Software Design and Development:
Concepts, Methodologies, Tools, and Applications

Information Resources Management Association
USA

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Section 1  
Fundamental Concepts and Theories

This section provides an overview of both traditional and recently developed paradigms in Software Design and Development. Despite being one of the youngest scientific fields, software engineering has developed quickly, and has a rich history of practices and procedures to draw from. In particular, this section addresses agile, lean, and service-oriented development; cloud computing and web-based services; and model-driven engineering. In the opening 11 chapters of this extensive reference source, readers will obtain a clear understanding of the fundamental concepts and theories integral to the field of Software Design and Development.

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Development and Design Methodologies

This section discusses techniques and best practices in Software Design and Development. Models and processes are crucial to ensure quality and consistency in software products, and developers must understand how to best apply and adapt existing methodologies to current projects. Primary topics covered in this section include model-driven software development, test-driven approaches, and embedded software systems. The 14 chapters that make up this section explore the development and design methodologies that bridge the gap between fundamental concepts and real-world applications in Software Design and Development.

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