

Abstract

A system and method are provided for transforming static documents into HTML-native, interactive “living” documents integrated with enterprise software systems. In one aspect, the invention converts documents (such as word processing files) into HTML format and enables drag-and-drop embedding of form elements (e.g. text fields, signatures, date pickers) directly into the document’s structure (for example, into table cells, paragraphs, or divisions). These embedded form fields are natively integrated with back-end databases and enterprise applications in real time, allowing data entered in the forms to seamlessly propagate to relevant systems (e.g. ERP software) without manual data transfer. The system further supports dynamic workflow triggers – for instance, automatically instantiating a required form or SOP (Standard Operating Procedure) interface in response to an event (such as an IoT sensor input, a state change in a process, or a timed schedule). It is designed for deployment from cloud down to rugged edge devices, featuring offline operation with synchronization, robust audit logging, and biometric access controls to meet strict regulatory compliance (e.g. FDA 21 CFR Part 11, DoD cybersecurity standards, NIST guidelines). This innovative approach significantly reduces the need for custom software development for forms and workflow integrations, providing an auto-versioned “living document” platform that ensures procedures and forms are always up-to-date and easily accessible. The result is a unified solution that improves data integrity, compliance, and efficiency by merging document content and interactive forms into a single, adaptable medium.

Pending processing