

Exercise Solution: Create Form

User Interface API

PUBLIC

INTRODUCTION

In this exercise, you will perform the following tasks:

1. Create new form
2. Create items on the form
3. Save form as an XML
4. Load the form from XML

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 - CREATE A NEW FORM

Create a new function in your Visual Studio project, which will create the form.

```
SAPboui COM. Form oForm;
SAPboui COM. FormCreationParams creati onPackage;

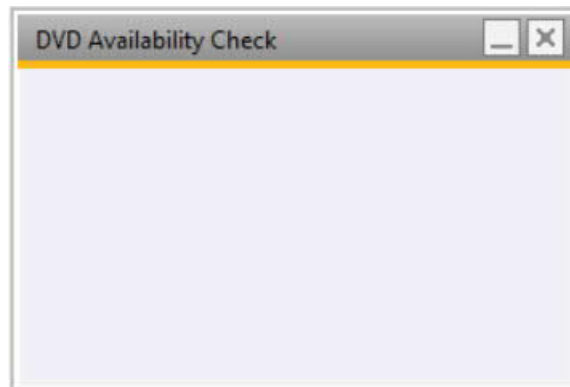
creati onPackage = (SAPboui COM. FormCreati onParams)
```

```
SB0_Appl i cati on. CreateObj ect (SAPboui COM. BoCreatabl eObj ectType. cot_FormCreati onParams);
```

```
creati onPackage. Uni queID = "TB1_DVDAvai l abi l i ty";
creati onPackage. FormType = "TB1_DVDAvai l abi l i ty";
creati onPackage. BorderStyl e = SAPboui COM. BoFormBorderStyl e. fbs_Fi xed;
```

```
oForm = SB0_Appl i cati on. Forms. AddEx(creati onPackage);
oForm. Ti tle = "DVD Avai l abi l i ty Check";
```

```
oForm. Left = 400;
oForm. Top = 100;
oForm. Cl i entWi dth = 270;
oForm. Cl i entHei ght = 154;
```



2. TASK - CREATE ITEMS ON THE FORM

The form should contain the following items:

2.1. Label fields for *DVD Name*, *DVD Aisle*, *DVD Section*, *DVD Rented*, *Rented To*

```
//create label - DVD Name
SAPboui COM. Item oItem;
SAPboui COM. StaticText oStatic;
oItem = oForm. Items. Add("Ib_Name", SAPboui COM. BoFormItemTypes. it_STATIC);
oItem. Left = 5;
oItem. Top = 20;
oItem. Width = 80;
oItem. Height = 14;
oStatic = ((SAPboui COM. StaticText)(oItem. Speci fi c));
oStatic. Capti on = "DVD Name";

//create label - DVD Aisle
oItem = oForm. Items. Add("Ib_Ai sl e", SAPboui COM. BoFormItemTypes. it_STATIC);
```

```

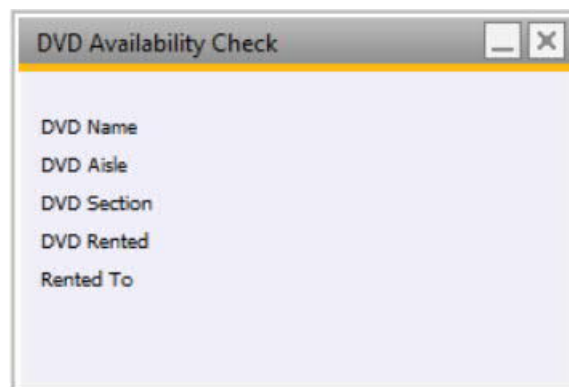
oItem.Left = 5;
oItem.Top = 39;
oItem.Width = 80;
oItem.Height = 14;
oStatic = ((SAPboui.COM.StaticText)(oItem.Speci fi c));
oStatic.Caption = "DVD Ai sle";

//create label - DVD Section
oItem = oForm.Items.Add("Ib_Secti on", SAPboui.COM.BoFormI temTypes.i t_STATIC);
oItem.Left = 5;
oItem.Top = 58;
oItem.Width = 80;
oItem.Height = 14;
oStatic = ((SAPboui.COM.StaticText)(oItem.Speci fi c));
oStatic.Caption = "DVD Section";

//create label - DVD Rented
oItem = oForm.Items.Add("Ib_Rented", SAPboui.COM.BoFormI temTypes.i t_STATIC);
oItem.Left = 5;
oItem.Top = 77;
oItem.Width = 80;
oItem.Height = 14;
oStatic = ((SAPboui.COM.StaticText)(oItem.Speci fi c));
oStatic.Caption = "DVD Rented";

//create label - Rented To
oItem = oForm.Items.Add("Ib_RentTo", SAPboui.COM.BoFormI temTypes.i t_STATIC);
oItem.Left = 5;
oItem.Top = 96;
oItem.Width = 80;
oItem.Height = 14;
oStatic = ((SAPboui.COM.StaticText)(oItem.Speci fi c));
oStatic.Caption = "Rented To";

```



2.2. Input fields for *DVD Name* (will be linked to a Choose from list), *DVD Aisle*, *DVD Section*, *DVD Rented*, *Rented To*

```

//create edit text - DVD Name
oItem = oForm.Items.Add("tx_Name", SAPboui.COM.BoFormI temTypes.i t_EDIT);
oItem.Left = 90;
oItem.Top = 20;
oItem.Width = 175;
oItem.Height = 14;
oItem.LinkTo = "Ib_Name";

```

```

//create edit text - DVD Aisle
oItem = oForm.Items.Add("tx_Aisle", SAPboui.COM.BoFormItemTypes.it_EDIT);
oItem.Left = 90;
oItem.Top = 39;
oItem.Width = 175;
oItem.Height = 14;
oItem.LinkTo = "lb_Aisle";

//create edit text - DVD Section
oItem = oForm.Items.Add("tx_Section", SAPboui.COM.BoFormItemTypes.it_EDIT);
oItem.Left = 90;
oItem.Top = 58;
oItem.Width = 175;
oItem.Height = 14;
oItem.LinkTo = "lb_Section";

//create edit text - DVD Rented
oItem = oForm.Items.Add("tx_Rented", SAPboui.COM.BoFormItemTypes.it_EDIT);
oItem.Left = 90;
oItem.Top = 77;
oItem.Width = 175;
oItem.Height = 14;
oForm.Visible = true;
oItem.LinkTo = "lb_Rented";

//create edit text - Rented To
oItem = oForm.Items.Add("tx_RentTo", SAPboui.COM.BoFormItemTypes.it_EDIT);
oItem.Left = 90;
oItem.Top = 96;
oItem.Width = 175;
oItem.Height = 14;
oItem.LinkTo = "lb_RentTo";

```

The screenshot shows a dialog box titled "DVD Availability Check". It contains five input fields arranged vertically, each with a label to its left: "DVD Name", "DVD Aisle", "DVD Section", "DVD Rented", and "Rented To". The "DVD Name" field is highlighted with a yellow background. The dialog box has a standard Windows-style title bar with minimize, maximize, and close buttons.

2.3. Buttons OK, Cancel, Rent DVD

```

oItem.LinkTo = "lb_RentTo";

//create OK button
SAPboui.COM.Button oButton;

oItem = oForm.Items.Add("1", SAPboui.COM.BoFormItemTypes.it_BUTTON);
oItem.Left = 5;
oItem.Top = 130;
oItem.Width = 65;

```

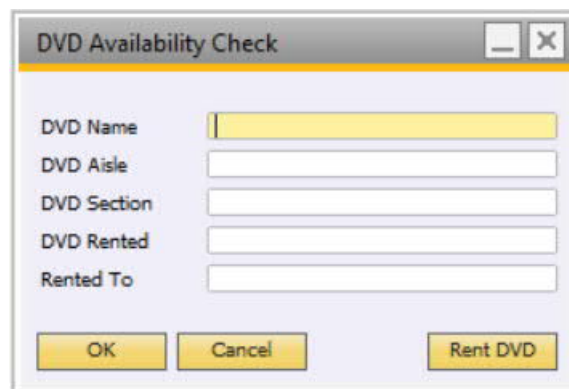
```

oItem.Height = 19;

//create Cancel button
oItem = oForm.Items.Add("2", SAPbouiCOM.BoFormItemTypes.it_BUTTON);
oItem.Left = 75;
oItem.Top = 130;
oItem.Width = 65;
oItem.Height = 19;

//create DVD rent button
oItem = oForm.Items.Add("Rent", SAPbouiCOM.BoFormItemTypes.it_BUTTON);
oItem.Left = 200;
oItem.Top = 130;
oItem.Width = 65;
oItem.Height = 19;
oButton = (SAPbouiCOM.Button)oItem.Specific;
oButton.Caption = "Rent DVD";

```



2.4. Make the form visible

```
oForm.Visible = true;
```

3. TASK - SAVE FORM AS AN XML

Enhance your program so that the form will be saved as an XML file. Create a new function in your Visual Studio project, which will save the created form.

```

SAPbouiCOM.Form oForm;
oForm = SBO_Application.Forms.GetForm("TB1_DVDAvailability", 0);

System.Xml.XmlDocument oXMLDoc = new System.Xml.XmlDocument();
string sXMLString = oForm.GetAsXML();
oXMLDoc.LoadXml(sXMLString);
oXMLDoc.Save("DVDAvailability.xml");

```

4. TASK - LOAD THE FORM FROM XML

- 4.1. Change your program. The form should now be loaded from the XML file you have created in the last step. Display the form in the SAP Business One window

```
SAPboui.COM. Form oForm;  
System.Xml.XmlDocument oXMLDoc = new System.Xml.XmlDocument();  
SAPboui.COM. FormCreationParams creationPackage;  
  
oXMLDoc.Load("DVDAvailability.xml");  
creationPackage =  
(SAPboui.COM. FormCreationParams)SBO_Application.CreateObject(SAPboui.COM. BoCreatableObjectType  
.cot_FormCreationParams);  
creationPackage.XmlData = oXMLDoc.InnerXml;  
  
oForm = SBO_Application.Forms.AddEx(creationPackage);  
oForm.Visible = true;
```

- 4.2. Comment the functions, which are creating the form and saving the form to the XML file. Your application should use now only the form creation function from the XML file.

Similar solution can be found in the SDK UI samples (in the SDK Folder – see Appendix “SDK Installations” for more information), COM UI/03.SimpleForm, 06.MatrixAndDataSources and 04.WorkingWithXML



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. Please see

<http://www.sap.com/corporate-en/legal/copyright/index.epx#trademark> for additional trademark information and notices. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.

National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.