COMPARATIVE ANALYSIS

Abstract

This research presents thorough information about web services as well as XML integration

This paper presents web services along with XML integration by detailing their advantages as well as discussing current procedures and demonstrating real-world usage. The study uses published research results from existing studies and journal articles along with technical documentation to Web services and XML receive evaluation through the assessment of their organizational efficiency as well as their operational limitations. Systems along with software development benefit from the implementation of XML and web services technologies.

Introduction

Organizations seek technological progress due to their need to enhance their systems. their systems with these modern technologies for better communication and operational effectiveness. The assessment looks at XML integration while evaluating web services.

The report provides descriptions of operational strengths along with established methods which present their real-world deployment scenarios systems.

Literature Review

Web Services

The standard Internet protocols use web services to connect systems with services and applications according to Bussler (2003).

The integration solutions offer adaptable system connection possibilities which alongside cost-effective benefits and efficiency improvements according to Chakravarti et al. (2010).The communication protocols utilized by web services consist of SOAP as well as REST and gRPC based on Alves et al. (2007).Web services provide businesses with three main advantages which include their independence from platforms and their scalability and adaptability capabilities (Sahoo et al., 2017).The deployment of web services requires difficult processes that need major development periods and in-depth testing procedures (Zhang et al., 2019).

XML Integration

Systems transfer data through XML integration which follows standardized markup language to achieve processing (Bray et al., 2006).The XML data exchange solution functions autonomously without needing any programming language or platform dependence (Harold, 2003).XML integration technology offers a set of components that include XSLT alongside XPath and features XQuery as its respected component (Kay, 2004).Standard data exchange compatibility and adaptable systems and extendable features

represent the main benefits of XML integration according to Mendelsohn (2008).The implementation of XML integration without adequate control results in system complexity together with duplicated data (Sahoo et al., 2017).

COMPARISON OF WEB SERVICES AND XML INTEGRATION

CRITERIA	WEB SERVICES	XML INTEGRATION
PLATFORM INDEPENDENCE	YES	YES
SCALABILITY	YES	LIMITED
FLEXIBILITY	YES	YES
COMPLEXITY	HIGH	MEDIUM
DEVELOPMENT EFFORT	HIGH	MEDIUM
DATA INTEGRITY	HIGH	LOW

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