

SharePoint Workflow Designer

Client Background

The Client is a document service provider offering automated and document solutions and typesetting, copy editing, content management, design and other services.

Business Challenge

The Client was planning to develop a module enabling Microsoft SharePoint users to create and manage custom workflows without having to turn to the corporate IT department for assistance.

Although SharePoint includes a number of customizable templates out of the box, these templates can hardly match the uniqueness of each organization. Creating and updating a variety of custom workflows to be associated with individual lists or libraries across the deployment is thus an important maintenance chore. The process requires a series of repeated negotiation, development and feedback loops, which places an additional burden on the IT department and is counter-productive for business users.

Project Description

The project team took special care to answer advanced security and performance requirements.

Security

For increased security, each activity uses settings stored in server-side a UDCX file, while references to external data services are implemented using the Single Sign-On (SSO) Service. Additional security concerns were associated with the user's ability to modify activities by setting their functions and variables. This issue was resolved by an additional database containing valid function signatures.

Performance

The approval process, which is a typical workflow activity, involves long-running calls to external services. This aspect of functionality should be handled with particular care so that workflows could be adequately finalized. In the present context, we opted for setting up a WCF service, which receives calls from the activity, submits asynchronous requests to an external service and returns the response.

Overview

Client

Leading document services provider

Industry:

Software

Country:

USA

Business Value:

Enhanced end-user performance and security

Technical Value:

Custom SharePoint Workflow Designer

Development Model:

Agile

Services:

Development

Tools and Technologies:

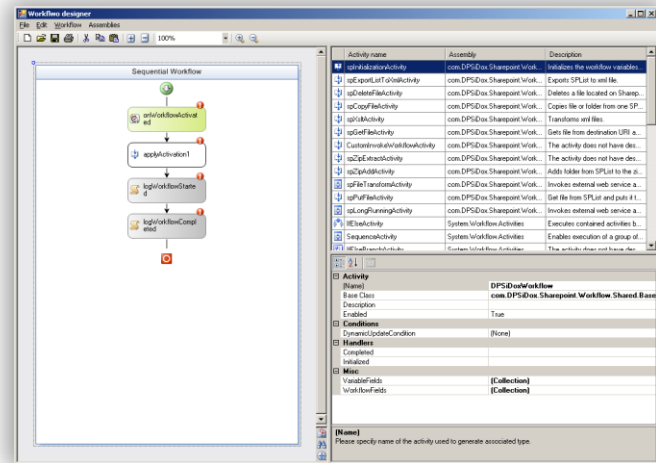
- Microsoft Office SharePoint Services 2007
- SSO Service
- Windows Forms
- Entity Framework
- UDCX
- Microsoft Office SharePoint Designer 2007
- .NET 3.5
- WCF
- Microsoft Visual Studio 2008

SharePoint Workflow Designer

Value Delivered

The solution allows delegating basic workflow tasks directly to the end user. The tool is based on a set of reusable basic activities, such as copying, deleting or saving files within or across libraries, initializing variables or calling external services. These functional building blocks suffice for creating a multitude of workflow types and variations in an all-embracing no-code environment.

The application provides an easily understandable drag-and-drop user interface. In order to create a new workflow, the user makes a series of selections from the list of activities, which is sortable and includes essential activity descriptions, by dragging the necessary activity to the workflow view panel, where the workflow flowchart is displayed. While positioning each activity on the workflow view panel, the user is prompted on the possible options. The user can additionally configure each activity by setting the available properties.



The workflow view area has a context menu allowing the user to resize and modify the current flowchart. The application can be used for creating workflows from scratch, adjusting the existing ones, assigning workflows to single or multiple document lists or libraries, overriding such associations, copying workflows from library to library across SharePoint sites, and deleting outdated workflows.

The set of activities available with the application can be modified to include additional building blocks for achieving a maximally close alignment between an actual process and a document management workflow.

iTechArt provides in-depth, high-quality and cost effective software development and consulting solutions to corporations across Europe and North America using both onsite and offsite service delivery models. iTechArt was founded in 2003 and has developed substantial strengths Application Development, Project Management and Outsourcing areas. iTechArt possesses deep domain knowledge through its proven research and implementation strategies across many industries including, Financial Services, Marketing & Digital Media, Security, Healthcare & Life Sciences, Retail and many more. We deliver the most effective and competitive solutions to our clients to achieve mutual business growth and success.

Quick Facts

Founded: 2003
Headquarters:
Iselin, New Jersey, USA
Development Centers:
Minsk, Belarus; Kiev, Ukraine
Team: 400+ employees

Industries

Financial Services
Marketing & Digital Media
Security
Healthcare & Life Sciences
Retail
and others

Services

Application Modernization
Enterprise Mobile Development
Custom Software Development
IT Staff Augmentation
Software Testing & QA
Software Maintenance

Practice Areas

Enterprise-Level Software
RIA
Mobile
Web & Intranet Portals
Middleware
Business Intelligence