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Nota di contenuto	The design and implementation of O 2, an object-oriented database system -- Zeitgeist: Database support for object-oriented programming -- A distributed object server -- Implementation techniques for object oriented databases -- Support for design processes in a structurally object-oriented database system -- Object orientation within the PRIMA-NDBS -- SOOM and tornado-* experience with database-support for object-oriented applications -- Formalizing objects for databases using ADABTPL -- Rules are objects too: A knowledge model for an active, object-oriented database system -- Abstract object types for databases -- Rule execution in CPLEX: A persistent objectbase -- Constraint analysis: A tool for explaining the semantics of complex objects -- Providing uniform access to heterogeneous information bases -- The object shell: An extensible system to define an object-oriented view of an existing database -- An adaptive derived data manager for distributed databases -- Mapping object-oriented concepts into relational concepts by meta-compilation in a logic programming environment -- Foundations of relational object management systems -- The COMANDOS integration system : An object oriented approach to the interconnection of heterogeneous applications -- A learning-based approach to meta-data evolution in

an object-oriented database -- Views, data abstraction, and inheritance in the FUGUE data model -- Vodak kernel data model -- A model for an object management system for software engineering environments -- Multiple inheritance and genericity for the integration of a database management system in an object-oriented approach -- Instance inheritance mechanisms for object oriented databases -- Identification of database objects by key -- The design of dynamo: A general-purpose information processing model with a time dimension -- A uniform concept for storing and manipulating engineering objects -- Managing persistent data with mneme: Designing a reliable, shared object interface -- Integration of database management with an object-oriented programming language -- On dynamically defined complex objects and SQL -- Common object-oriented repository system -- On the integration of object-oriented and process-oriented computation in persistent environments -- Rose: An object-oriented database system for interactive computer graphics applications -- Identity, equality and query optimization -- Optimization of object-retrieval queries -- Query optimization in object-oriented database systems: A prospectus -- Object-oriented DBMS performance measurement -- Data abstraction and query optimization.

Sommario/riassunto

This volume collects papers presented at the 2nd International Workshop on Object-Oriented Database Systems (ooDBS-II) held at the Ebernburg near Bad Münster am Stein, FRG, in September 1988. It thus gives a comprehensive overview of the latest developments in this flourishing area of current database research. Object-oriented database systems have been approached with mainly two major intentions in mind, namely to better support new application areas like CAD/CAM, office automation, knowledge engineering, and to overcome the 'impedance mismatch' between data models and programming languages. The notion of object-orientation in database systems is thus a broader one than e.g. in the area of programming languages. Structural object-orientation provides for data model mechanisms that allow the direct representation and manipulation of highly-structured entities; behavioral object-orientation cares for facilities to associate arbitrary user-defined type-specific operations with data entities; finally, full object-orientation tries to combine the advantages of both categories. Though data model concepts are the decisive feature of object-oriented database systems, numerous other system aspects have to be reconsidered or allow better solutions, respectively, in this light. They include e.g. transactions, implementation techniques, optimization, formalization, the inclusion of rules, and the integration with other systems. A number of research prototypes and even some commercial systems are meanwhile available. Both, approaches to extend databases with object-oriented capabilities and approaches to extend object-oriented programming languages with database features have been and are being investigated.