



Exercise Solution: Create Menu Entries

User Interface API

PUBLIC

INTRODUCTION

In this exercise, you will perform the following tasks:

1. Add entry into the main menu (Modules)
2. Handle menu event
3. Add Context menu entry
4. Remove the menu entries

PREREQUISITE:

- This document is using the **C Sharp** (C#) language
- This document is using the Microsoft Visual Studio 2015
- Use the demo database for SAP Business One, version for SAP HANA or SAP Business One
- 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 - ADD ENTRY INTO THE MAIN MENU (MODULES)

- 1.1. Add a menu entry to the "Modules" menu called **DVD Store**. Those are the menu entries which are also displayed in the Main Menu. Add a new sub-menu to that menu entry called **DVD Availability**.

```

public static void CreateMenu()
{
    SAPboui COM. Menu moduleMenus;
    SAPboui COM. MenuItem menuItem;
    SAPboui COM. MenuItem fatherMenuItem;
    SAPboui COM. MenuCreationParams oCreationPackage;

    try
    {
        // Find the id of the menu into which you want to add your menu item
        // ModuleMenuId = "43520"
        menuItem = SBO_Application.Menus.Item("43520");

        // Get the menu collection of SAP Business One
        moduleMenus = menuItem.SubMenus;

        // Add a pop-up menu item
        oCreationPackage =
(SAPboui COM. MenuCreationParams)SBO_Application.CreateObject(SAPboui COM. BoCreatableObjectType
.cot_MenuCreationParams);
        oCreationPackage.Checked = false;
        oCreationPackage.Enabled = true;
        oCreationPackage.Type = SAPboui COM. BoMenuType.mt_POPUP;
        oCreationPackage.UniqueID = "TB1_DVDStore";
        oCreationPackage.String = "DVD Store";
        oCreationPackage.Position = -1;

        fatherMenuItem = moduleMenus.AddEx(oCreationPackage);

        // add a submenu item to the new pop-up item
        oCreationPackage =
(SAPboui COM. MenuCreationParams)SBO_Application.CreateObject(SAPboui COM. BoCreatableObjectType
.cot_MenuCreationParams);
        oCreationPackage.Checked = false;
        oCreationPackage.Enabled = true;
        oCreationPackage.Type = SAPboui COM. BoMenuType.mt_STRING;
        oCreationPackage.UniqueID = "TB1_Avail";
        oCreationPackage.String = "DVD Availability";
        oCreationPackage.Position = -1;

        menuItem = fatherMenuItem.SubMenus.AddEx(oCreationPackage);
    }
    catch (Exception)
    {
        SBO_Application.StatusBar.SetText("Menu already exists",
SAPboui COM. BoMessageTime.bmt_Short, SAPboui COM. BoStatusBarMessageType.smt_Error);
    }
}

```

2. TASK - HANDLE MENU EVENT

When you choose the menu entry, your form should be displayed.

2.1. Create a function which will handle the mandatory *MenuEvent*.

```
public static void SBO_Application_MenuEvent(ref SAPboui COM.MenuEvent pVal, out bool
BubbleEvent)
{
    BubbleEvent = true;
    if (pVal.BeforeAction && pVal.MenuUID == "TB1_Avail")
    {
        LoadFormFromXML();
    }
}
```

2.2. Create event subscriber for the previously create function before the application run will be called in the **Main** function.

```
SBO_Application.MenuEvent += new
SAPboui COM._I_ApplicationEvents_MenuEventEventHandler(SBO_Application_MenuEvent);
```

2.3. Comment the functions call **LoadFormFromXML** and **ExtendCancelButtonWithEvent** in the Main function.

```
//LoadFormFromXML();
//ExtendCancelButtonWithEvent();
```

2.4. Extend the **SetEventFilters** function with the *Menu_Click* event type.

```
oFilter = oFilters.Add(SAPboui COM. BoEventTypes.et_MENU_CLICK);
```

3. TASK - ADD CONTEXT MENU ENTRY

3.1. Add another menu only visible when your form is open. This menu should appear under the GoTo menu.

```
private static void CreateContextMenu(SAPboui COM. Form oForm)
{
    SAPboui COM.MenuCreationParams oCreationPackage;
    oCreationPackage =
(SAPboui COM.MenuCreationParams)SBO_Application.CreateObject(SAPboui COM. BoCreatableObjectType
.cot_MenuCreationParams);
    oCreationPackage.Type = SAPboui COM. BoMenuType.mt_STRING;
    oCreationPackage.UniqueID = "TB1_Remove";
    oCreationPackage.String = "Remove Menu";
    oForm.Menu.AddEx(oCreationPackage);
}
```

3.2. Call the **CreateContextMenu** function in the **LoadFormFromXML** function.
CreateContextMenu(oForm);

4. TASK - REMOVE THE MENU ENTRIES

- 4.1. Create an event handler for the Context menu entry “Remove Menu” to remove all menu entries. The **SBO_Application_MenuEvent** function needs to be extended.

```
if(pVal.BeforeAction && pVal.MenuUID == "TB1_Remove")
{
    SBO_Application.Menus.RemoveEx("TB1_Avail");
    SBO_Application.Menus.RemoveEx("TB1_DVDStore");
    SBO_Application.Menus.RemoveEx("TB1_Remove");
}
```

A similar solution can be found in the SDK UI samples (in the SDK Folder – see Appendix “SDK Installations” for more information), COM UI/05.AddingMenuItems



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