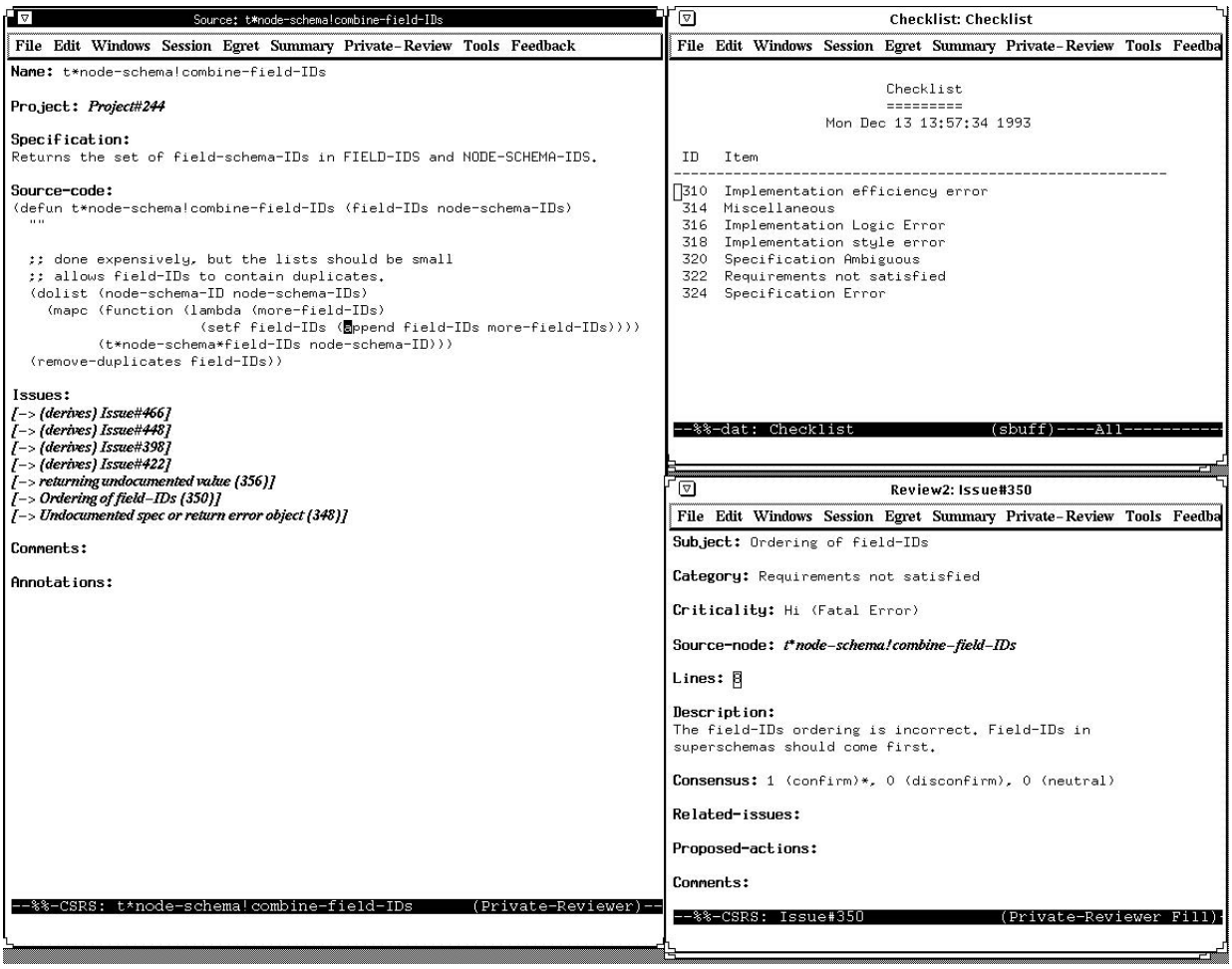

Improving Software Quality through Computer Supported Collaborative Review

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Formal technical review (FTR) is a cornerstone of software quality assurance. However, the labor-intensive and manual nature of review, along with basic unresolved questions about its process and products, means that review is typically under-utilized or inefficiently applied within the software development process. This paper describes CSRS, a computer-supported cooperative work environment for software review designed with two major goals. First, it improves the efficiency of review activities through a variety of computational services to reduce clerical and adminstrative overhead. Second, it supports empirical investigation into improved review methods through fine-grained, high quality instrumentation of the review process and products. This paper presents a typical scenario of CSRS in review, its data and process model, its application to process maturation, its relationship to other research, and its current status and future directions.