

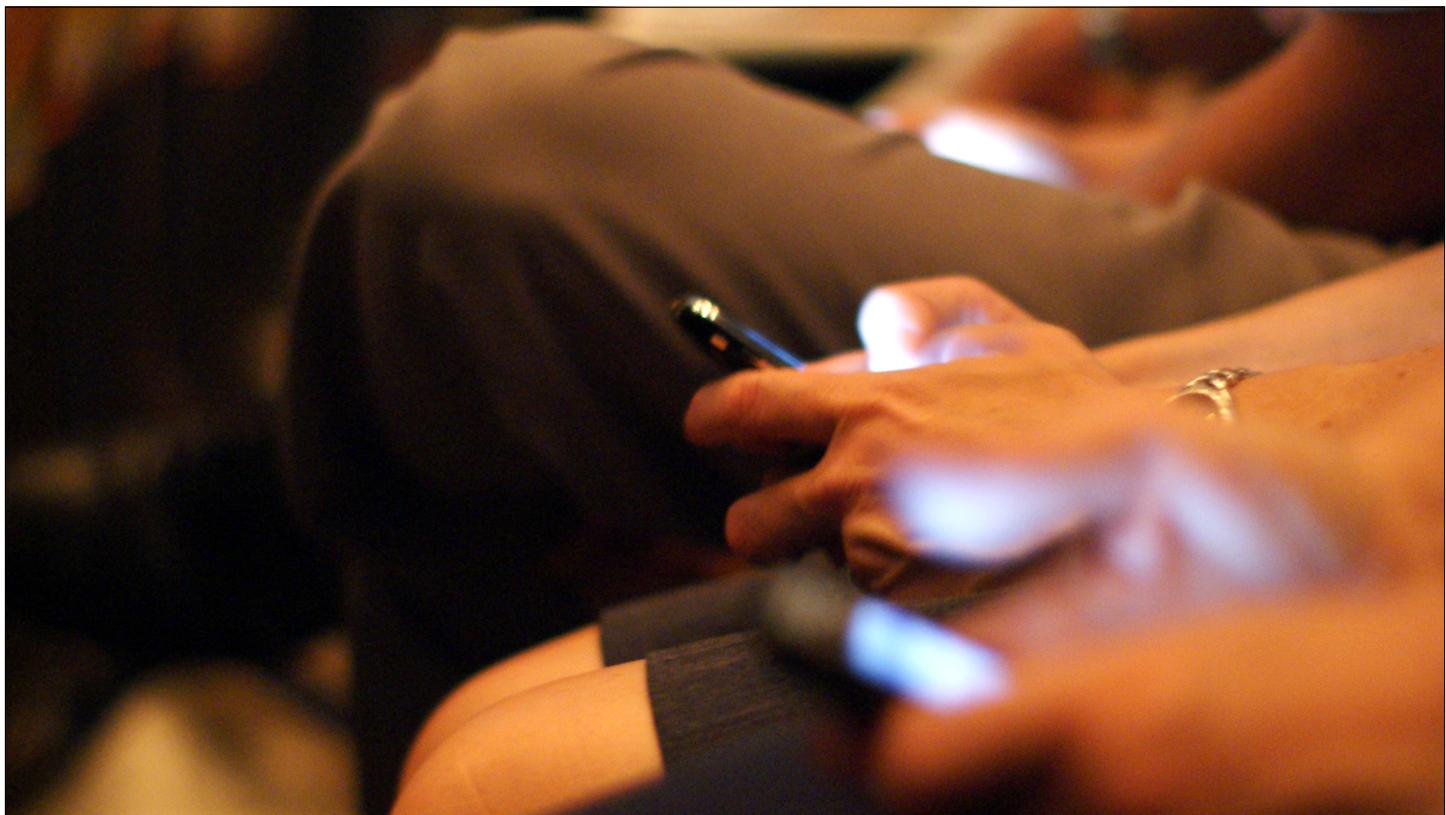
Xamarin Evolve 2014



# Navigation Patterns in iOS



**Rob Gibbens**  
[rob.gibbens@xamarin.com](mailto:rob.gibbens@xamarin.com)  
[@RobGibbens](https://twitter.com/RobGibbens)



# Agenda

1. Stack Navigation
2. Tab Navigation
3. Master/Detail

XamarinUniversity

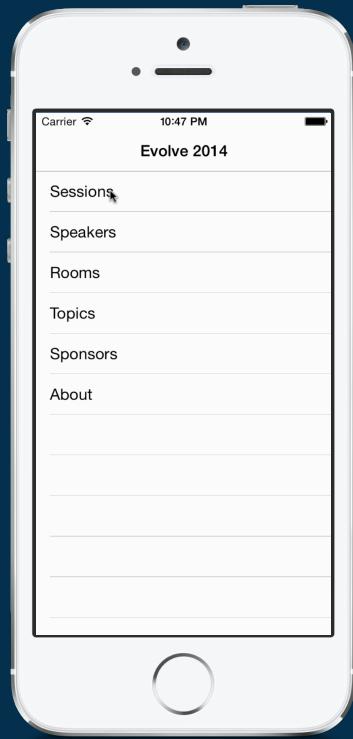
## Stack Navigation

Xamarin University

# UINavigationController

- Stack-based navigation is built into iOS through the use of the UINavigationController class
- Acts as a *parent* to any number of child view controllers
- Maintains a *stack* of children where the topmost child is visible to the user

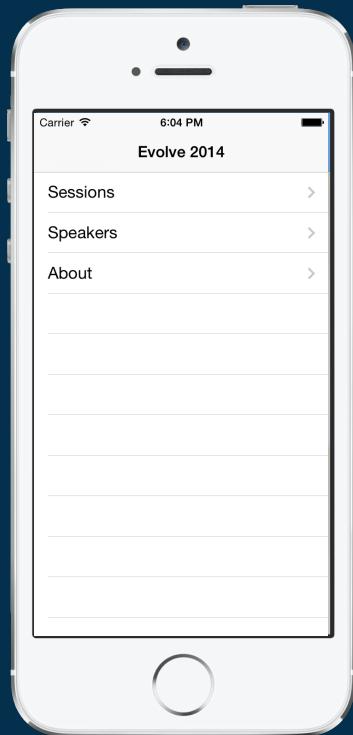
Xamarin University



# UINavigationController

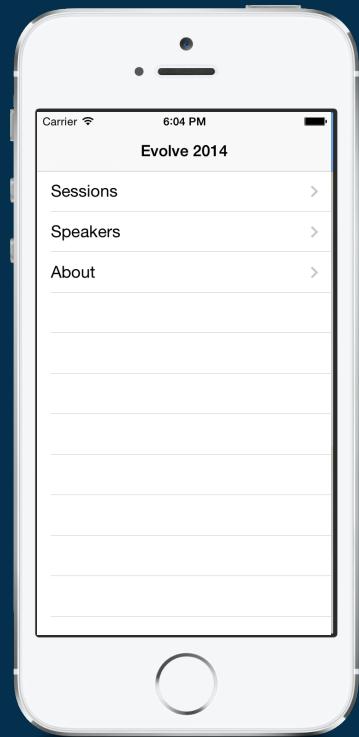
```
| var navVC = new UINavigationController();
```

Xamarin University



# UINavigationController

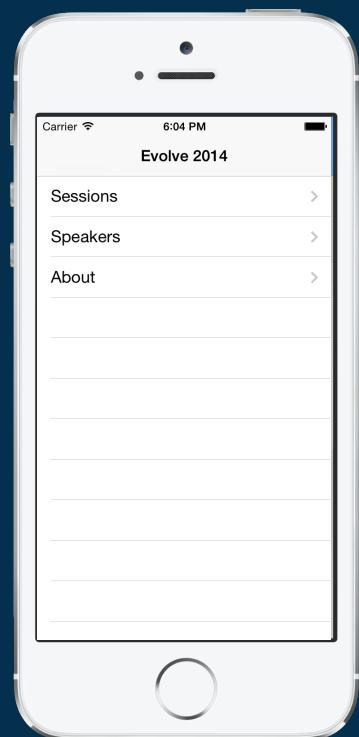
```
var navVC = new UINavigationController ();  
navVC.PushViewController  
    (firstViewController, animated:true);
```



Xamarin University

# UINavigationController

```
var navVC = new UINavigationController ();  
navVC.PushViewController  
    (firstViewController, animated:true);  
  
window.RootViewController = navVC;
```



Xamarin University

# Demo

Xamarin University

## Agenda

- 1. Stack Navigation
- 2. Tab Navigation
- 3. Master/Detail

Xamarin University

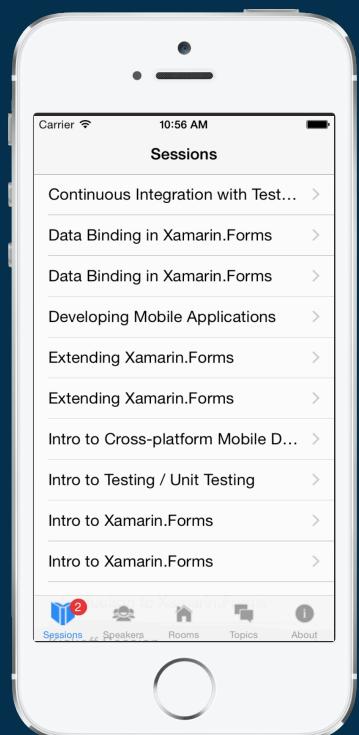


# Tabs

Xamarin University

## UITabBarController

- UITabBarController is used to create tabbed-interface
- User selects which tab to “activate”
- Can switch between tabs interactively



Xamarin University

# UITabBarController

```
public class EvolveTabBarController : UITabBarController  
{  
}
```



XamarinUniversity

# UITabBarController

```
public override void ViewDidLoad ()  
{  
    base.ViewDidLoad ();  
  
    var tabVC1 = new MyViewController ();  
}
```



XamarinUniversity

# UITabBarController

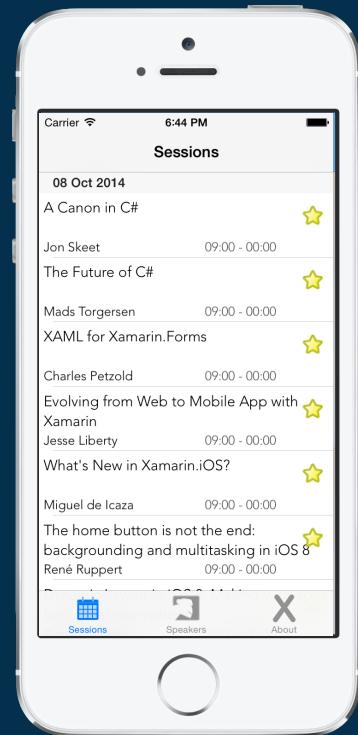
```
public override void ViewDidLoad ()  
{  
    base.ViewDidLoad ();  
  
    var tabVC1 = new MyViewController ();  
  
    tabVC1.TabBarItem = new UITabBarItem (  
        title:"Sessions",  
        image: UIImage.FromBundle ("images/sessions"),  
        tag:0);  
  
    /* Add More Tabs */  
  
}
```



Xamarin University

# UITabBarController

```
public override void ViewDidLoad ()  
{  
    base.ViewDidLoad ();  
  
    var tabVC1 = new MyViewController ();  
  
    tabVC1.TabBarItem = new UITabBarItem (  
        title:"Sessions",  
        image: UIImage.FromBundle ("images/sessions"),  
        tag:0);  
  
    /* Add More Tabs */  
  
    this.ViewControllers = new UIViewController[]  
    { tabVC1, tabVC2, tabVC3 };  
}
```



Xamarin University

# Demo

Xamarin University

## Agenda

- 1. Stack Navigation
- 2. Tab Navigation
- 3. Master/Detail

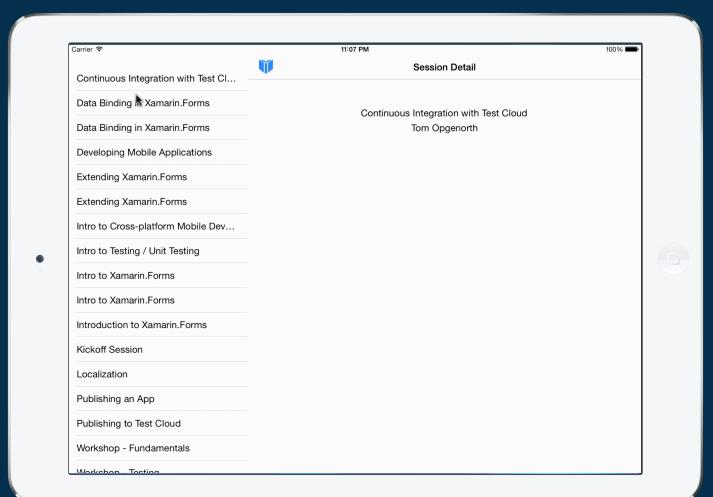
Xamarin University

# Master/Detail

Xamarin University

## UISplitViewController

- Displays two side by side view controllers
- Left side displays the list of items
- Right side displays selected item detail



Xamarin University

# UISplitViewController

```
public class EvolveSplitViewController : UISplitViewController  
{  
}
```

Xamarin University

# UISplitViewController

```
public EvolveSplitViewController () : base()  
{  
    masterView = new MasterViewController ();  
    detailView = new DetailViewController ();  
  
    ViewControllers = new UIViewController[] { masterView, detailView };  
}
```

Xamarin University

# UISplitViewController

```
public class MasterViewController : UITableViewController
{
    public event EventHandler<MenuSelectedEventArgs> RowClicked;

    public override void RowSelected (UITableView tv, NSIndexPath indexPath)
    {
        var session = _sessions[indexPath.Row];
        RowClicked(this, new MenuSelectedEventArgs (session));
    }
}
```

Xamarin University

# UISplitViewController

```
public EvolveSplitViewController () : base()
{
    masterView = new MasterViewController ();
    detailView = new DetailViewController ();

    ViewControllers = new UIViewController[] { masterView, detailView } ;

    masterView.RowClicked += (sender, e) => {
        detailView.Update(e.Session);
    };
}
```

Xamarin University

# UISplitViewController

```
public class DetailViewController : UIViewController
{
    private UILabel label;
    public UIPopoverController Popover { get; set; }

    public void Update (Session session)
    {
        label.Text = session.Title;

        if (Popover != null) {
            Popover.Dismiss (true);
        }
    }
}
```

Xamarin University



# Demo

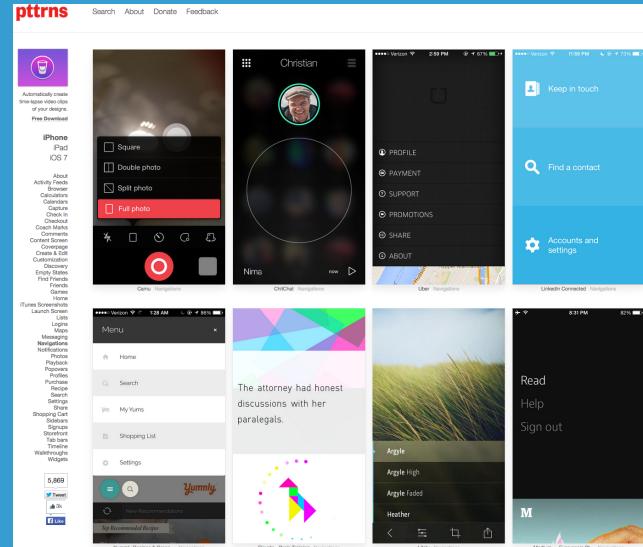
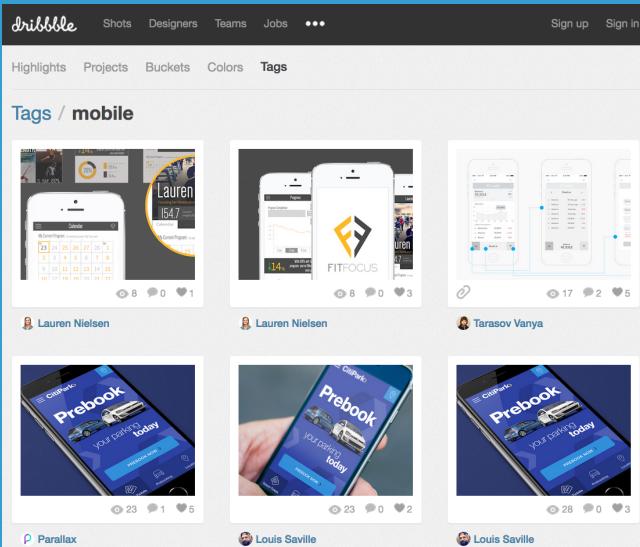
Xamarin University

# Agenda

- 1. Stack Navigation
- 2. Tab Navigation
- 3. Master/Detail

XamarinUniversity

# Inspiration



XamarinUniversity

# Questions?

Xamarin University

Xamarin Evolve 2014

## Navigation Patterns in iOS



 Rob Gibbens  
[rob.gibbens@xamarin.com](mailto:rob.gibbens@xamarin.com)  
[@RobGibbens](https://twitter.com/RobGibbens)

