1. Record Nr. UNINA9910299245103321 Autore Seidl Martina Titolo UML @ Classroom: An Introduction to Object-Oriented Modeling / / by Martina Seidl, Marion Scholz, Christian Huemer, Gerti Kappel Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2015 **ISBN** 3-319-12742-X Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (XII, 206 p.) Collana Undergraduate Topics in Computer Science, , 2197-1781 005.117 Disciplina Soggetti Software engineering Electronic data processing - Management Software Engineering **IT Operations** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali 1 Introduction -- 2 A Short Tour of UML -- 3 The Use Case Diagram --Nota di contenuto 4 The Class Diagram -- 5 The State Machine Diagram -- 6 The Sequence Diagram -- 7 The Activity Diagram -- 8 All Together Now --9 Further Topics. Sommario/riassunto This textbook mainly addresses beginners and readers with a basic knowledge of object-oriented programming languages like Java or C#, but with little or no modeling or software engineering experience thus reflecting the majority of students in introductory courses at universities. Using UML, it introduces basic modeling concepts in a highly precise manner, while refraining from the interpretation of rare special cases. After a brief explanation of why modeling is an indispensable part of software development, the authors introduce the individual diagram types of UML (the class and object diagram, the sequence diagram, the state machine diagram, the activity diagram. and the use case diagram), as well as their interrelationships, in a stepby-step manner. The topics covered include not only the syntax and the semantics of the individual language elements, but also pragmatic aspects, i.e., how to use them wisely at various stages in the software development process. To this end, the work is complemented with

examples that were carefully selected for their educational and

illustrative value. Overall, the book provides a solid foundation and deeper understanding of the most important object-oriented modeling concepts and their application in software development. An additional website offers a complete set of slides to aid in teaching the contents of the book, exercises and further e-learning material.