

Outlook Connector for Windows Phone

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Abstract:

In a company many projects are done simultaneously as a result the team working on project exchange many documents, to prevent making different copies of the same document Microsoft's SHAREPOINT(SP) is available. What basically SharePoint does is that it saves the document pertaining to the project at a central location which all the team members can access. When a team member makes changes to any document it creates a new version of the document so that original document can be retrieved. Our project basically focuses on connecting Microsoft (MS) Outlook to SharePoint, when we send an email it will prompt, whether to save the attachment on SharePoint. If we click on yes it will save the document on SharePoint and ask for details about the document. Windows mobile does not have large market share as Android or IOS, but in past year it has gained popularity with the launch of Windows phone 8. Windows Phone 8 devices are now manufactured by Nokia, HTC, Samsung, and Huawei.

KEYWORDS-SP, CLR, MS, WP

1. Introduction

The popularity of mobile phones with Windows platform is increasing because of its distinctive features and interface, encouraging developers to develop application for Windows Phone. One such type of application which we would be developing is an Outlook Connector.

An Outlook Connector is an application designed to connect Outlook to SharePoint (installed as an add-in to Outlook) Using an Outlook Connector, user can do the following tasks:

- Add a new SP account.
- Saving email attachments in SP database.
- Copy and move items from one account to another.

- Copy and move items from one sub-site to another sub-site.
- Allows setting priority to documents and organize accordingly.
- Provides easy access to documents saved in SP database.

2. Background

2.1 C# .Net

The .NET Framework (pronounced dot net) is a software framework developed by Microsoft that runs primarily on Microsoft Windows. It includes a large library and provides language interoperability (each language can use code written in other languages) across several programming languages. Programs written for the .NET Framework execute in a software environment, known as the Common Language Runtime (CLR), an application virtual machine that provides services such as security, memory management, and exception handling. The class library and the CLR together constitute the .NET Framework. The .NET Framework's Base Class Library provides user interface, data access, database connectivity, cryptography, web application development, numeric algorithms, and network communications. C# [2] is a multi-paradigm programming language encompassing strong typing, imperative, declarative, functional, procedural, generic, object-oriented (class-based), and component-oriented programming disciplines. It was developed by Microsoft within its .NET initiative and later approved as a standard by ECMA (ECMA-334) and ISO. C# is one of the programming languages designed for the Infrastructure# is intended to be a simple, modern, general-purpose, object-oriented programming language. The most recent version is C# 5.0, which was released on August 15, 2012.

2.2 Windows Phone Operating System

Windows Phone (WP) [4] is a series of proprietary mobile developed by Microsoft. It is the successor to Windows Mobile, although it is incompatible with the earlier platform. Unlike its predecessor, it is primarily aimed at the consumer market rather than the enterprise market. It was first launched in October 2010, with a release in Asia following in early 2011. The latest major release is Windows Phone 8, which was launched on October 29, 2012. With Windows Phone, Microsoft created a new user interface, featuring its Modern design language (which was formerly known as "Metro"). Additionally, the software is integrated with third-party and Microsoft services, and sets minimum requirements for the hardware on which it runs.

2.3 Microsoft SQL Server

Microsoft SQL Server [3] is a relational database management system developed by Microsoft Inc.. As a database, it is a software product whose primary function is to store and retrieve data as requested by other software applications, be it those on the same computer or those running on another computer across a network (including the Internet). There are at least a dozen different editions of Microsoft SQL Server aimed at different audiences and for different workloads (ranging from small applications that store and retrieve data on the same computer, to millions of users and computers that access huge amounts of data from the Internet at the same time). Its primary query languages are T-SQL and ANSI SQL.

2.4 Microsoft SharePoint

Microsoft SharePoint [1] is a Web application platform developed by Microsoft. First launched in 2001, SharePoint has historically been associated with intranet content management and document management, but recent versions have significantly broader capabilities. SharePoint comprises a multipurpose set of Web technologies backed by a common technical infrastructure. By default, SharePoint has a Microsoft Office-like interface, and it is closely integrated with the Office suite. The web tools are designed to be usable by non-technical users. SharePoint can be used to provide intranet portals, document & file management, collaboration, social networks, extranets, websites, enterprise search, and business intelligence. It also has system integration, process integration, and workflow automation capabilities. Microsoft has two versions of SharePoint available at no cost, but it sells premium editions with additional functionality, and provides a cloud service edition as part of their Office 365 platform (previously). The product is also sold through a cloud model by many third-party vendors.

3. Design of the System

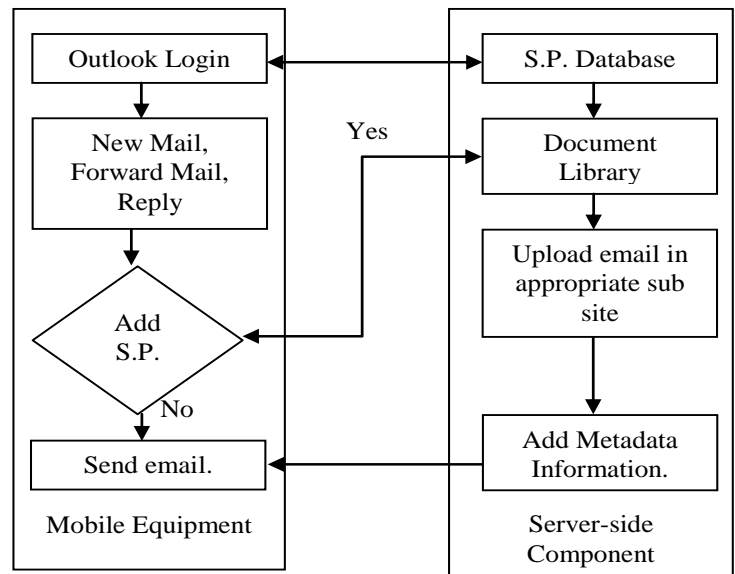


Figure1. Block diagram of the system

3.1 Mobile Equipment:

The user logs into his Outlook account. On successful login the user is logged into his SharePoint (SP) account as well. When a user sends an email (compose new email, reply and forward), the connector will prompt the user, whether to send directly or to take back up on SharePoint before sending it to the recipient. When the user selects yes, it will allow the user to save in the sub-site of his choice in the Documents Library of the S.P. Then, the user is asked to add information about the email or the attachment to be sent, if the document is already present it will not ask for details but it will ask details about previously stored document if metadata of the document is changed.

3.2 Server Side Component:

Information of the user will be stored in the SP database. The SP has three repositories naming Communication Library, Document Library and Submittal. All the communication related information will get saved in the Communication library, all email attachments it will be saved in the document library, and mapping information will be saved in the

Submittal. Server side has a database of documents, pertaining to each department's work. The application communicates with the server component when the user signs in (see Fig 1.). When the user requests for access to sub-site, he is allowed based on the access rights defined for his/her registered email in the S.P. Database and Company Database.

SP stores the Metadata information of the document, and the next time same document is sent if the metadata of the document is changed it will ask for the details otherwise sends it directly.

4. Conclusion and Future Works

The Windows phone 8 proved to be capable of supporting a corporate environment at hand. Our System allows the user to upload the document on SP while sending an email and thus reduces the time taken to externally upload the document on SP.

Future development is planned to integrate additional capabilities of Smartphone, and also to make this available in different mobile operating system like Android and IOS.

5. References

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