



Exercise: Working with Entities

Service Layer

PUBLIC

INTRODUCTION

You want to use the SAP Business One User Interface and Service Layer in your Add-On solution. In order to retrieve the data, you would like to use a simple http calls and to retrieve the data the WCF based approach.

In this exercise, you will perform the following tasks:

1. Customize the Menu items
2. Create items on the default form
3. Add a Business Partner Master Data entry
4. Retrieve the list of the existing Business Partners

PREREQUISITE:

- Use the **C Sharp** (C#) language during this exercise
- Use Microsoft Visual Studio 2005 or higher version
- Continue to work with the project finalized in previous exercise.
- This document is using the SAP Business One Studio for Microsoft Visual Studio 2015
- Use the demo database for SAP Business One, version for SAP HANA
- Credentials: User code: **manager**

GUIDELINES:

The screenshots provided here are for your reference only and may differ from the actual screenshots in your system.

1. TASK – CUSTOMIZE THE MENU ITEMS

- 1.1. Uncomment the instantiation of the Menu class, Menu item creation function call and the Menu event subscriber.
- 1.2. Change the menu collection to TB1_ServiceLayer. Refer to the function **AddMenuItems** in class *Menu*.
- 1.3. Change the menu item to TB1_BPList. Refer to the function **AddMenuItems** in class *Menu*.
- 1.4. Reflect the menu related changes in the Menu item event handled function as well

2. TASK – CREATE ITEMS ON THE DEFAULT FORM

- 2.1. Create 2 *EditText* items and 2 *StaticText* items with captions **CardCode** (*UniqueID* = *txCardCode*) and **CardName** (*UniqueID* = *txCardName*).
- 2.2. Create *ComboBox* and *StaticText* item and set the *UniqueID* to value **cbCardType** for *ComboBox*.
- 2.3. Assign default values for *ComboBox* item.
 - Value = C; Description = Customer
 - Value = S; Description = Supplier
 - Value = L; Description = Lead
- 2.4. Create *Button* and set the *UniqueID* to value **btnAddBP** and the Caption to **Add Business Partner**.
- 2.5. Create *Button* and set the *UniqueID* to value **btnGetBP** and the Caption to **Get Business Partners**.
- 2.6. Create *Grid* and set the *UniqueID* to value **grResult**.

3. TASK – ADD A BUSINESS PARTNER MASTER DATA ENTRY

- 3.1. Make the string **serviceLayerAddress** global and public in the **Program** class.
- 3.2. Create the function **RemoteSSLTLSCertificateValidate** for certificate validation.
- 3.3. Create the button click event for **btnAddBP**.

- 3.4. Define the web request details in the function **btnAddBP_ClickBefore**.
- 3.5. Include to the function **btnAddBP_ClickBefore** the session cookie to the web request, which is stored in the string `sConnectionContext`.
- 3.6. Add the web request body (function **btnAddBP_ClickBefore**).
- 3.7. Handle in function **btnAddBP_ClickBefore** the web response.
- 3.8. Hand the Business Partner Master Data by filling the `CardCode`, `CardName` and `CardType`. The response should be displayed in the `MessageBox` object.

4. TASK – RETRIEVE THE LIST OF THE EXISTING BUSINESS PARTNERS

- 4.1. Add the metadata as service or file directly by selecting “Add Service Reference” into your Microsoft Visual Studio project, the metadata will be validated automatically.
Project → Add Service Reference
- 4.2. Install NuGet package – Newtonsoft.Json
Project → Manage NuGet Packages
- 4.3. Create the button click event for **btnGetBP**.
- 4.4. Define the web request details in the function **btnGetBP_ClickBefore**.
- 4.5. Include to the function **btnGetBP_ClickBefore** the session cookie to the web request, which is stored in the string `sConnectionContext`.
- 4.6. Handle in function **btnGetBP_ClickBefore** the web response.
- 4.7. Display the results in the *Grid* object, the code can be handled in function **btnGetBP_ClickBefore**.
- 4.8. Extend the `CardCode` column in the *Grid* item with the *LinkedTextBox* object.
- 4.9. Try to get the Business Partner Records into the *grid* object.



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