Lightning Lecture //

How to create a "Sign in" screen flow in Xamarin.Forms

Chris van Wyk | chris.vanwyk@xamarin.com
@ChrisvWyk

Objectives

1. We have a Feature – Sign in
2. Xamarin.Forms Navigation
3. A solution

We have this feature – Sign in …

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Tasks

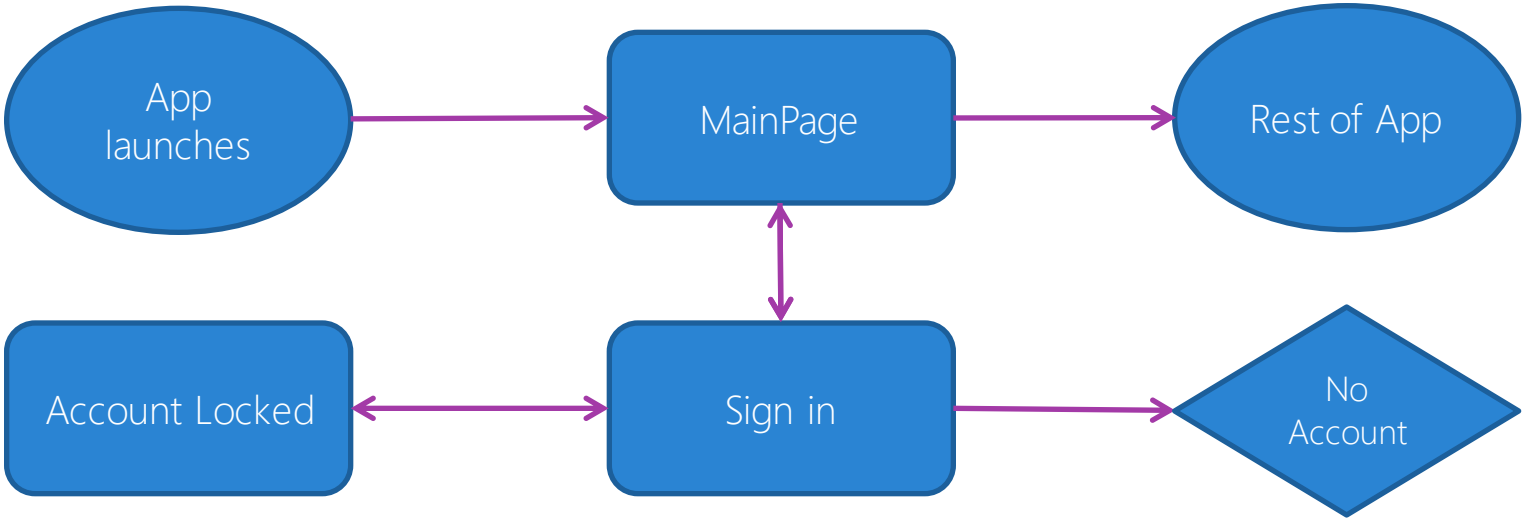
1. The sign in flow
2. Authentication vs. Authorization

Sign in Flow

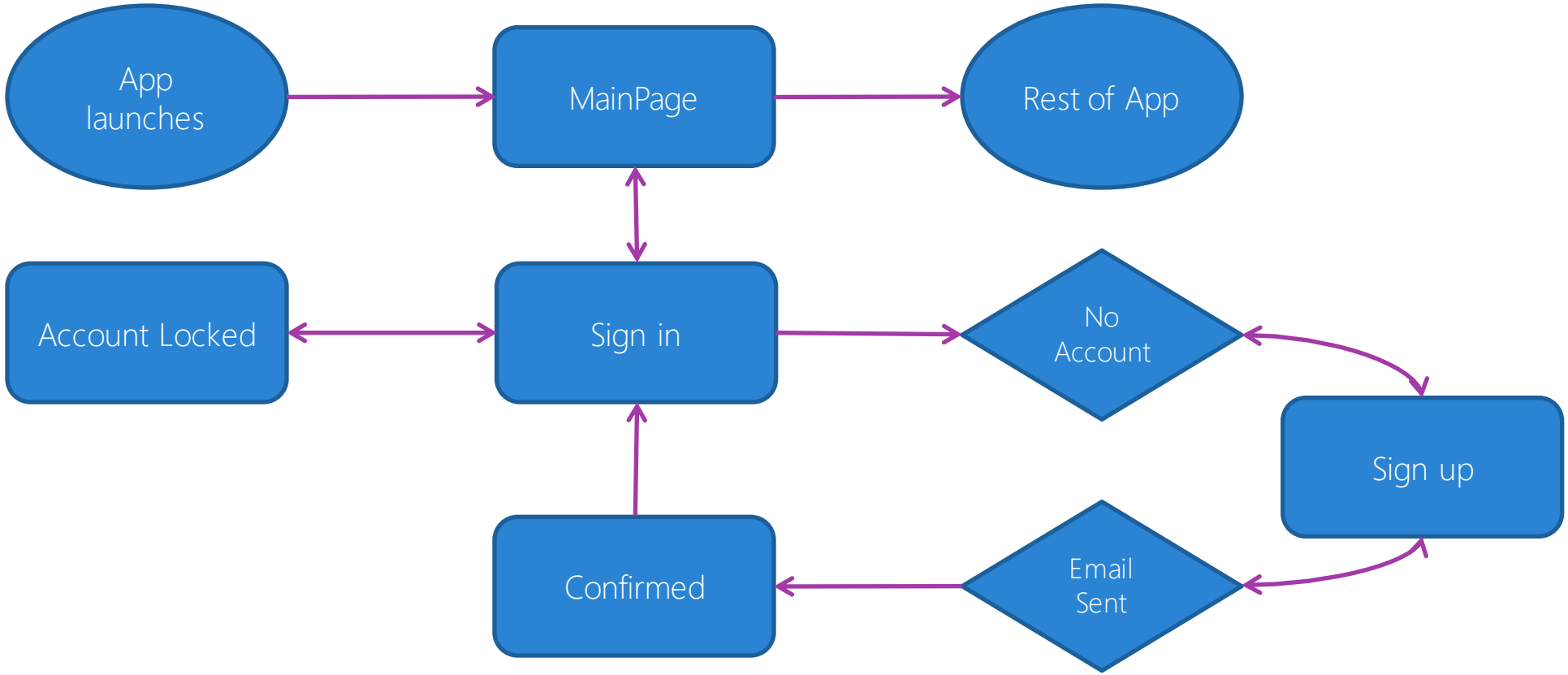
As "Bob"

I would like to Sign in

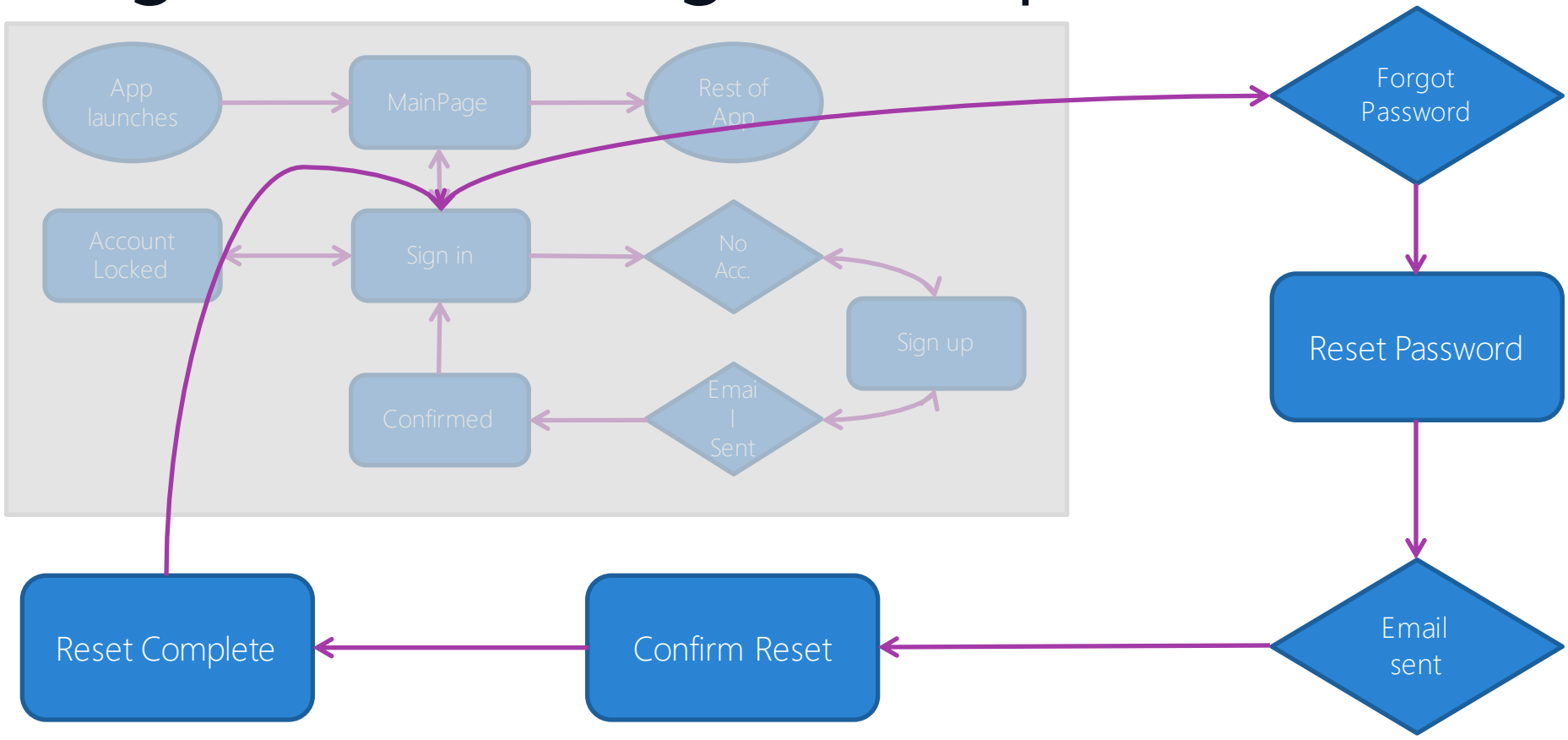
So that I can use the application



Sign in … no … Sign in & up



Sign in … no … Sign in & up



Authentication vs. Authorization

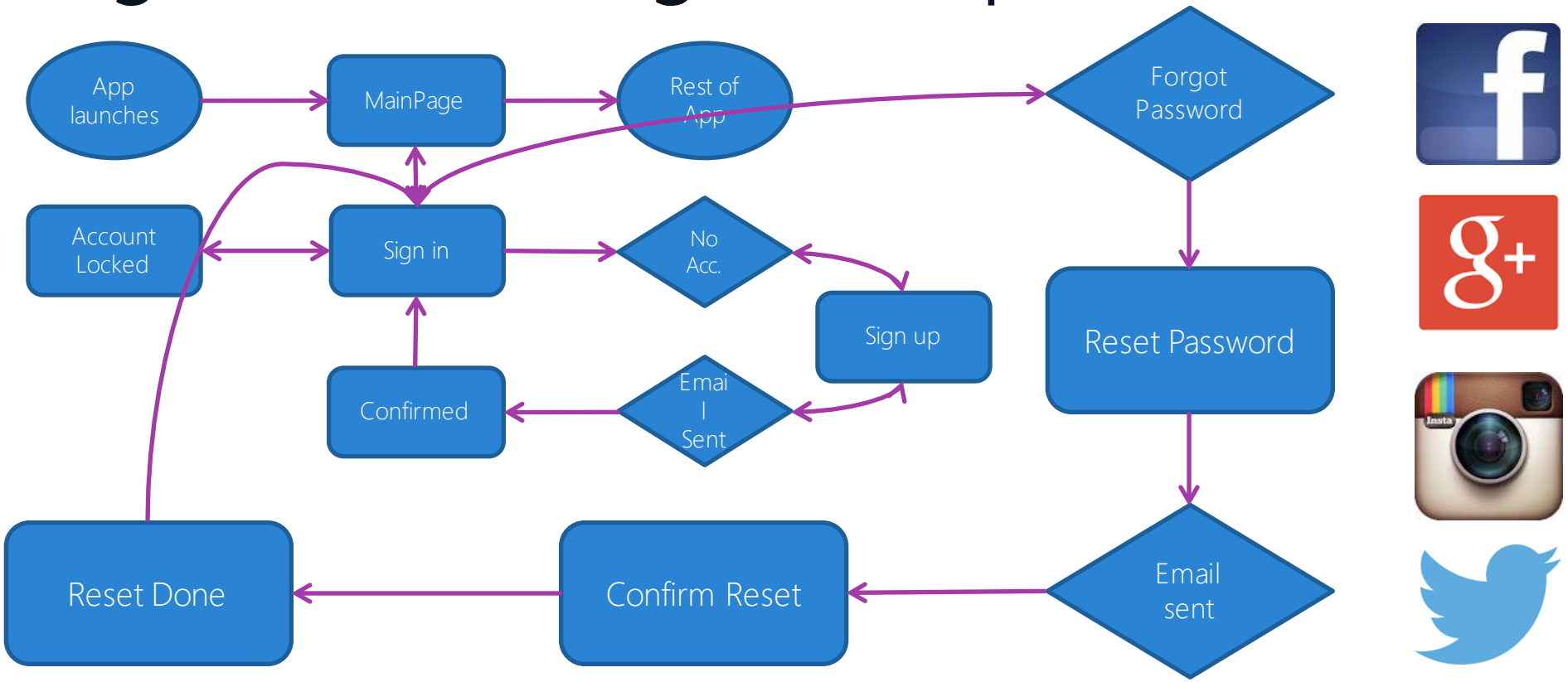
Authentication

The act of **confirming the truth** of an **attribute** of a **single piece of data claimed true** by an entity.

Authorization

The function of **specifying access rights** to **resources** related to **information security and computer security** in general and to **access control** in particular.

Sign in … no … Sign in & up



Xamarin.Forms Architecture

Tasks

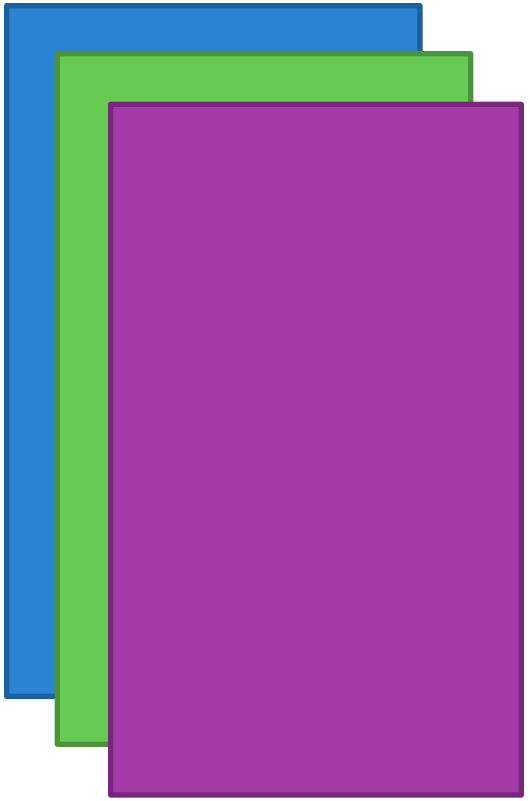
1. Modal Pages
2. Modeless Pages
3. The Application.MainPage

[Motivation] The Navigation Stack

The Navigation Stack is a concept all of us are familiar with.

When one page **navigates to** another, the page navigated from is **pushed onto the stack**.

When the **page goes back**, it gets **popped from the stack** and the previous page is visible.



Modal Pages

Are generally used for the following reason:

The app **needs** some **information** from the user, but **does not allow** the user to **navigate back**.

```
Task Navigation.PushModalAsync (Page page);

Task <Page> Navigation.PopModalAsync ();
```

A modal page must provide its own user-interface for back navigation.

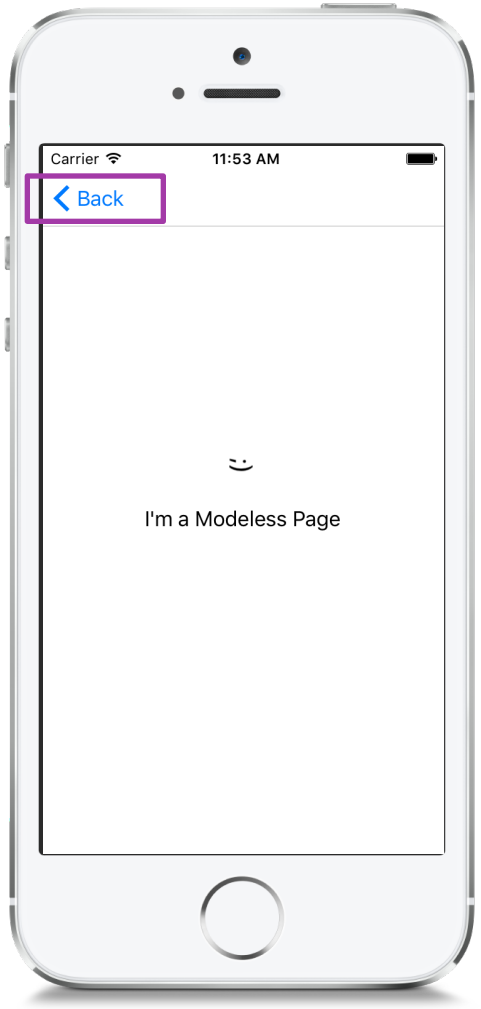
Modeless Pages

Are generally used for the following reason:

For standard **forward and back navigation** and the user is required to use the **software or hardware** provided **back button**.

```
Task Navigation.PushAsync (Page  page);

Task <Page> Navigation.PopAsync ();
```



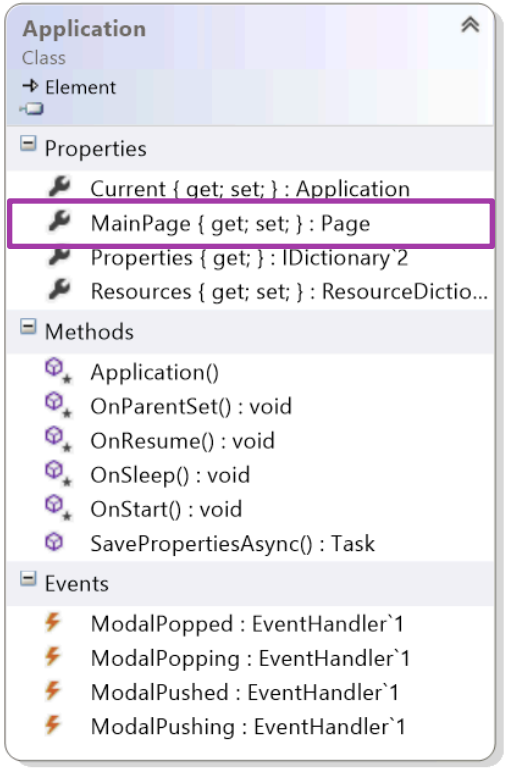
Why is this important ?

- Is there a **landing** page?
- Is the rest of the **app locked** down?
- Does the app allow **Sign in** ?
- Does the app allow **Sign up** ?
- Is there a **login with** button, e.g. Facebook ?

Deciding on **combinations** of **Modal** and **Modeless** pages will determine how our app deals with the answers on the above.

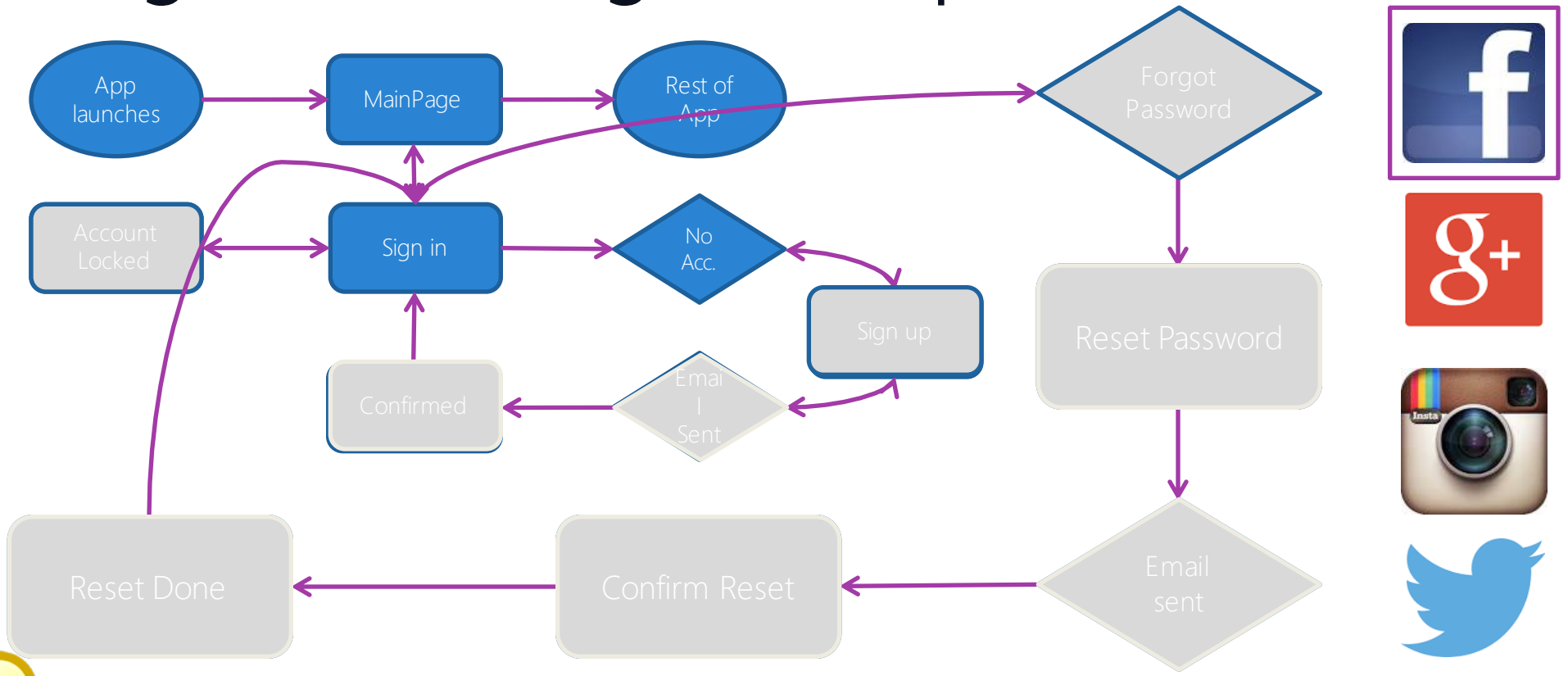
Application.[MainPage]

The **MainPage** property **sets the root page** of the application.



A solution

Login … no … Sign in & up



Make use of the HTTP Status codes to manage app & API interaction.

Demonstration

Coding the Sign up feature

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Resources

https://developer.xamarin.com/guides/cross-platform/xamarin-forms/
https://developers.facebook.com/docs/graph-api/using-graph-api/v2.4
https://github.com/xamarin/Xamarin.Auth
http://www.restapitutorial.com/httpstatuscodes.html
https://github.com/jamesmontemagno/Xamarin.Plugins
https://www.nuget.org/packages/Xam.Plugins.Forms.ImageCircle/
https://github.com/CaveBirdLabs/PagedCarouselPage
https://github.com/Cheesebaron/ViewPagerIndicator
https://github.com/aritchie/userdialogs

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