

# Creating Custom MXML Components

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## Move code to a component

1. In Flex Builder from the **Navigator** view, right click on the **src** folder and select **New > Folder**.
2. Name the new folder **components**.
3. Right click on the **components** folder and select **New > MXML Component**.
4. The **Filename** is `ReservationForm`.
5. It is **Based on** `VBox`.
6. Remove the width and height values.
7. Click **Finish**.
8. In **AdobeODT.mxml** locate the **Form** container.
9. Copy the **Form** and paste it into the **ReservationForm.mxml** file.
10. Delete the **Form** in **AdobeODT.mxml** and save the file.
11. In **ReservationForm.mxml**, move the **borderStyle**, **borderColor**, **dropShadowEnabled**, **dropShadowColor**, **shadowDirection** and **shadowDistance** properties and values from the beginning **Form** tag to the beginning **VBox** tag.
12. Remove the **x**, **y**, **width** and **height** properties from the **Form** container.

Your code should appear as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<mx:VBox xmlns:mx="http://www.adobe.com/2006/mxml"
    borderColor="#D4D4D4" borderStyle="solid"
    dropShadowColor="#B3B3B3" dropShadowEnabled="true"
    shadowDirection="right" shadowDistance="10">
    <mx:Form>
        <mx:FormHeading label="Contact Information"/>
        <mx:FormItem label="Full Name:">
```

```

        <mx:TextInput id="fullname"/>
    </mx:FormItem>
    <mx:FormItem label="Address:">
        <mx:TextInput id="address"/>
    </mx:FormItem>
    <mx:FormItem label="City:">
        <mx:TextInput id="city"/>
    </mx:FormItem>
    <mx:FormItem label="State:">
        <mx:TextInput id="state"/>
    </mx:FormItem>
    <mx:FormItem label="Postal Code:">
        <mx:TextInput id="postalcode"/>
    </mx:FormItem>
    <mx:FormItem label="Phone:">
        <mx:TextInput id="phone"/>
    </mx:FormItem>
    <mx:FormHeading label="Room Information"/>
    <mx:FormItem label="Date Needed:">
        <mx:DateField id="dateNeeded" />
    </mx:FormItem>
    <mx:FormItem>
        <mx:Button label="Submit"/>
    </mx:FormItem>
</mx:Form>
</mx:VBox>

```

**13. Save the file.**

## Use the component in the application

14. Return to **AdobeODT.mxml** file and locate the **Application** tag.
15. Create a new namespace named `comp` that points to all the files in the `components` folder.

```
<mx:Application
    xmlns:mx="http://www.adobe.com/2006/mxml"
    layout="vertical"
    backgroundColor="#FFFFFF"
    horizontalAlign="left" paddingTop="5"
    creationComplete="init()"
    xmlns:comp="components.*">
```

16. Locate the **List** control, after the **List** control add the `ReservationForm` component from the `comp` namespace.

```
<comp:ReservationForm />
```

17. Add the following properties to the **ReservationForm** tag:
  - Add an `x` property with the value `439` and a `y` property with the value `53`.
  - Add a `width` property with the value of `318` and `height` property with the value of `529`.

```
<comp:ReservationForm x="439" y="53"
    width="318" height="529"/>
```

18. Save the file and run.

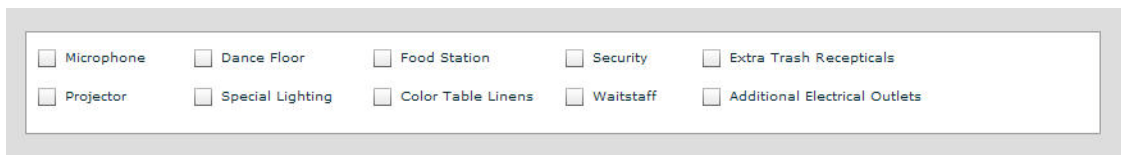
You should not see a change in the display of the application.

## Create a new component

19. In the **Navigator** view, right click on the **components** folder and select **New > MXML Component**.

20. The **Filename** is Options .
21. It is **Based on** Canvas .
22. The **width** is 840 and the **height** is 80.
23. Click **Finish**.
24. Change to the **Flex Design** view.
25. From the **Components** view, drag a CheckBox control to the stage.
26. In the **Flex Properties** view, enter these properties:
  - **Label:** Microphone **X:** 10 **Y:** 10
27. Drag the following **CheckBox** controls to the stage and add their respective properties:
  - **Label:** Projector **X:** 10 **Y:** 40
  - **Label:** Dance Floor **X:** 132 **Y:** 10
  - **Label:** Special Lighting **X:** 132 **Y:** 40
  - **Label:** Food Station **X:** 272 **Y:** 10
  - **Label:** Color Table Linens **X:** 272 **Y:** 40
  - **Label:** Security **X:** 422 **Y:** 10
  - **Label:** Waitstaff **X:** 422 **Y:** 40
  - **Label:** Extra Trash Receptacles **X:** 529 **Y:** 10
  - **Label:** Additional Electrical Outlets **X:** 529 **Y:** 40

Your components should display similar to this in **Flex Design** view:



28. Save the file.
29. Change to the **Source** view.

## Add new component to application

30. Return to **AdobeODT.mxml** and locate the **Canvas** container.
31. Add a `height` property having a value of `100%` to the **Canvas** tag.
32. After the beginning **Canvas** tag, add a **Label** control with an `x` property with a value of `0` and a `text` property with a value of `Please select any additional amenities needed for your room. Our staff will contact you to finalize your reservation.`
33. After the **Label** tag, add the **Options** component from the `comp` namespace.
34. Add an `x` property of `0` and a `y` property of `26`.

Your code should look as follows:

```
<mx:Canvas height="100%">
    <mx:Label x="0"
        text="Please select any additional amenities
        needed for your room. Our staff will contact you to
        finalize your reservation." />
    <comp:Options x="0" y="26" />
```

...

35. Change the `x` property value of the **Rooms Available Label** control to `0` (zero) and the `y` property value to `116`.

```
<mx:Label text="Rooms Available:" x="0" y="116"/>
```

36. Change the `y` property of the **List** control to `142`.
37. Change the `y` property of the **ReservationForm** component to `142`.
38. Save the file and run.

Your application should appear as follows:

## XYZ Convention Center

111 49th Ave, Denver, CO 80634 Phone: 303-555-1212 Fax: 303-555-1234

### Room Reservation System

Please select any additional amenities needed for your room. Our staff will contact you to finalize your reservation.

Microphone   
 Dance Floor   
 Food Station   
 Security   
 Extra Trash Recepticals  
 Projector   
 Special Lighting   
 Color Table Linens   
 Waitstaff   
 Additional Electrical Outlets


Rooms Available:

- Colorado Room
- Mile High Room
- Bronco Room
- Greeley Room
- Boulder Room
- Denver Room

#### Contact Information

Full Name:   
Address:   
City:   
State:   
Postal Code:   
Phone:

#### Room Information

Date Needed:  

## Create a property in the custom component

39. Return to the **ReservationForm** component and add a **Script** block after the opening **VBox** tag.

40. Within the **Script** block import the **ArrayCollection** class.

```
import mx.collections.ArrayCollection;
```

41. Create a public variable named **selectedOptions** datatyped as **ArrayCollection**.

```
public var selectedOptions:ArrayCollection;
```

42. Make the **selectedOptions** variable **Bindable**.

```
[Bindable] public var selectedOptions:ArrayCollection;
```

43. Save the file.