testing with the software development life cycle.

By offering a mix of theory and practical examples, Subraya provides the reader with a detailed understanding of performance testing issues in a Web environment. He offers an experience-based guidance of the testing process, detailing the approach from the definition of test requirements to design, simulation and benchmarking, and building, executing and analyzing testing strategies and plans. The book also details key processes and issues involved in test automation, as well as performance monitoring and tuning for specific technologies.

The chapters are filled with real-life examples, as well as illustrative working code, to facilitate the reader's understanding of different facets of the testing process. The discussion of testing methodology is anchored by a running case study which helps illustrate the application of test plans, strategies, and techniques. The case study and examples help demonstrate various approaches in developing performance testing strategies, benchmark designs, operation profiles and workloads. By bringing an experiential understanding into aspects of Web performance testing, the author is able to offer useful tips to effectively plan and execute testing activity. In addition, the book offers various guidelines and checklists to help practitioners conduct and analyze results using the various testing tools available for Web based applications.

The book provides a highly systematic approach to performance testing and offers an expert's eye view of the testing and functionality of Web systems. Subraya is careful to provide broad, initial groundwork for the subject in his first three chapters, which makes this text accessible even to the beginner.

Integrated Approach to Web Performance Testing: A Practitioner's Guide will prove to be a valuable tool for testing professionals, as well as for students, academicians and researchers.

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