Good Afternoon

It’s always good to start off with an excuse.

Yesterday, I did a 4 hour workshop in a room that was rather warm.

When I woke up today, my voice was about half of normal.

And while it’s better this afternoon …

I can’t guarantee it will last the entire hour.

So I hope you understand
and that these cute pictures
of my dogs make up for it.

A Lap Around Xamarin

Douglas Starnes
June 2, 2017
Music City Code

Why? What? Who? When? Where?

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Pronounced ‘Zamarin’ (think ‘xylophone’)

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//build 2016

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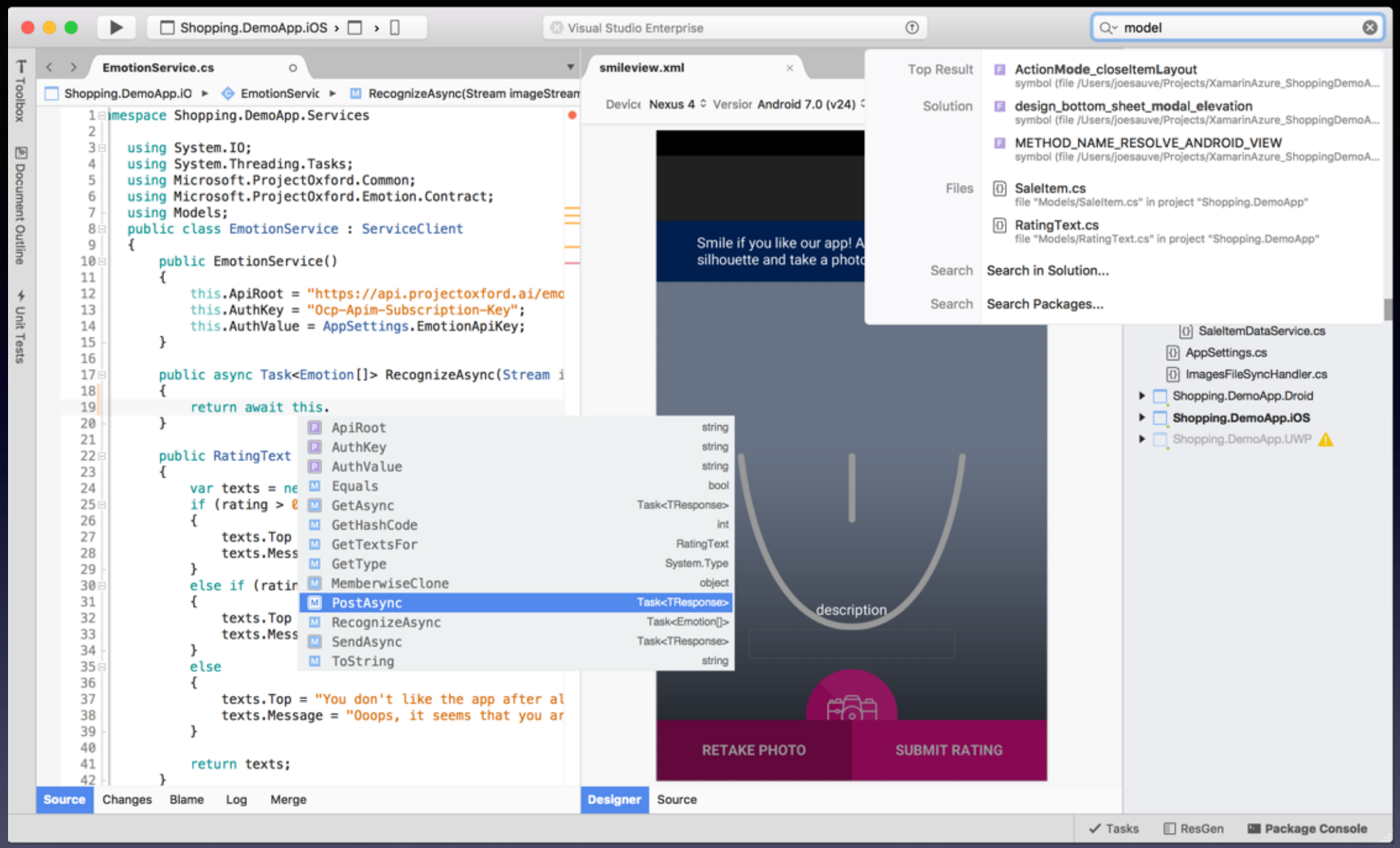

Visual Studio for Mac

(yes, for Mac!)

```
class ViewController: UIViewController {
    var data = ["iOS", "Android", "Xamarin", "UWP", "Ionic", "NativeScript", “PhoneGap"]
    // lifecycle events here
}

extension ViewController: UITableViewDataSource {
    func numberOfSections(in tableView: UITableView) -> Int {
        return 1
    }

    func tableView(_ tableView: UITableView, numberOfRowsInSection section: Int) -> Int {
        return data.count
    }

    func tableView(_ tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {
        let cell = tableView.dequeueReusableCell(withIdentifier: "cellId", for: indexPath)
        cell.textLabel?.text = data[indexPath.row]
        return cell
    }
}
```

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class ViewController: UIViewController {
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}
```

```
public partial class ViewController : UIViewController
{
  public override void ViewDidLoad()
  {
    base.ViewDidLoad();
    // Perform any additional setup after loading the view, typically from a nib.
    tableView.Source = new DemoSource();
  }
}

public class DemoSource : UITableViewSource
{
  private List<String> data = new List<String>()
  {
    "iOS", "Android", "Xamarin", "UWP", "Ionic", "NativeScript", "PhoneGap"
  };

  public DemoSource()
  {
  }

  public override UITableViewCell GetCell(UITableView tableView, NSIndexPath indexPath)
  {
    var cell = tableView.DequeueReusableCell("cellId", indexPath);
    cell.TextLabel.Text = data[indexPath.Row];
    return cell;
  }

  public override nint RowsInSection(UITableView tableview, nint section)
  {
    return data.Count;
  }
}
```

```
Button button = (Button)findViewById(R.id.btnClickMe);

button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // more code here
    }
});
```

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Button button = (Button)findViewById(R.id.btnClickMe);

button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // more code here
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});
```

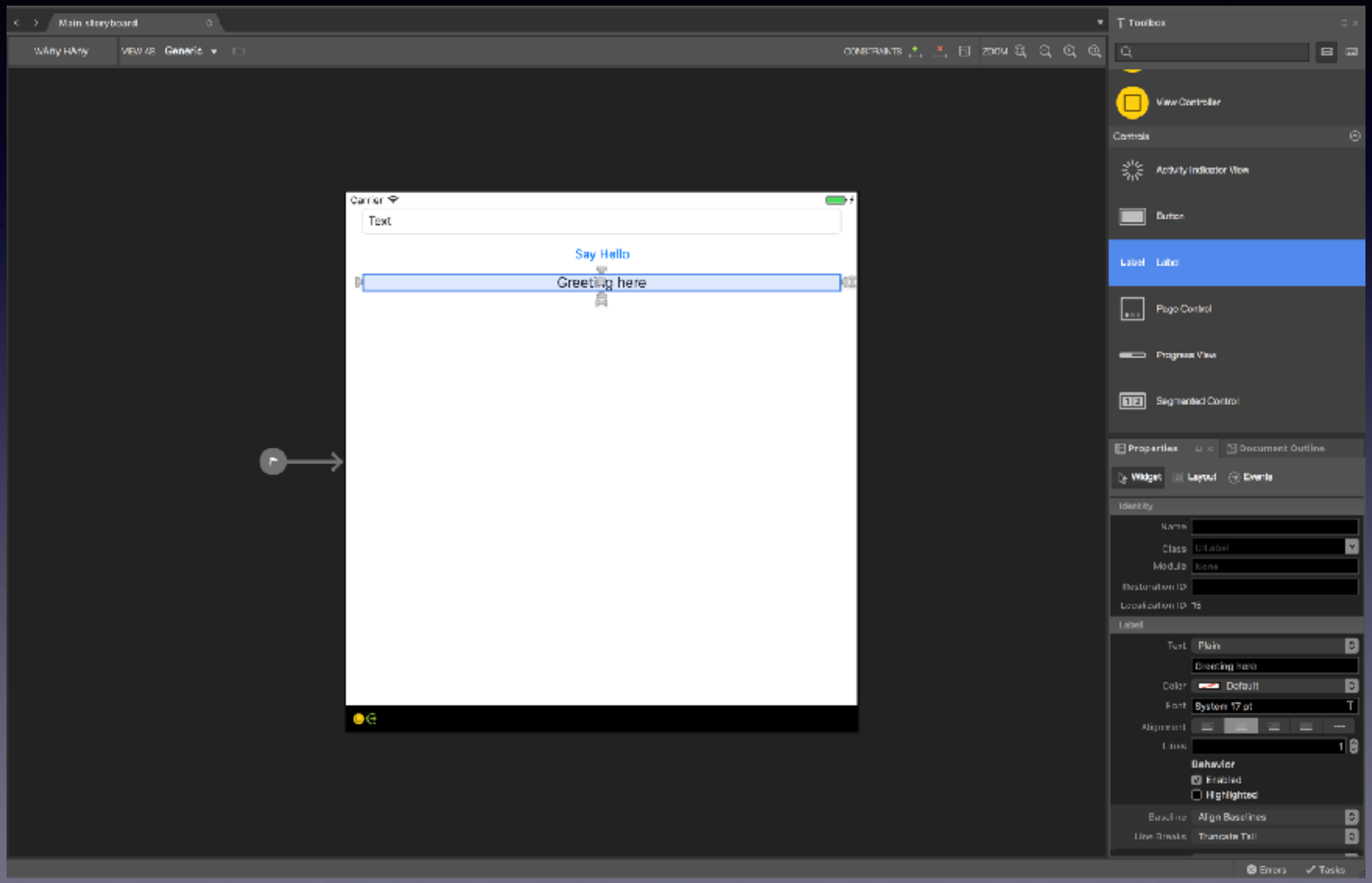
```
protected override void OnCreate(Bundle savedInstanceState)
{
      base.OnCreate(savedInstanceState);

      // Set our view from the "main" layout resource
      SetContentView(Resource.Layout.Main);

      // Get our button from the layout resource,
      // and attach an event to it
      Button button = FindViewById<Button>(Resource.Id.btnClickMe);

      button.Click += delegate { /* More code here */ };
}
```

Designing a UI



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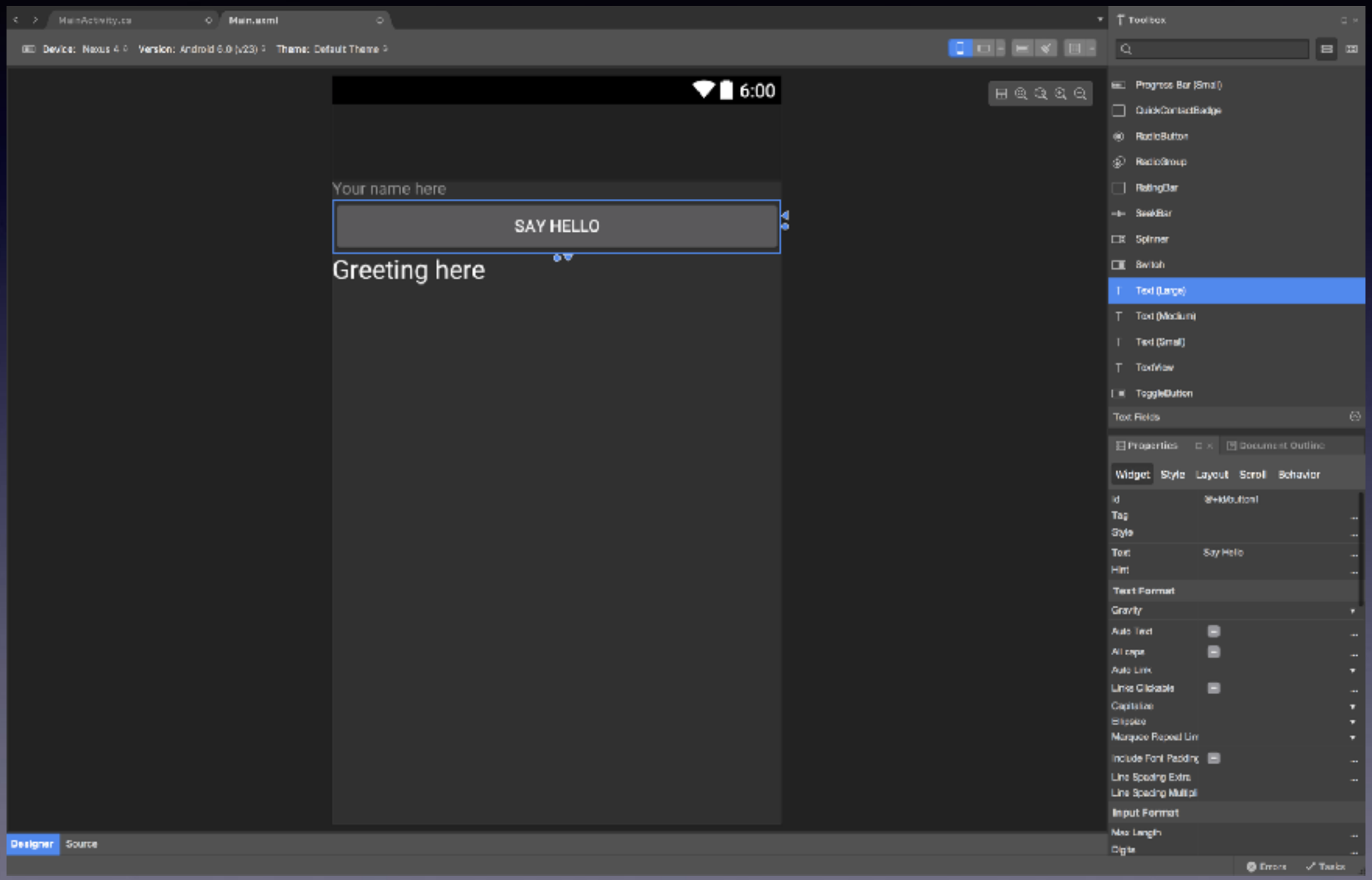

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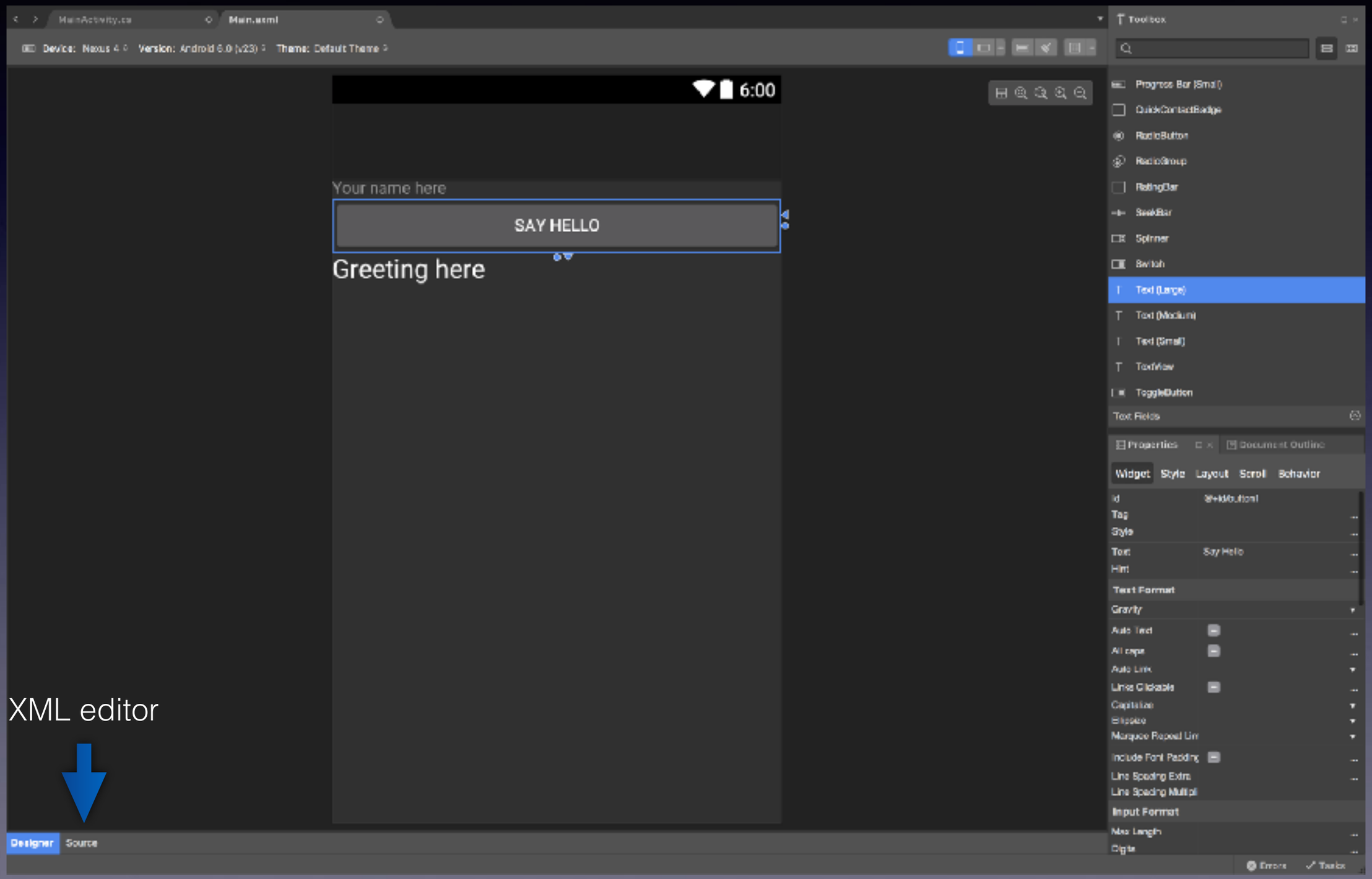

XML editor

```
class MathOps {
  int Add() {
    return a + b;
  }

  int Subtract() {
    return a - b;
  }

  // ...
}
```

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```

```
addButton.TouchUpInside += (sender, e) =>
{
  var mathOps = new MathOps(getOperand1(), getOperand2());
  var sum = mathOps.Add();
  txtResult.Text = $"{sum}";
};
```

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class MathOps {
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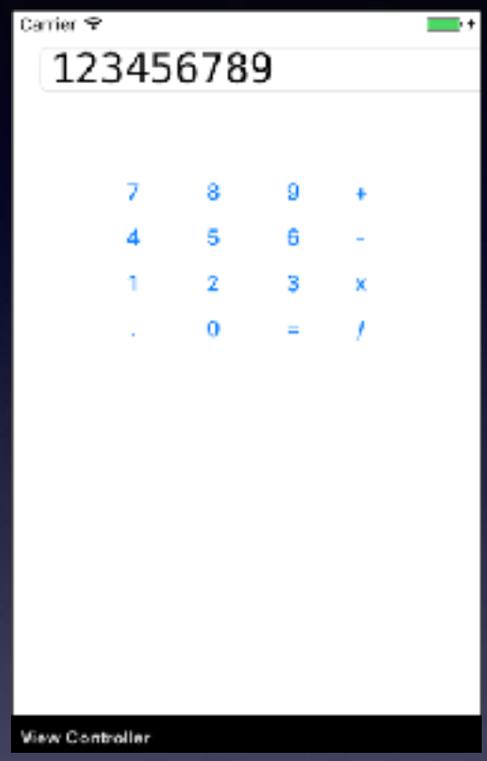


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Static previewer (YMMV with Android)

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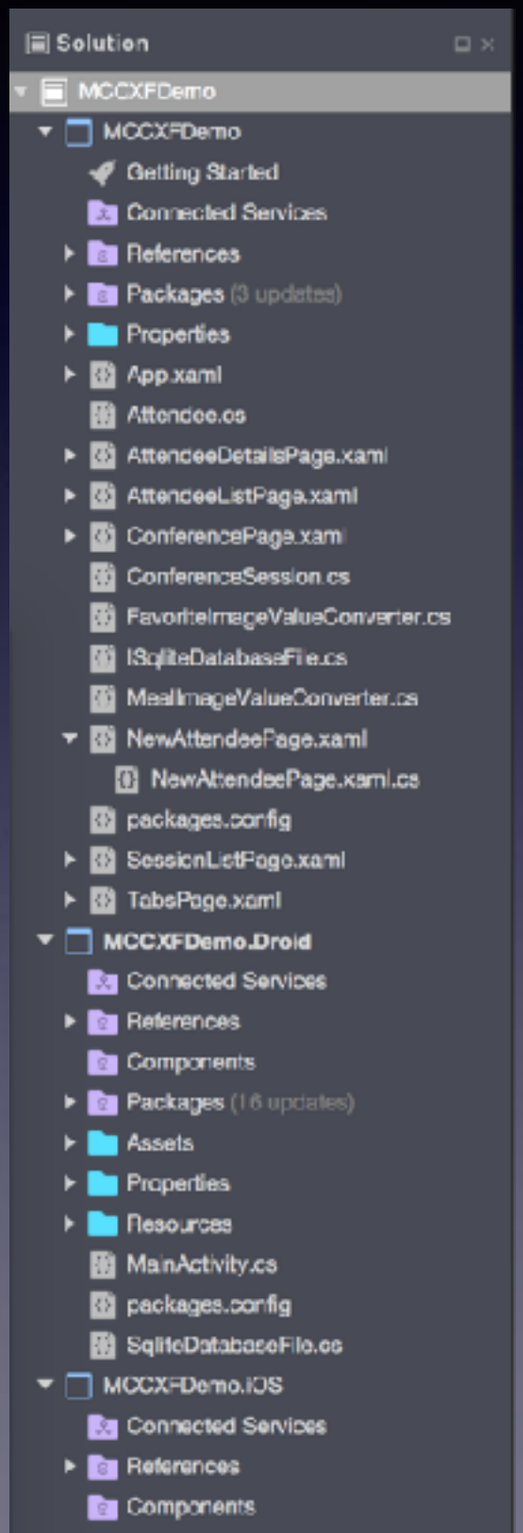

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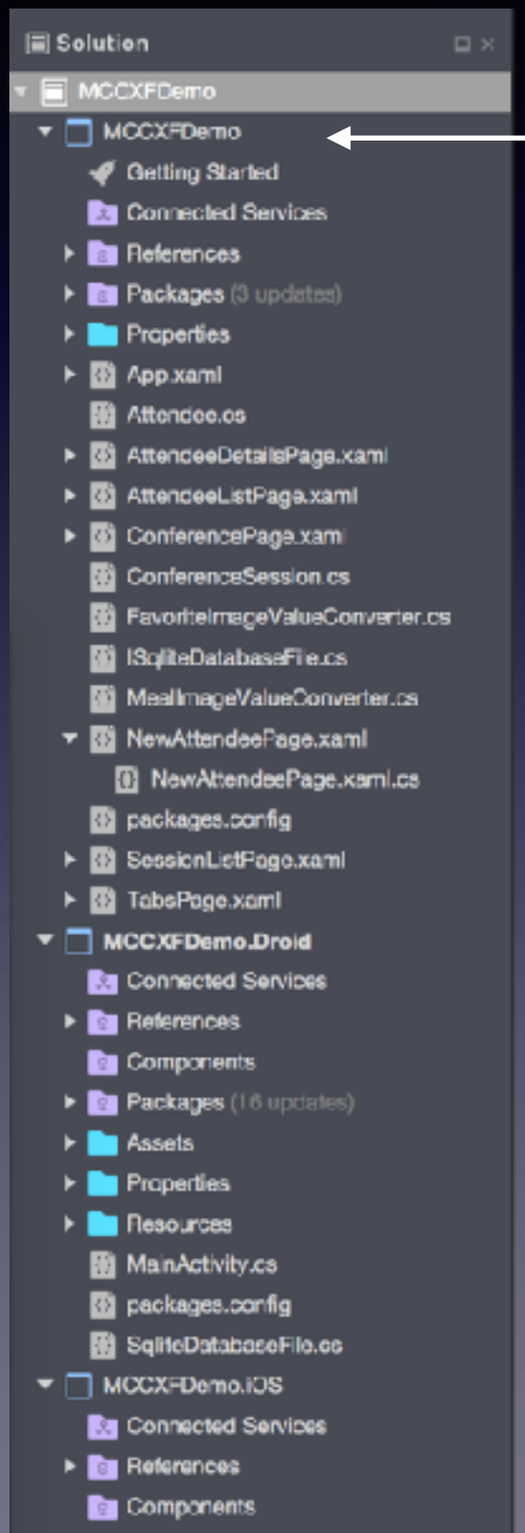

Xamarin.Forms Project

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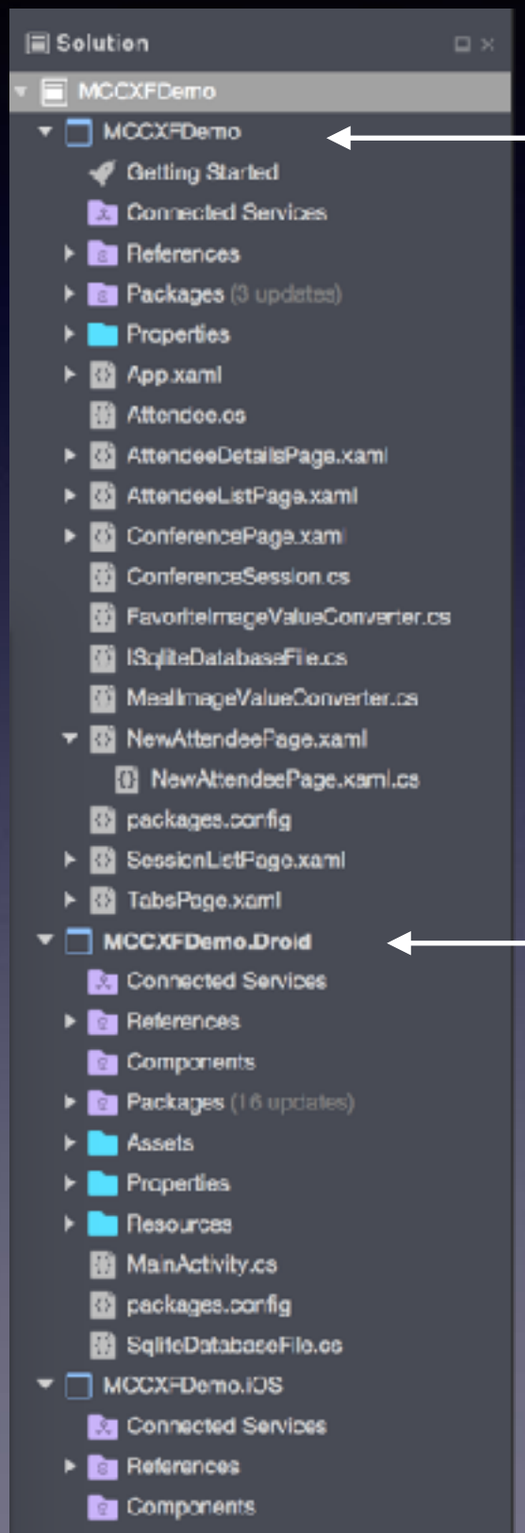
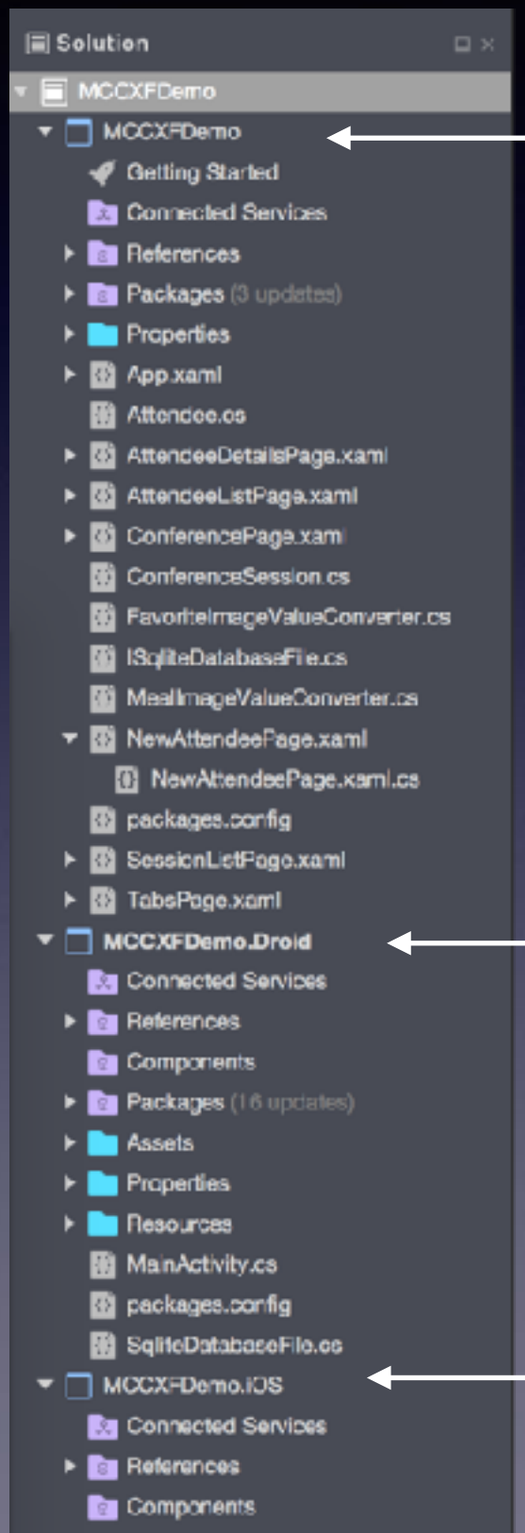


Xamarin.Forms Project

Xamarin.Android Project

Xamarin.Forms



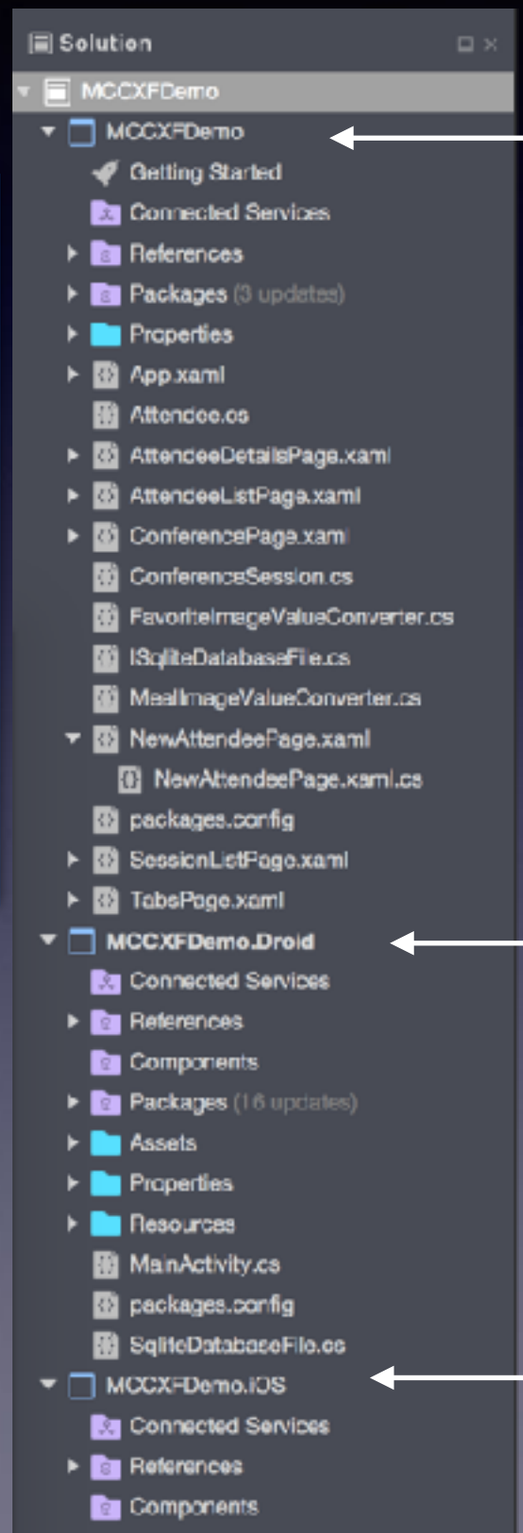
Xamarin.Forms Project

Xamarin.Android Project

Xamarin.iOS Project

Xamarin.Forms

90%



Xamarin.Forms Project

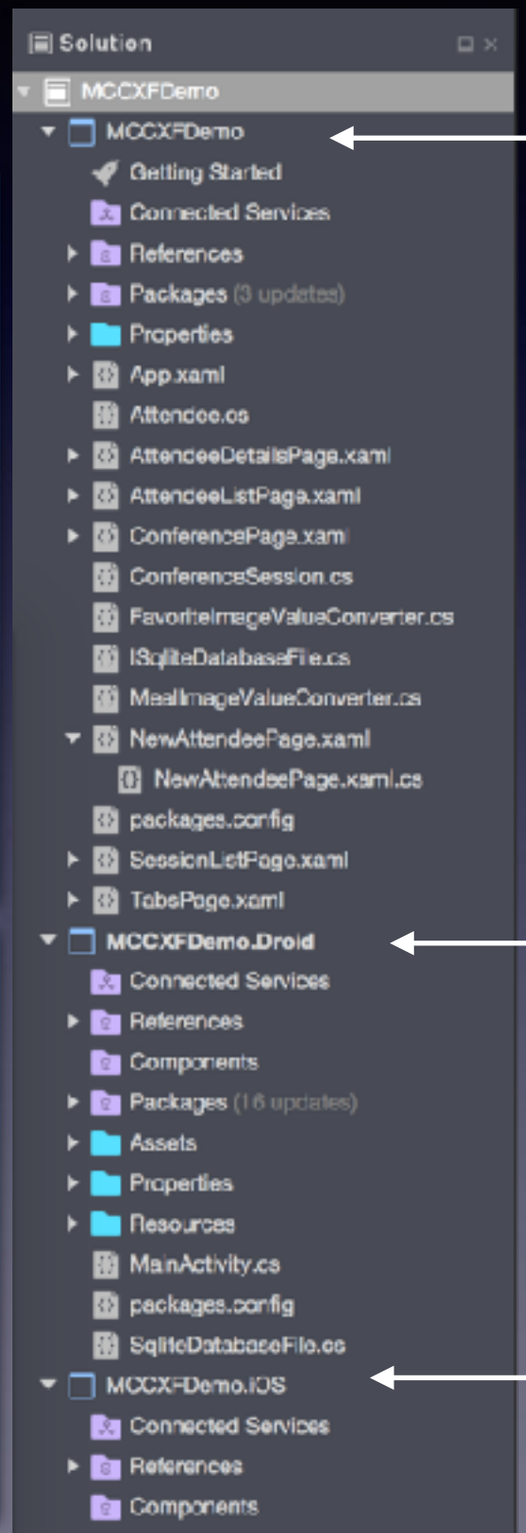
Xamarin.Android Project

Xamarin.iOS Project

Xamarin.Forms

90%

10%



Xamarin.Forms Project

Xamarin.Android Project

Xamarin.iOS Project

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             xmlns:local="clr-namespace:MCCXFDemo"
             x:Class="MCCXFDemo.MCCXFDemoPage">
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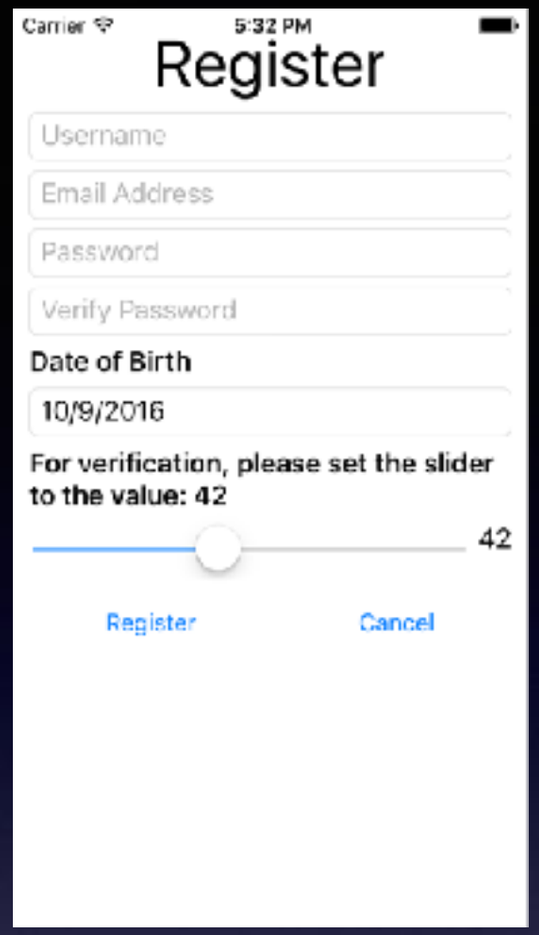

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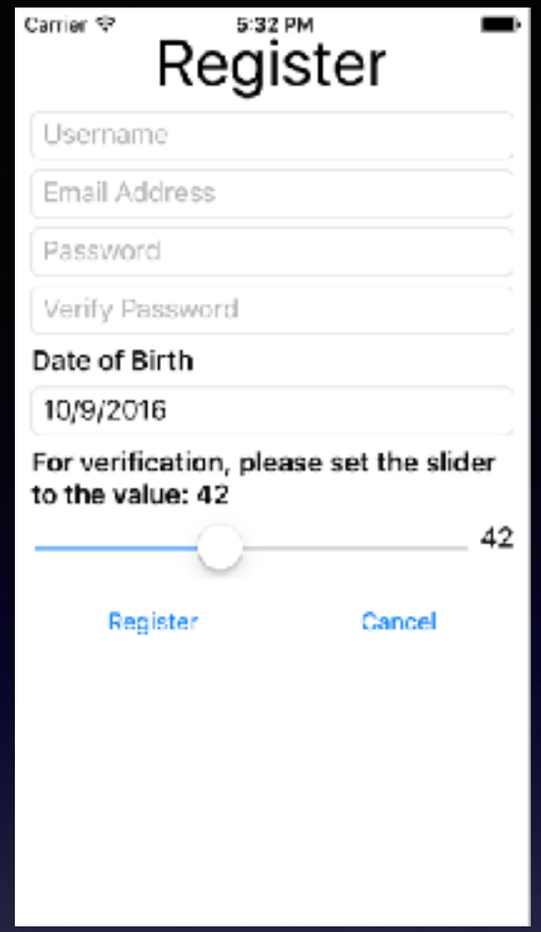

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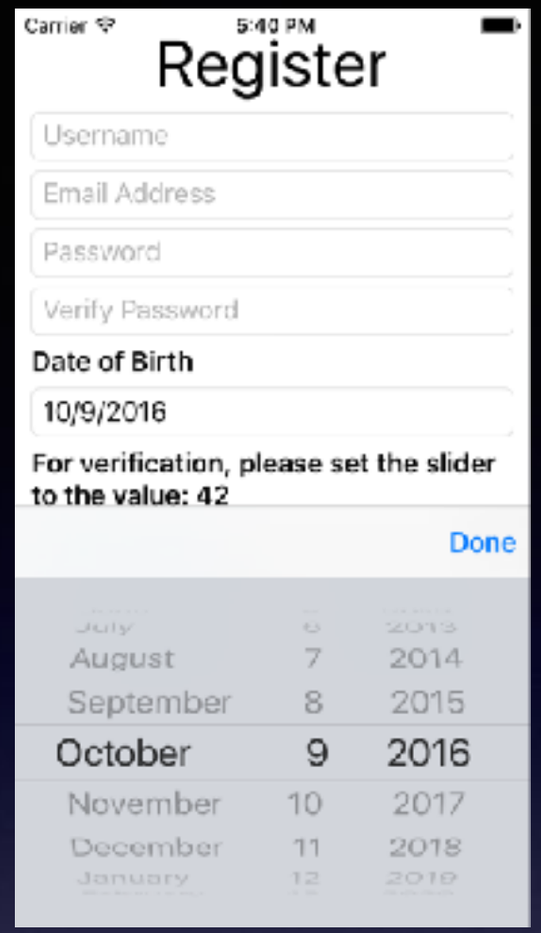

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```

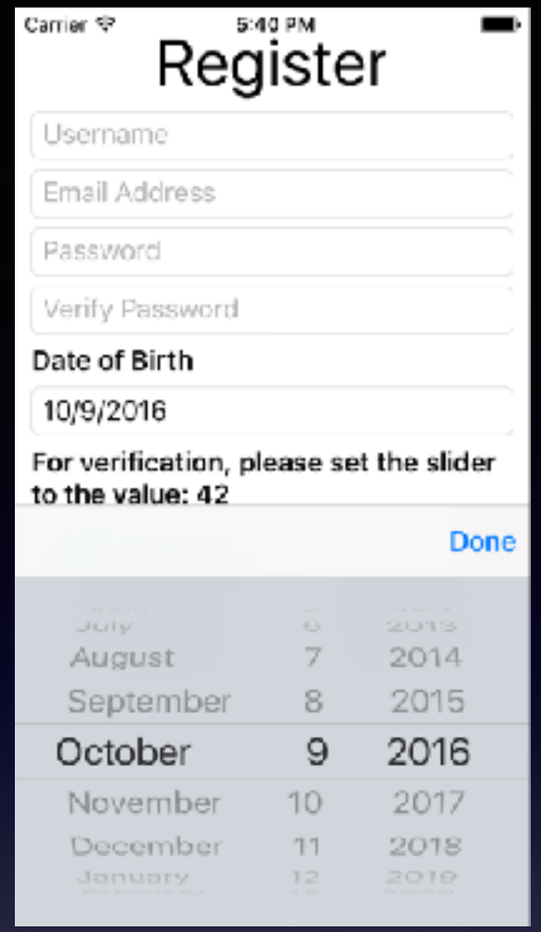

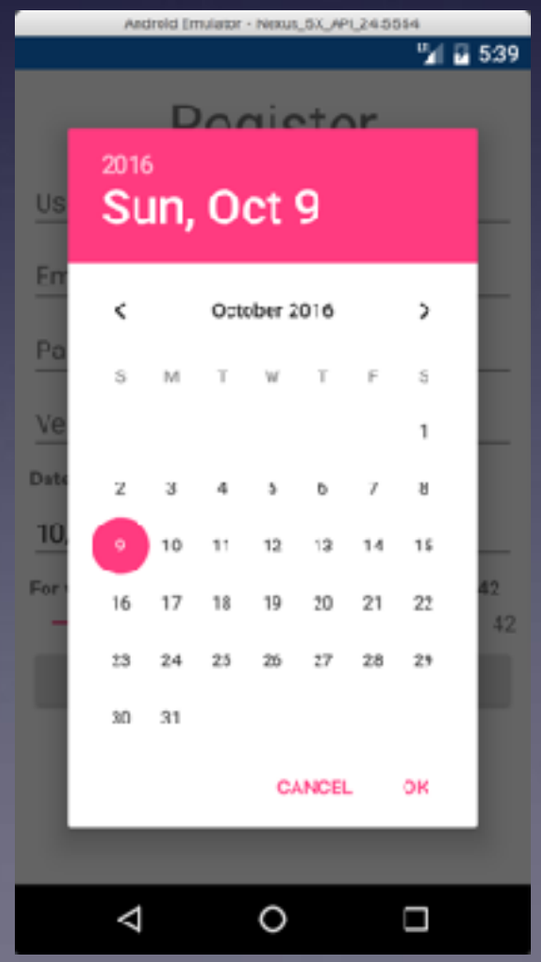

That Last 10%

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A platform specific feature (NFC, Touch 3D)

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A platform specific implementation (SQLite, camera)

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Custom user interface

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A platform specific feature (NFC, Touch 3D)

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DependencyService

That Last 10%

A platform specific feature (NFC, Touch 3D)

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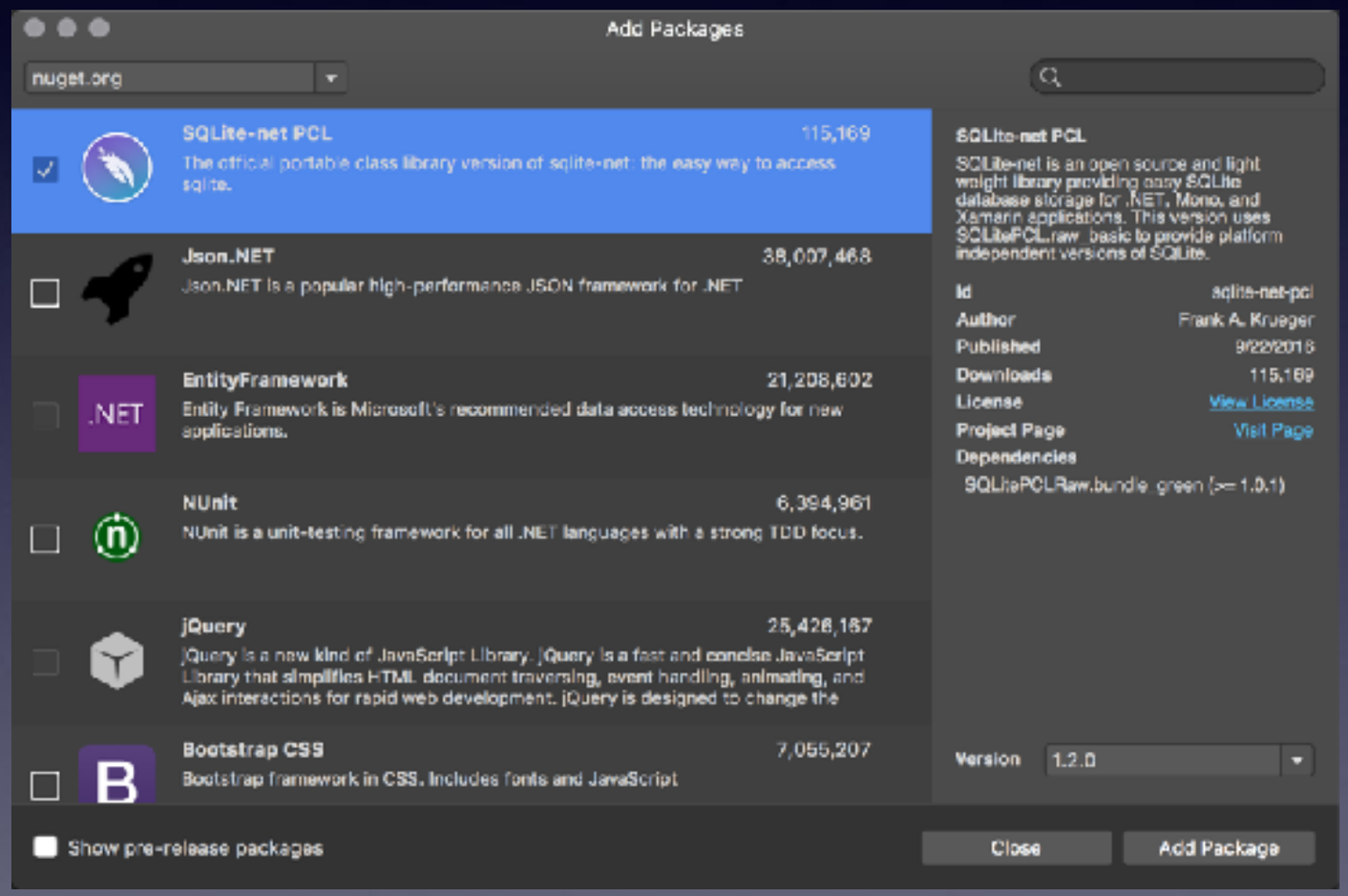
Custom user interface

DependencyService

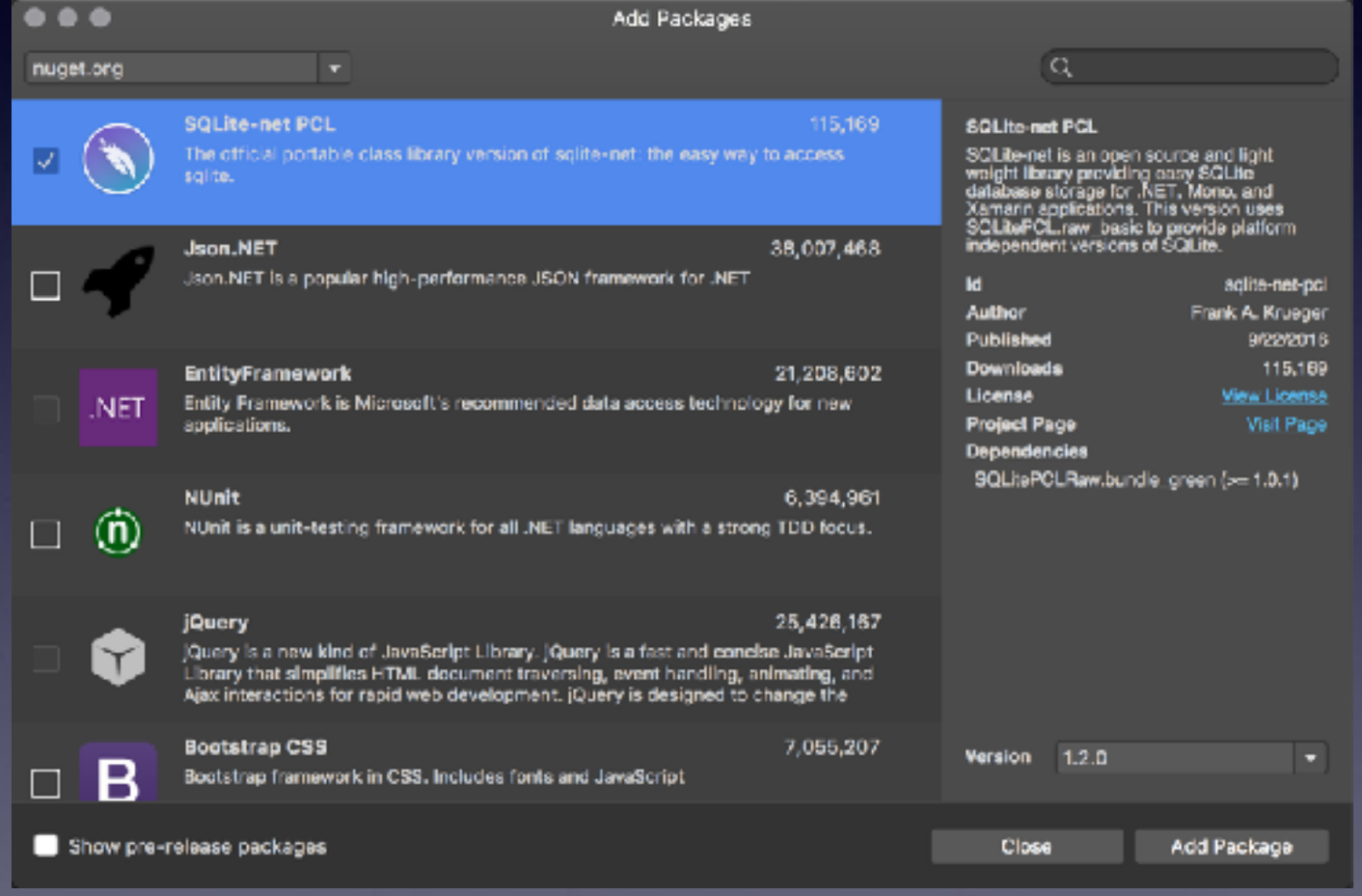
Custom Renderers

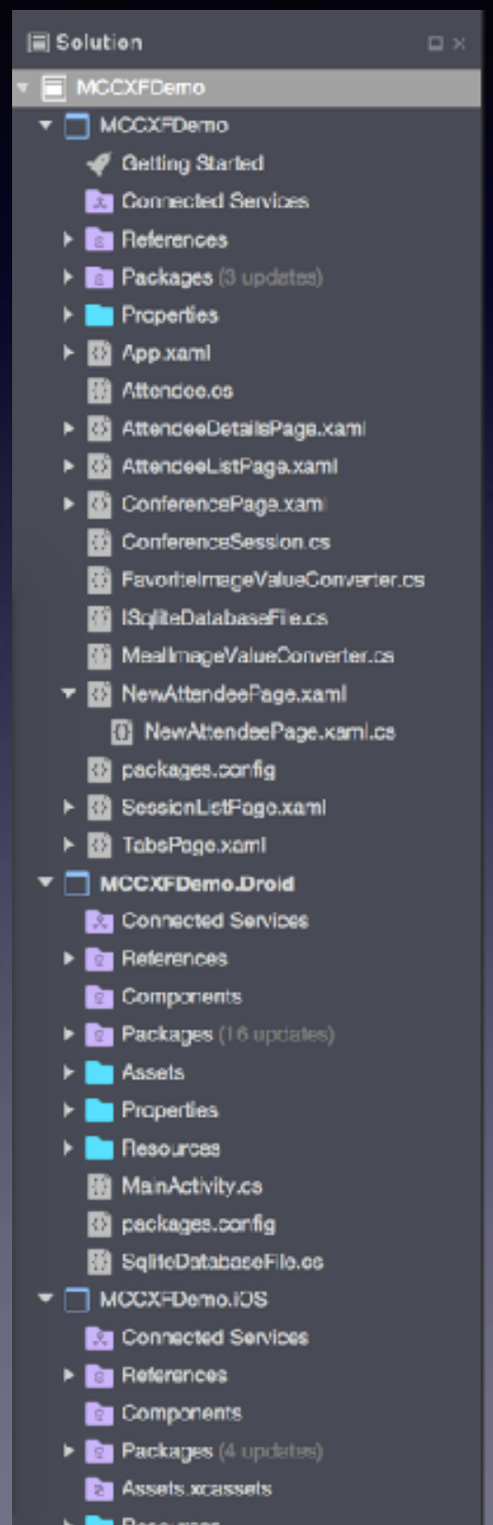
Dependency Service

Dependency Service

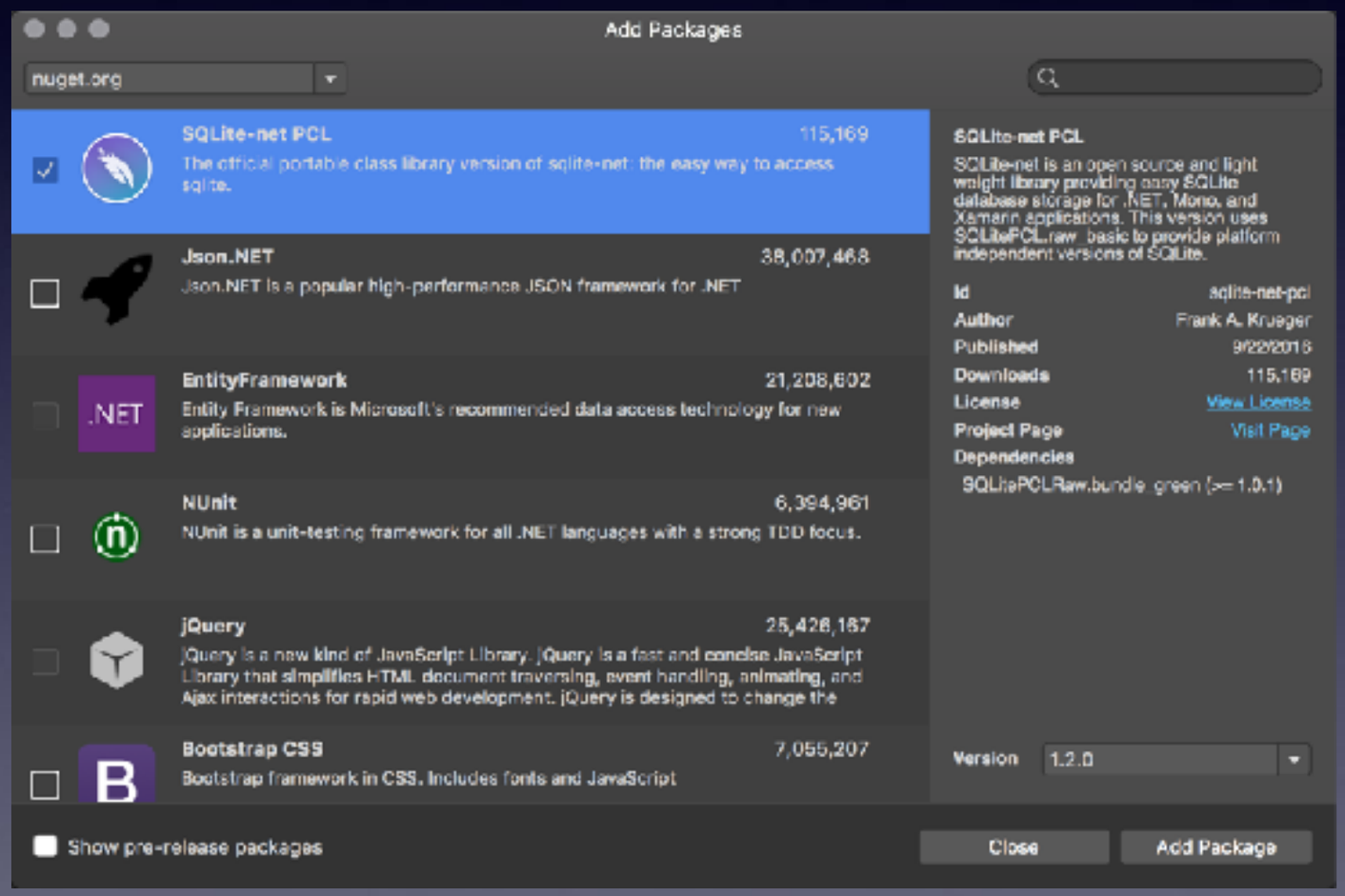


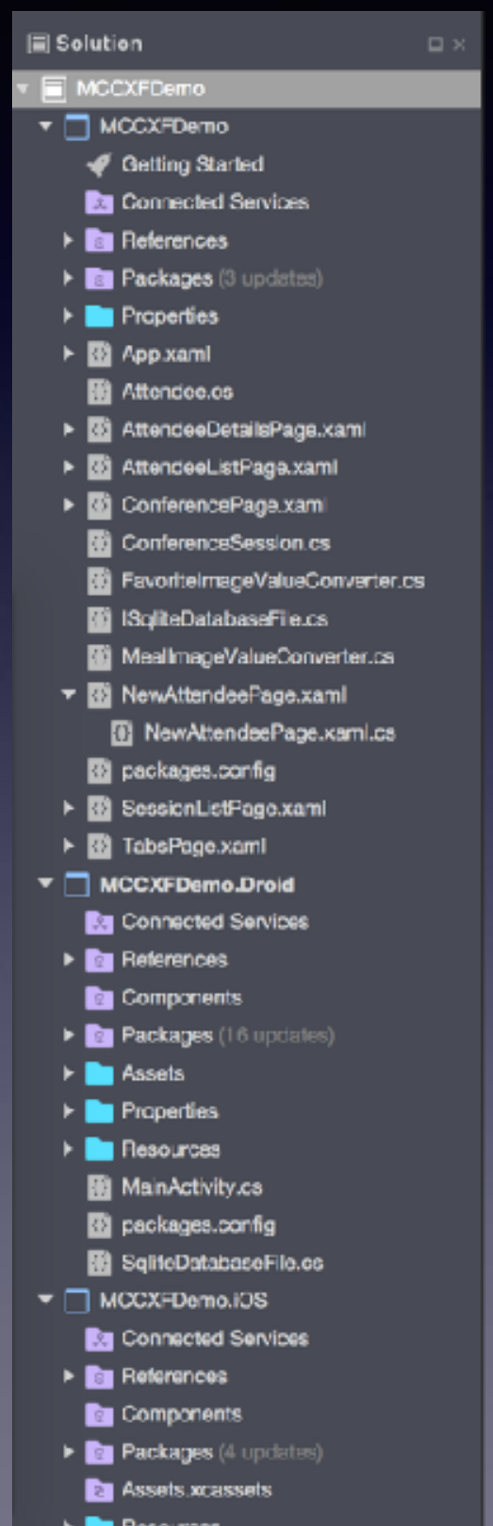
Dependency Service



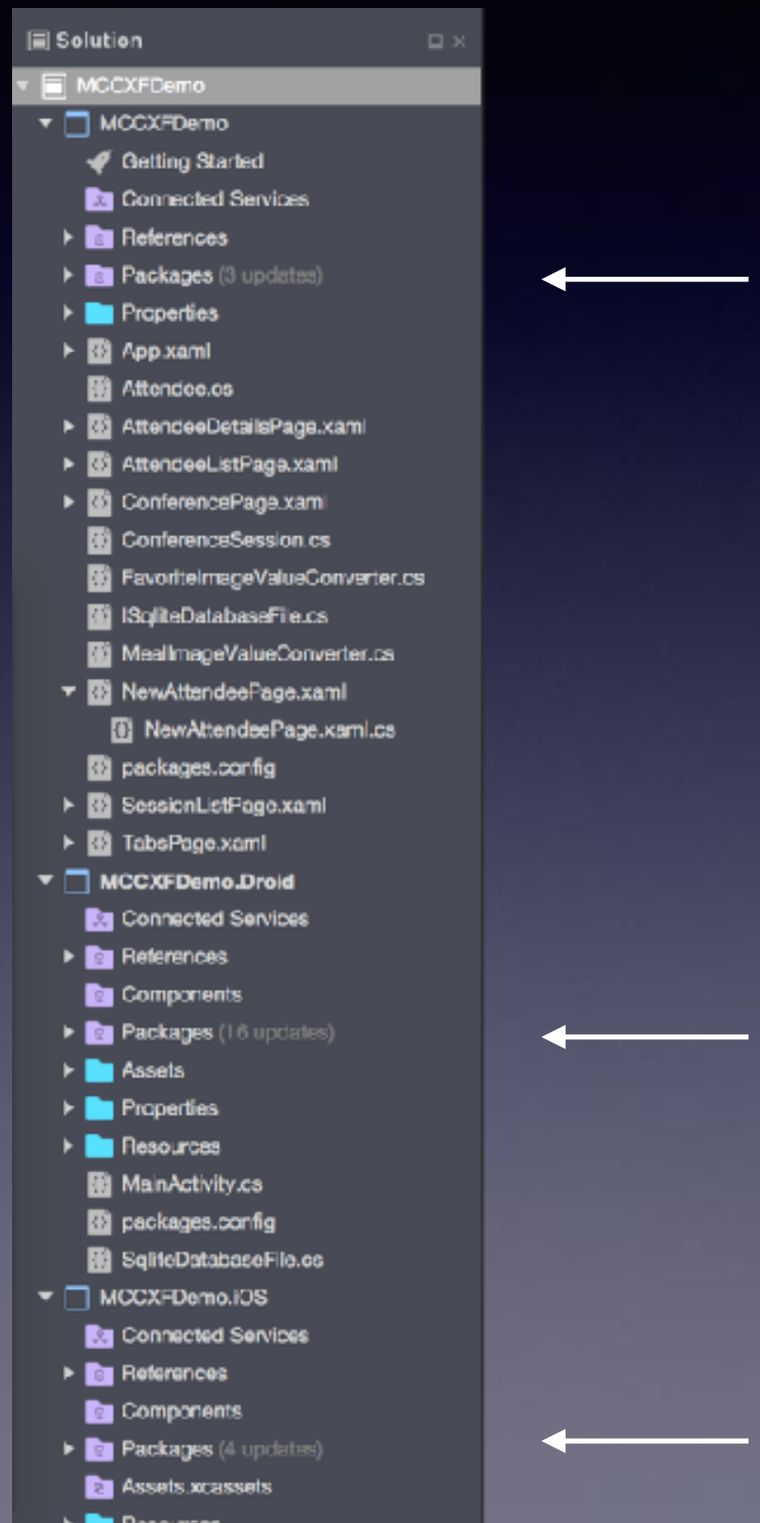


Dependency Service



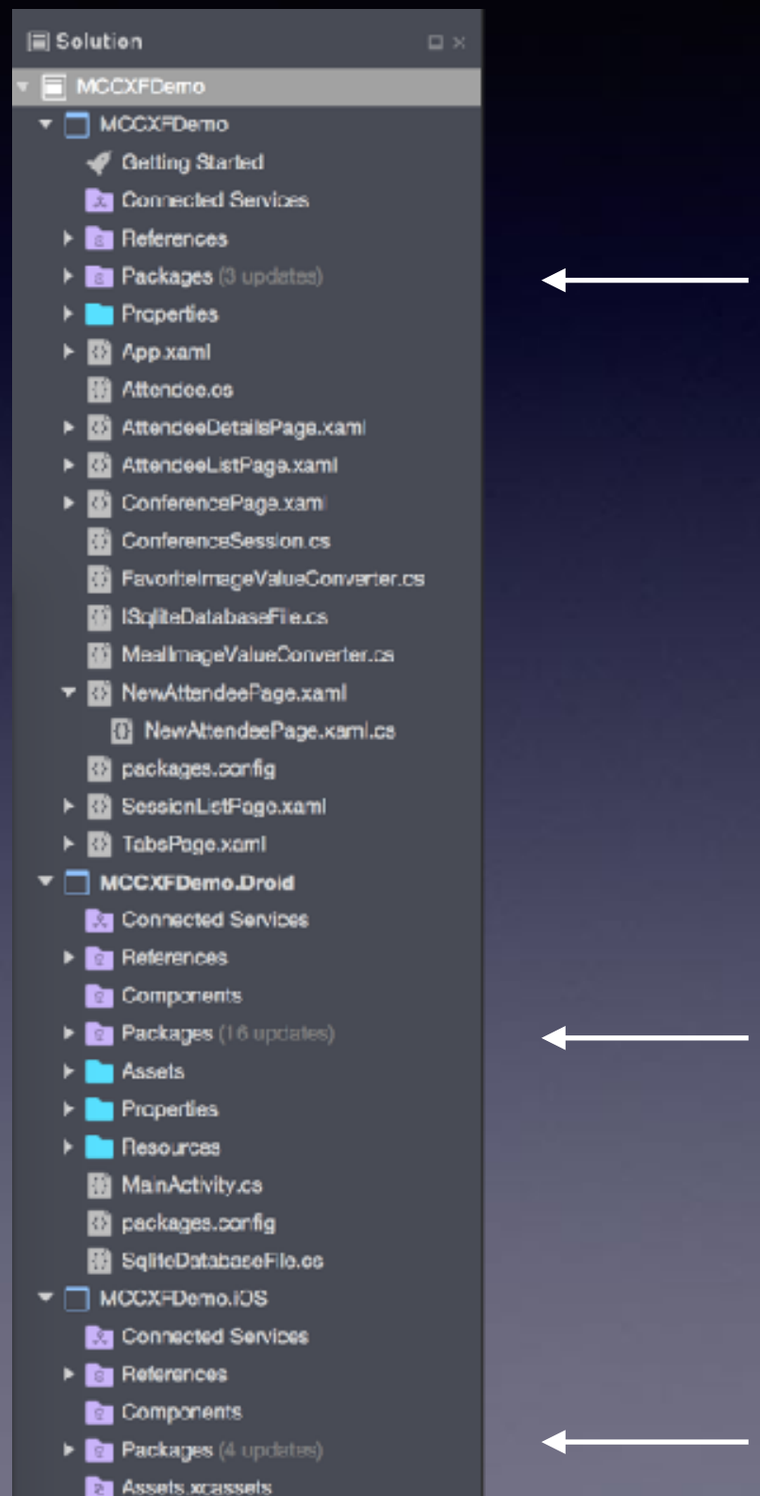


Dependency Service



Dependency Service

```
public interface ISQLite
{
	SQLiteConnection Connect();
}
```



Dependency Service

```
public interface ISQLite
{
	SQLiteConnection Connect();
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```
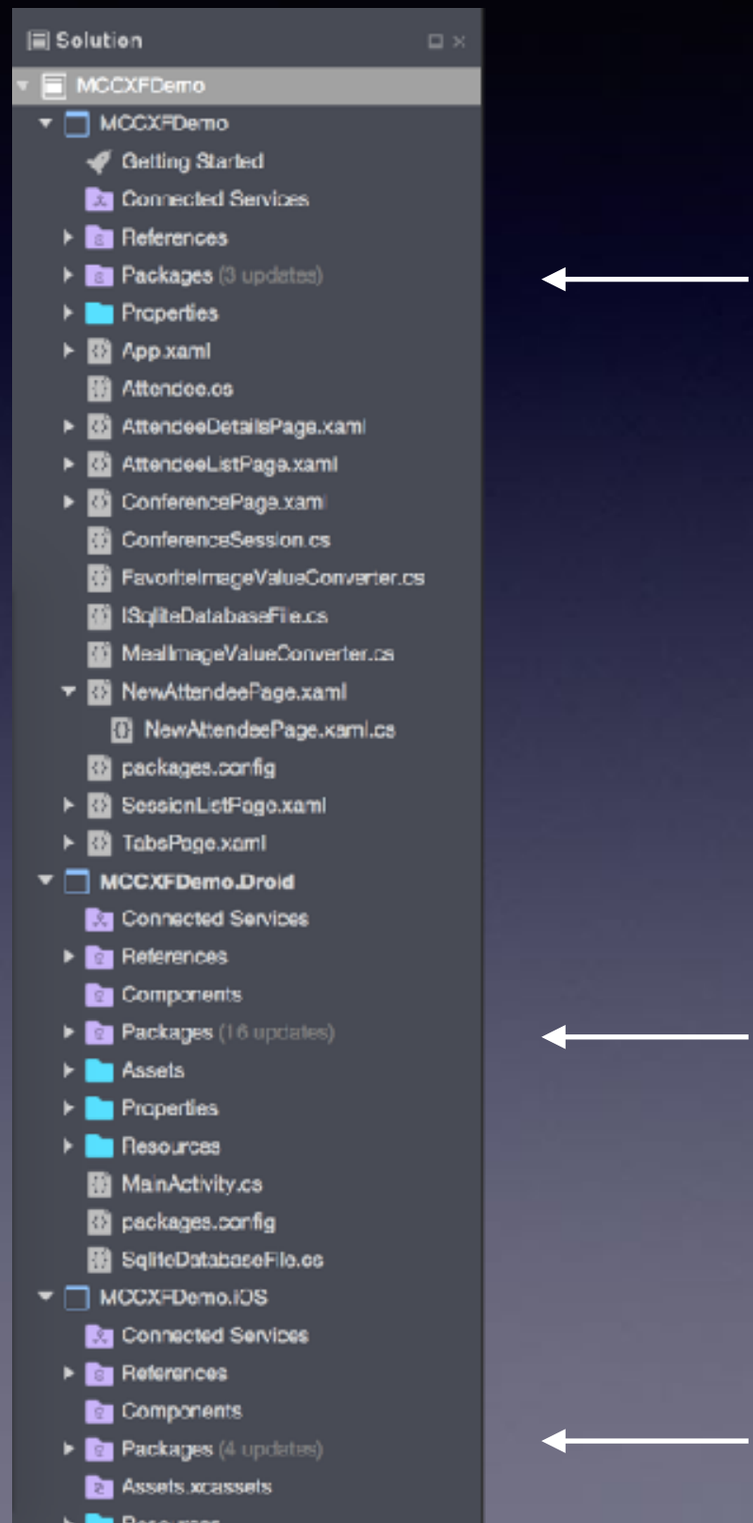

```
[assembly: Dependency(typeof(SQLite_Droid))]
namespace DroidNamespace {
  public class SQLite_Droid : ISQLite {
    public SQLiteConnection Connect() {
      return new SQLiteConnection(databasePath);
    }
  }
}
```



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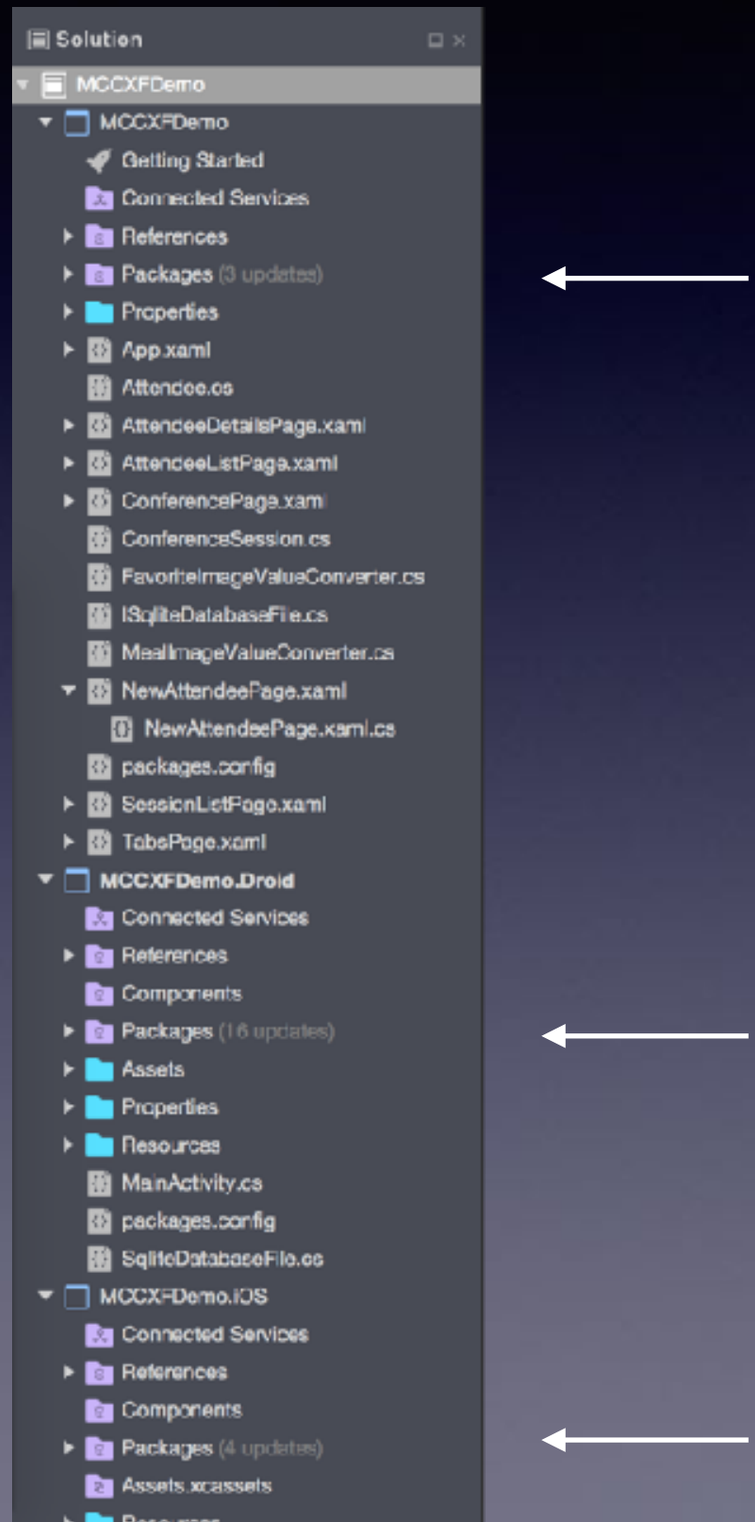
    public SQLiteConnection Connect() {
      return new SQLiteConnection(databasePath);
    }
  }
}
```



Dependency Service

```
public interface ISQLite
{
        SQLiteConnection Connect();
}

var conn = DependencyService.Get<ISQLite>().Connect();
```

```
[assembly: Dependency(typeof(SQLite_Droid))]
namespace DroidNamespace {
  public class SQLite_Droid : ISQLite {
    public SQLiteConnection Connect() {
      return new SQLiteConnection(databasePath);
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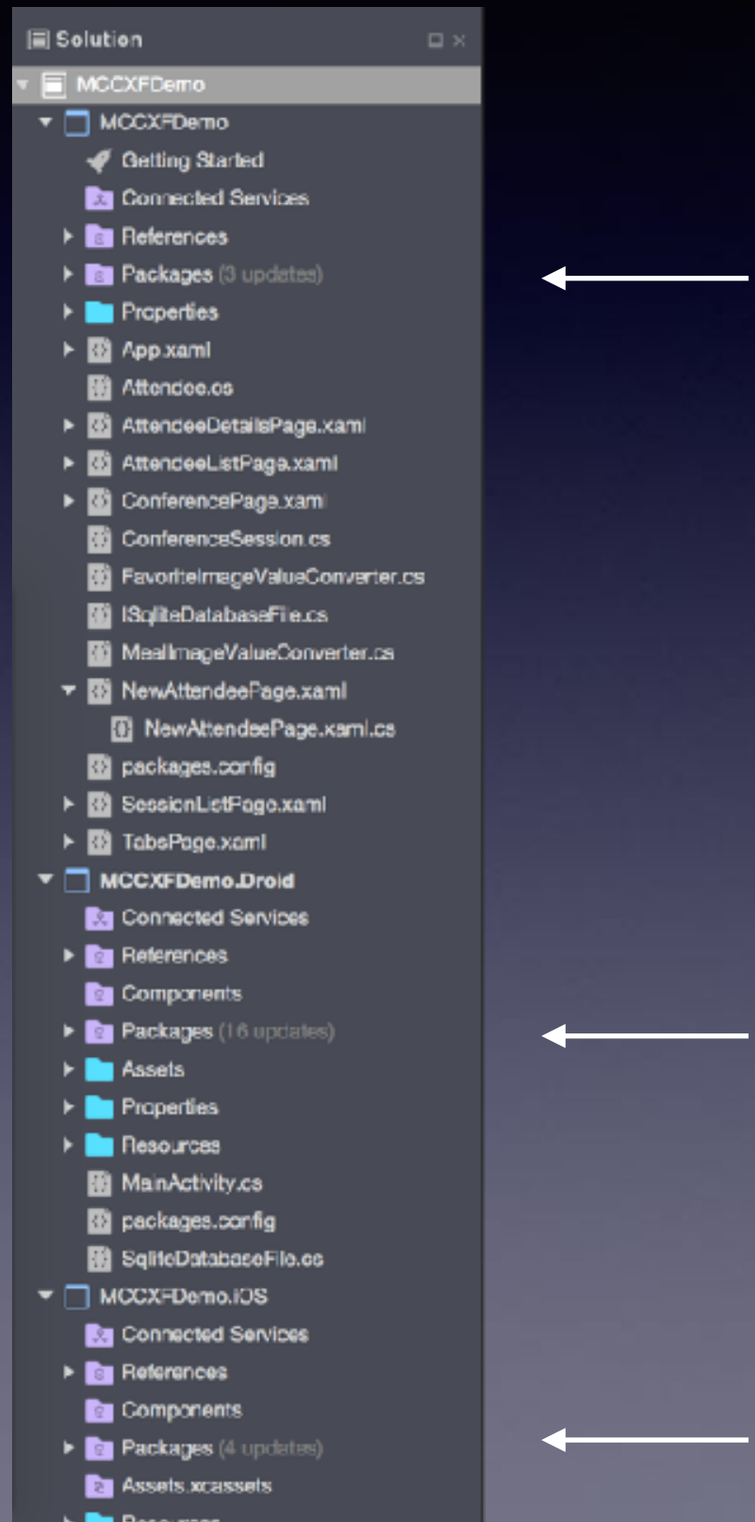

DEMOS

What’s Next?

What’s Next?

iOS Simulator Remoting

What’s Next?

iOS Simulator Remoting

iOS USB Remoting

What’s Next?

iOS Simulator Remoting

iOS USB Remoting

Xamarin.Forms 3.0

What's Next?

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Xamarin.Forms 3.0 // adds WPF, macOS and Linux!

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Xamarin Workbooks

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Xamarin Workbooks

Xamarin Live Player

Thank You!

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