

A Proposed Framework for Software Redocumentation Using Distributed Data Processing Techniques and Ontology

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Abstract : Legacy systems are crucial for organizations, but their intricacy and lack of documentation pose challenges for maintenance and enhancement. Redocumentation of legacy systems is vital for automatically or semi-automatically creating documentation for software lacking sufficient records. It aims to enhance system understandability, maintainability, and knowledge transfer. However, existing redocumentation methods need improvement in data processing performance and document generation efficiency. This stems from the necessity to efficiently handle the extensive and complex code of legacy systems. This paper proposes a method for semi-automatic legacy system re-documentation using semantic parallel processing and ontology. Leveraging parallel processing and ontology addresses current challenges by distributing the workload and creating documentation with logically interconnected data. The paper outlines challenges in legacy system redocumentation and suggests a method of redocumentation using parallel processing and ontology for improved efficiency and effectiveness.

Keywords : legacy systems, redocumentation, big data analysis, parallel processing

Conference Title : ICBDC 2024 : International Conference on Big Data Computing

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : August 22-23, 2024