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	Nota di contenuto	Software Specification Methods; Preface; Contents; List of Contributors; Part I State-Based Approaches; 1 Z; 1.1 Overview of the Z notation; 1.1.1 The process of producing a Z specification; 1.2 Analysis and specification of case 1; 1.3 Analysis and specification of case 2; 1.4 Validation of the specification; 1.5 The natural language description of the specifications; 1.6 Conclusion; 2 SAZ; 2.1 Overview of the SAZ method; 2.2 Analysis and specification of case 1; 2.2.1 Z specification; 2.3 Analysis and specification of case 2; 2.4 Natural language description of the specifications 2.4.1 Case 12.4.2 Case 2; 2.5 Conclusions; 3 B; 3.1 Overview of the B notation; 3.2 Analysis and specification of case 1; 3.2.1 Identifying operations; 3.2.2 Defining the state space; 3.2.3 Defining the behavior of the invoicing operation; 3.2.4 The Product1 machine; 3.3 Analysis and specification of case 2; 3.3.1 Identifying operations; 3.3.2 The Product2 machine; 3.3.3 The Invoicing2 machine; 3.4 Validation of the specification; 3.5 The natural language description of the

specifications; 3.5.1 Case 1; 3.5.2 Case 2; 3.6 Conclusion; 4 From UML Diagrams to B Specifications
4.1 Overview of the method4.1.1 Summaryof the B method; 4.1.2 Data specification; 4.1.3 Transaction specification; 4.2 Specification of case 1; 4.2.1 The class diagram and its B representation; 4.2.2 Transaction specification; 4.3 Specification of case 2; 4.3.1 Transactions specification; 4.3.2 The formal specification; 4.4 Validation; 4.5 The natural-language description of the specifications; 4.5.1 Case 1; 4.5.2 Case 2; 4.6 Conclusion; 5 UML+Z: Augmenting UML with Z; 5.1 Overview of UML+ Z; 5.2 Analysis and Specification of case 1; 5.2.1 UML class model; 5.2.2 UML state models
5.2.3 The Z model5.2.4 Checking model consistency; 5.2.5 Validating the model; 5.3 Analysis and Specification of case 2; 5.3.1 Entries of new orders; 5.3.2 Cancellation of orders; 5.3.3 Entries of quantities into stock; 5.4 Natural language description of the specification; 5.4.1 Case 1; 5.4.2 Case 2; 5.5 Conclusion; 6 ASM; 6.1 Overview of the ASM; 6.2 Requirements capture and Specification of case 1; 6.2.1 Identifying the agents; 6.2.2 Identifying the states; 6.2.3 Identifying static and dynamic parts of the states; 6.2.4 Identifying the transitions
6.2.5 Identifying the initial and final states6.2.6 Exceptions handling and robustness; 6.2.7 Identifying the desired properties (validation/verification); 6.3 Requirements capture and Specification of case 2; 6.4 The natural language description of the specification; 6.4.1 Case 1; 6.4.2 Case 2; 6.5 Conclusion; 7 TLA+; 7.1 Overview of TLA+; 7.1.1 TLA; 7.1.2 TLA+ versus Z; 7.2 A Specification of case 2; 7.3 The problematic case 1; 7.4 Validation of the specification; 7.5 Satisfying the specification; 7.6 The natural language description; 7.7 Conclusion; Part II Event-Based Approaches
8 Action Systems

<table>
<tr><td>Sommario/riassunto</td><td>This title provides a clear overview of the main methods, and has a practical focus that allows the reader to apply their knowledge to real-life situations. The following are just some of the techniques covered: UML, Z, TLA+, SAZ, B, OMT, VHDL, Estelle, SDL and LOTOS.</td></tr>
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