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Soggetti	Computer software - Development Software architecture - Reliability
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Nota di contenuto	Cover; Title Page; Copyright Page; Dedication; Contents; About the Author; Foreword; Preface; Acknowledgments; Part 1 - Introduction; Information-based applications; Intelligence; Difficulties of current technologies; A brief tour of Unit Modeler technology; The Unit Modeler desktop; Standard library components; Data analytics package; Analytics workbench; Expression editor; Data sets; Surface plot creator; Geometry calculator; Database query and connect; Commercial Applications; ASE echo test and teach; Medical image correlation; Bakehouse purchasing application; Workspaces Elsevier book examples workspaceThe Development Package; Part 2 - Modeling fundamentals; What is a model; The information Unit Model; A simple example: checking account; The Information Unit; Elements; Operators; Paths and relations; Structures; Classes; Attributes; Types; Boolean; Class; Complex number; Date; Expression; File data; Holder; List; Matrix; Number; Process; Rich text; Text; Time; Timestamp; Unit; Constraint lists; Types of classes; Base classes and instances; Copying classes/creating a class instance; Top-level classes; Processes; The parts of a process; The process unit ParametersVariables; Operation steps; Truth values; Error paths; Return values; Shocks and process flow; Categories of processes; Action processes; Utility processes; Tool processes; Launch processes; Directives; Objects; Domains; Domain categories; Domain types;

Dynamic loading; Other topics; Stars (\*); Complex elements; Basic operations within a process; Setting and removing elements; Basic math operations; Decision points; Looping over the elements of a unit; Shocking a process; Setting truth values; Showing a form; Creating and evaluating expressions; Mapping elements; String manipulation  
User interface and interaction. Prompts; Unit selection; Copying structures; Creating new units; Adding and removing paths; Virtual elements; References in processes; Compose and decompose; The General Modeling Process; Structural design; Step 1: Define the domain; Step 2: Identify the Unit Model structures; Example:  $A+B=C$  calculator; General Modeling Process; Functional Design: Modeling Processes; Continuing the example; Step 3: Create the processes; How do processes get shocked?; Part 3 - Reuse of models and the domain libraries; Encapsulation; Max Calculator encapsulation example  
Test Creator: encapsulation example Reuse of models; Finding reusable components; Mechanisms for reusing components; Assists in the Development Resource Center; Creating a class instance; Class attributes; Areas of support; Modeling Structures; Classes; Processes; Elements; Loops; Decision points; Getting information; Unit manipulation; Lists; Computer technology; Forms/graphical user interfaces; Showing forms; Printing; Visualizations; Overview; The graph class; Tools; Assists; Custom plots; Animation; Video; Databases; Web services; Network communication; File manipulation  
String manipulation

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