DESCRIPTION

This book describes an approach to software management based on establishing an infrastructure that serves as the foundation for the project. This infrastructure defines people roles, necessary technology, and interactions between people and technology. This infrastructure automates repetitive tasks, organizes project activities, tracks project status, and seamlessly collects project data to provide measures necessary for decision making. Most importantly, this infrastructure sustains and facilitates the improvement of human-defined processes.

The methodology described in the book, which is called Automated Defect Prevention (ADP) stands out from the current software landscape as a result of two unique features: its comprehensive approach to defect prevention, and its far-reaching emphasis on automation. ADP is a practical and thorough guide to implementing and managing software projects and processes. It is a set of best practices for software management through process improvement, which is achieved by the gradual automation of repetitive tasks supported and sustained by this flexible and adaptable infrastructure, an infrastructure that essentially forms a software production line.

In defining the technology infrastructure, ADP describes necessary features rather than specific tools, thus remaining vendor neutral. Only a basic subset of features that are essential for building an effective infrastructure has been selected. Many existing commercial and non-commercial tools support these, as well as more advanced features. Appendix E contains such a list.
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Dorota Huizinga, PhD, is the Associate Dean for the College of Engineering and Computer Science and Professor of Computer Science at California State University, Fullerton. Her publication record spans a wide range of computer science disciplines and her research was sponsored by the National Science Foundation, California State University System, and private industry.

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