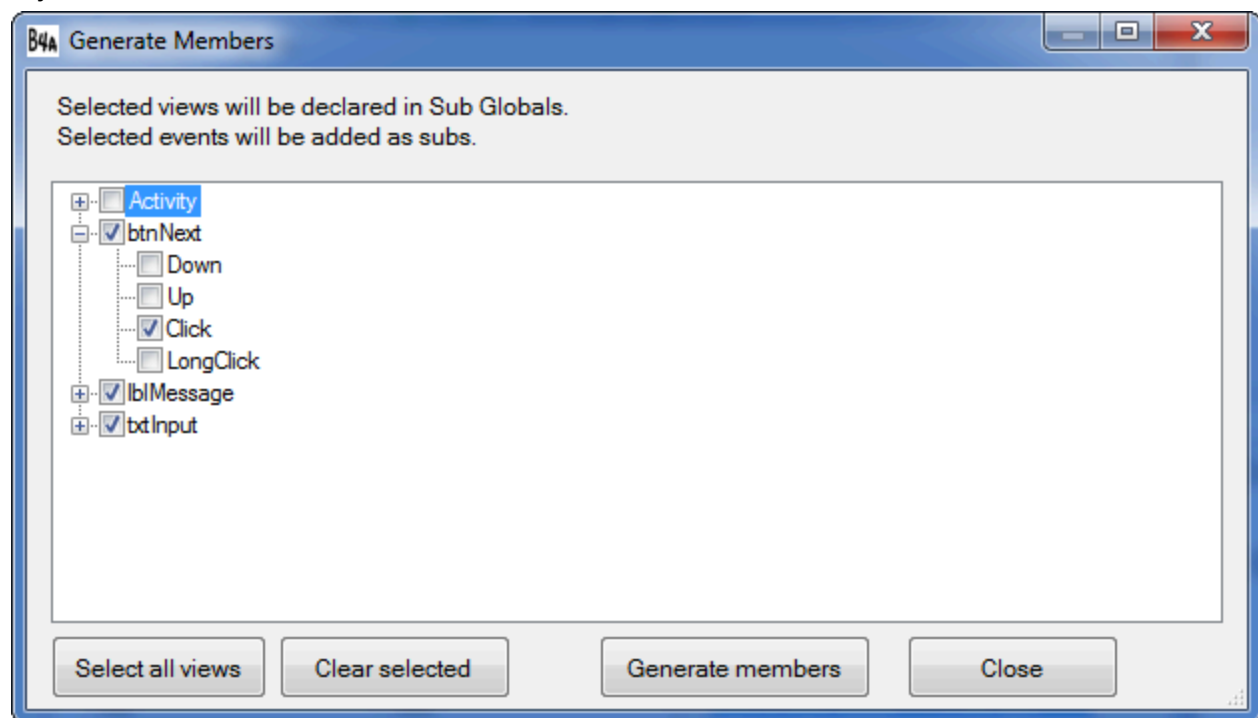


In this tutorial, we will be creating few activities.

1. Run Basic4Android.
2. Create New. Save it as "MyProject".
3. By default, you see "Main" activity.
4. Goto Menu/Project/Add Module/Activity Module. Enter a name "Info" for this module. You will see a second tab added beside "Main" tab.
5. We will make a login page on the "Main" activity. Click Designer and design layout as follows:

txtInput
btnNext
lblMessage

6. After layout process is done, click menu/tools/generate members. Click the name for all objects and for btnNext, click the event "click" as well.



7. Close Designer window, save the layout as "main".
8. Edit "Sub Activity_Create()" and "Sub btnNext_Click" as follows:

Sub Activity_Create(FirstTime As Boolean)

```
        activity.LoadLayout("main")  
End Sub
```

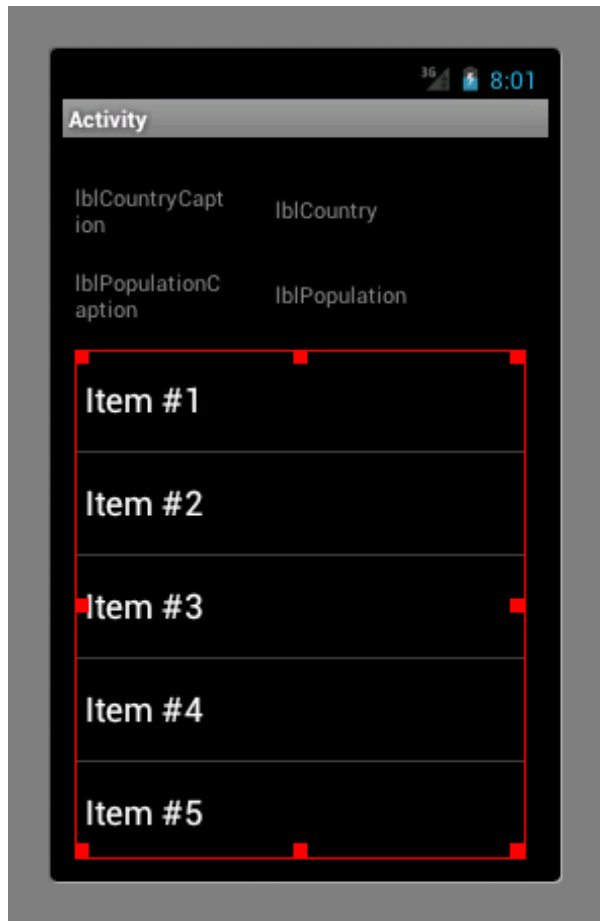
```
Sub btnNext_Click  
    StartActivity("Info")  
End Sub
```

9.Run the program and click the button. Observe the outcome.

10. Stop the program. Re-edit Sub btnNext_Click as follows. Run and enter a) 1234 b)4567. Observe the outcome.

```
Sub btnNext_Click  
    If txtInput.Text="1234" Then  
        StartActivity("Info")  
    End If  
End Sub
```

11. We will be adding a listview object on the page "info". Click the "Info" tab. Goto Designer Window , Goto File/New and create the following objects.



12. Copy codes from the previous Android-Php-MySQL project.

```
Sub Process_Globals
    Dim hc As HttpClient
    Dim COUNTRIES_LIST, COUNTRY_POPULATION As Int
    COUNTRIES_LIST = 1
    COUNTRY_POPULATION = 2
End Sub
```

```
Sub Globals
    Type TwoLines (First As String, Second As String)
        Dim lblPopulation As Label
        Dim lstView As ListView
        Dim lblCountry As Label
        Dim lblCountryCaption As Label
        Dim lblPopulationCaption As Label
    End Type
```

End Sub

Sub Activity_Create(FirstTime As Boolean)

 If FirstTime Then

 hc.Initialize("hc")

 End If

 Activity.LoadLayout("info")

 FetchCountriesList

End Sub

Sub FetchCountriesList

 ProgressDialogShow("Fetching list of countries")

 'Gets all the available countries

 ExecuteRemoteQuery("SELECT name, id FROM countries ORDER BY id",
COUNTRIES_LIST)

End Sub

Sub IstView_ItemClick (Position As Int, Value As Object)

 If IsBackgroundTaskRunning(hc, COUNTRY_POPULATION) Then

 ToastMessageShow("Wait for previous call to finish.", False)

 Return

 End If

 Dim tl As TwoLines

 tl = Value

 lblCountry.Text = tl.Second

 lblPopulation.Text = "Calling server..."

 ExecuteRemoteQuery("SELECT population FROM countries WHERE id='" & tl.First & "'",
COUNTRY_POPULATION)

End Sub

Sub ExecuteRemoteQuery(Query As String, TaskId As Int)

 Dim req As HttpRequest

 req.InitializePost2("http://droid.razoph.com/droidshowcountry.php", query.GetBytes("UTF8"))

 hc.Execute(req, TaskId)

End Sub

Sub hc_ResponseError (Response As HttpResponse, Reason As String, StatusCode As Int,
TaskId As Int)

```

Log("Error: " & Reason & ", StatusCode: " & StatusCode)
If Response <> Null Then
    Log(Response.GetString("UTF8"))
    Response.Release
End If
ProgressDialogHide
End Sub

```

```

Sub hc_ResponseSuccess (Response As HttpResponseMessage, TaskId As Int)
    Dim res As String
    res = Response.GetString("UTF8")
    Log("Response from server: " & res)
    Dim parser As JSONParser
    parser.Initialize(res)
    Select TaskId
        Case COUNTRIES_LIST
            'add the countries to the ListView
            Dim countries As List
            countries = parser.NextArray 'returns a list with maps
            For i = 0 To countries.Size - 1
                Dim m As Map
                m = countries.Get(i)
                'We are using a custom type named TwoLines (declared in Sub Globals).
                'It allows us to later get the two values when the user presses on an item.
                Dim tl As TwoLines
                tl.First = m.Get("id")
                tl.Second = m.Get("name")
                lstView.AddTwoLines2(tl.First, tl.Second, tl)
            Next
            ProgressDialogHide
        Case COUNTRY_POPULATION
            Dim l As List
            l = parser.NextArray
            If l.Size = 0 Then
                lblPopulation.Text = "N/A"
            Else
                Dim m As Map
                m = l.Get(0)
                lblPopulation.Text = NumberFormat2(m.Get("population"),0, 0, 0, True) & " (K)"
            End If
    End Select
    response.Release
End Sub

```

End Sub

EXTRA CREDIT:

We can modify the codes on the main activity so that it also connect to database server and check for valid user. The following codes are raw but can be refined to achieve this objective.

'Activity module

Sub Process_Globals

Dim hc1 As HttpClient

'These global variables will be declared once when the application starts.

'These variables can be accessed from all modules.

End Sub

Sub Globals

'These global variables will be redeclared each time the activity is created.

'These variables can only be accessed from this module.

Dim btnNext As Button

Dim lblMessage As Label

Dim txtInput As EditText

Dim intLogin As Int

End Sub

Sub Activity_Create(FirstTime As Boolean)

activity.LoadLayout("main")

End Sub

Sub Activity_Resume

End Sub

Sub Activity_Pause (UserClosed As Boolean)

End Sub

```

Sub btnNext_Click
    intLogin=0
    If txtInput.Text<>Null Then
        ExecuteRemoteQuery("SELECT username FROM user WHERE
Password="" & txtInput.Text & """, 1)
        MsgBox (intLogin,"log")
        If intLogin=1 Then StartActivity("Info")
    End If

```

```

End Sub

```

```

Sub ExecuteRemoteQuery(Query As String, TaskId As Int)
    Dim req As HttpRequest
    MsgBox(query,"debug")
    req.InitializePost2("http://droid.razoph.com/droidshowcountry.php",
query.GetBytes("UTF8"))
    hc1.Execute(req, TaskId)
End Sub

```

```

Sub hc1_ResponseError (Response As HttpResponse, Reason As String, StatusCode As
Int, TaskId As Int)
    Log("Error: " & Reason & ", StatusCode: " & StatusCode)
    If Response <> Null Then
        Log(Response.GetString("UTF8"))
        Response.Release
    End If

```

```

End Sub

```

```

Sub hc1_ResponseSuccess (Response As HttpResponse, TaskId As Int)
    Dim res As String
    res = Response.GetString("UTF8")
    Log("Response from server: " & res)
    Dim parser As JSONParser
    parser.Initialize(res)
    Select TaskId
        Case 1

```

```
'add the countries to the ListView
Dim userlist As List
userlist = parser.NextArray 'returns a list with maps
For i = 0 To userlist.Size - 1
    Dim m As Map
    m = userlist.Get(i)
    'We are using a custom type named TwoLines (declared in Sub Globals).
    'It allows us to later get the two values when the user presses on an item.
    Dim tl As TwoLines
    tl.First = m.Get("Password")
        MsgBox (tl.First,"debug")
    tl.Second = m.Get("username")
    'ListView.AddTwoLines2(tl.First, tl.Second, tl)
        intLogin=1
Next
End Select
response.Release

End Sub
```