Chapter 28: Contact Picker - Xamarin Forms (Android and iOS)

Section 28.1: contact_picker.cs

```
using System;

using Xamarin.Forms;

namespace contact_picker
{
    public class App : Application
    {
        public App ()
        {
            // The root page of your application
            MainPage = new MyPage();
        }

        protected override void OnStart ()
        {
            // Handle when your app starts
        }

        protected override void OnSleep ()
        {
            // Handle when your app sleeps
        }

        protected override void OnResume ()
        {
            // Handle when your app resumes
        }
    }
}
```

Section 28.2: MyPage.cs

```
using System;

using Xamarin.Forms;

namespace contact_picker
{
    public class MyPage : ContentPage
    {
        Button button;
        public MyPage ()
        {
            button = new Button {
                Text = "choose contact"
            };

            button.Clicked += async (object sender, EventArgs e) => {

                    if (Device.OS == TargetPlatform.iOS) {
                        await Navigation.PushModalAsync (new ChooseContactPage ());
                        }
```

```
                    else if (Device.OS == TargetPlatform.Android)
                    {
                        MessagingCenter.Send (this, "android_choose_contact", "number1");
                    }


            };

            Content = new StackLayout {
                Children = {
                    new Label { Text = "Hello ContentPage" },
                    button
                }
            };
        }

        protected override void OnSizeAllocated (double width, double height)
        {
            base.OnSizeAllocated (width, height);

            MessagingCenter.Subscribe<MyPage, string> (this, "num_select", (sender, arg) => {
                DisplayAlert ("contact", arg, "OK");
            });

        }
    }
}
```

Section 28.3: ChooseContactPicker.cs

```
using System;
using Xamarin.Forms;

namespace contact_picker
{
    public class ChooseContactPage : ContentPage
    {
        public ChooseContactPage ()
        {

        }
    }
}
```

Section 28.4: ChooseContactActivity.cs

```
using Android.App;
using Android.OS;
using Android.Content;
using Android.Database;
using Xamarin.Forms;

namespace contact_picker.Droid
{

    [Activity (Label = "ChooseContactActivity")]

    public class ChooseContactActivity : Activity
    {
        public string type_number = "";
```

```
        protected override void OnCreate (Bundle savedInstanceState)
        {

            base.OnCreate (savedInstanceState);

            Intent intent = new Intent(Intent.ActionPick,
Android.Provider.ContactsContract.CommonDataKinds.Phone.ContentUri);
            StartActivityForResult(intent, 1);
        }

        protected override void OnActivityResult (int requestCode, Result resultCode, Intent data)
        {
            // TODO Auto-generated method stub

            base.OnActivityResult (requestCode, resultCode, data);
            if (requestCode == 1) {
                if (resultCode == Result.Ok) {

                    Android.Net.Uri contactData = data.Data;
                    ICursor cursor = ContentResolver.Query(contactData, null, null, null, null);

                    cursor.MoveToFirst();

                    string number =
cursor.GetString(cursor.GetColumnIndexOrThrow(Android.Provider.ContactsContract.CommonDataKinds.Pho
ne.Number));


                    var twopage_renderer = new MyPage();
                    MessagingCenter.Send<MyPage, string> (twopage_renderer, "num_select", number);
                    Finish ();
                    Xamarin.Forms.Application.Current.MainPage.Navigation.PopModalAsync ();


                }
                else if (resultCode == Result.Canceled)
                {
                    Finish ();
                }
            }
        }
    }
}
```

Section 28.5: MainActivity.cs

```
using System;

using Android.App;
using Android.Content;
using Android.Content.PM;
using Android.Runtime;
using Android.Views;
using Android.Widget;
using Android.OS;
using Xamarin.Forms;

namespace contact_picker.Droid
{
    [Activity (Label = "contact_picker.Droid", Icon = "@drawable/icon", MainLauncher = true,
ConfigurationChanges = ConfigChanges.ScreenSize | ConfigChanges.Orientation)]
```

```
    public class MainActivity : global::Xamarin.Forms.Platform.Android.FormsApplicationActivity
    {
        protected override void OnCreate (Bundle bundle)
        {
            base.OnCreate (bundle);

            global::Xamarin.Forms.Forms.Init (this, bundle);

            LoadApplication (new App ());


            MessagingCenter.Subscribe<MyPage, string>(this, "android_choose_contact", (sender,
args) => {
                Intent i = new Intent (Android.App.Application.Context,
typeof(ChooseContactActivity));
                i.PutExtra ("number1", args);
                StartActivity (i);
            });
        }
    }
}
```

Section 28.6: ChooseContactRenderer.cs

```
using UIKit;
using AddressBookUI;
using Xamarin.Forms;
using Xamarin.Forms.Platform.iOS;
using contact_picker;
using contact_picker.iOS;


[assembly: ExportRenderer (typeof(ChooseContactPage), typeof(ChooseContactRenderer))]

namespace contact_picker.iOS
{
    public partial class ChooseContactRenderer : PageRenderer
    {
        ABPeoplePickerNavigationController _contactController;

        public string type_number;

        protected override void OnElementChanged (VisualElementChangedEventArgs e)
        {
            base.OnElementChanged (e);

            var page = e.NewElement as ChooseContactPage;

            if (e.OldElement != null || Element == null) {
                return;

            }

        }

        public override void ViewDidLoad ()
        {
            base.ViewDidLoad ();

            _contactController = new ABPeoplePickerNavigationController ();
```

```
            this.PresentModalViewController (_contactController, true); //display contact chooser


            _contactController.Cancelled += delegate {
                Xamarin.Forms.Application.Current.MainPage.Navigation.PopModalAsync ();

                this.DismissModalViewController (true); };

            _contactController.SelectPerson2 += delegate(object sender,
ABPeoplePickerSelectPerson2EventArgs e) {

                var getphones = e.Person.GetPhones();
                string number = "";

                if (getphones == null)
                {
                    number = "Nothing";
                }
                else if (getphones.Count > 1)
                {
                    //il ya plus de 2 num de telephone
                    foreach(var t in getphones)
                    {
                        number = t.Value + "/" + number;
                    }
                }
                else if (getphones.Count == 1)
                {
                    //il ya 1 num de telephone
                    foreach(var t in getphones)
                    {
                        number = t.Value;
                    }
                }


                Xamarin.Forms.Application.Current.MainPage.Navigation.PopModalAsync ();


                var twopage_renderer = new MyPage();
                MessagingCenter.Send<MyPage, string> (twopage_renderer, "num_select", number);
                this.DismissModalViewController (true);



            };
        }

        public override void ViewDidUnload ()
        {
            base.ViewDidUnload ();

            // Clear any references to subviews of the main view in order to
            // allow the Garbage Collector to collect them sooner.
            //
            // e.g. myOutlet.Dispose (); myOutlet = null;

            this.DismissModalViewController (true);
        }

        public override bool ShouldAutorotateToInterfaceOrientation (UIInterfaceOrientation
toInterfaceOrientation)
```

```
        {
            // Return true for supported orientations
            return (toInterfaceOrientation != UIInterfaceOrientation.PortraitUpsideDown);
        }
    }
}
```