Record Nr. UNINA9910437568603321 Autore Turban Bernhard Titolo Tool-based requirement traceability between requirement and design artifacts / / Bernhard Turban; foreword by Prof. Dr. Christian Wolff Weisbaden, Germany:,: Springer Vieweg,, 2013 Pubbl/distr/stampa **ISBN** 3-8348-2474-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xxvii, 439 pages): illustrations (some color) Collana Gale eBooks Disciplina 006.7 Soggetti Computer software - Development Software architecture Software engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Requirement Engineering and Management -- Design Theories --Quality Standards for Safety-Critical Development Processes --Rationale Management -- Requirement Traceability -- A Tool Approach for Requirement Traceability between Requirements and Design. Sommario/riassunto Processes for developing safety-critical systems impose special demands on ensuring requirements traceability. Achieving valuable traceability information, however, is especially difficult concerning the transition from requirements to design. Bernhard Turban analyzes systems and software engineering theories cross-cutting the issue (embedded systems development, systems engineering, software engineering, requirements engineering and management, design theory and processes for safety-critical systems). As a solution, the author proposes a new tool approach to support designers in their thinking in order to achieve traceability as a by-product to normal design activities and to extend traceability information with information about design decision rationale. Contents · Requirement Engineering and Management · Design Theories · Quality Standards for Safety-Critical Development Processes · Rationale Management Requirement Traceability -A Tool Approach for

Requirement Traceability between Requirements and Design

Groups ·

Researchers and students in the fields of requirement

Target

traceability, design theory, rationale management, development of safety-critical systems • Engineers in the fields of requirements engineering, systems engineering, and software engineering of safety-critical systems Author Dr. Bernhard Turban completed his doctoral degree at the Institute for Information and Media, Language and Culture of the University of Regensburg under the supervision of Prof. Dr. Christian Wolff. He is an advisor in the fields of processes and tools for requirements engineering.