



# RAD Studio XE4 in Action *LIVE!*

Zagreb, 14.05.2013

[pawel.glowacki@embarcadero.com](mailto:pawel.glowacki@embarcadero.com)



# About Your Presenter

- Paweł Głowacki
- Embarcadero EMEA Tech Lead  
for Delphi and RAD Studio
- <http://blogs.embarcadero.com/pawelglowacki>

# Raspored

0830-0900 Prijava i druženje uz kavu

0900-0910 Dobrodošlica i uvod

0910-0930 Multi-Device razvoj pravih Native aplikacija

0930-1100 Razvoj Mobile i Desktop aplikacija iz istog izvornog koda

1100-1130 Pauza

1130-1245 Stvaranje aplikacija koje rade s bazama podataka i servisima

1245-1300 Pitanja i odgovori

# Servisne informacije

- za parking u garaži može se kupiti dnevna karta po cijeni od 20kn
- po završetku radionice ostanite na neformalnom druženju
- u pauzama prezentacija pridružite nam se na kavi i slobodno pitajte / komentirajte
- potrudite se staviti slajdove i primjere on-line kroz par dana

# Promo cijena za XE4 alate

<http://embarcadero.konto.hrs>

Delphi XE4 Enterprise	Medij	SKU	Cijena EURO	
<b>New User (and upgrade from version 2009 or earlier)</b>	Named	ESD	HDEX04MLENWB0	€ 2.249
	5 Named Users	ESD	HDEX04MLENWD0	€ 11.245
	10 Named Users	ESD	HDEX04MLENWE0	€ 21.241
	Network Named	AppWave	HDEX04MLELWB0	€ 2.249
	Concurrent	AppWave	HDEX04MLETWB0	€ 4.498
<b>Upgrade from Delphi XE3 Enterprise only</b>	Named	ESD	HDEX04MUENWP0	€ 449
	Network Named	AppWave	HDEX04MUELWP0	€ 449
	Concurrent	AppWave	HDEX04MUETWP0	€ 898
<b>Upgrade for users of 2010-XE2 versions of Delphi, or cross-grade from C++Builder or RAD Studio 2010-XE3 (Pro or higher)</b>	Named	ESD	HDEX04MUENWB0	€ 1.349
	5 Named Users	ESD	HDEX04MUENWD0	€ 6.745
	10 Named Users	ESD	HDEX04MUENWE0	€ 12.741
	Network Named	AppWave	HDEX04MUELWB0	€ 1.349
	Concurrent	AppWave	HDEX04MUETWB0	€ 2.698
<b>Upgrade from DelphiStarter</b>	Named	ESD	HDEX04MUENWS0	€ 2.159
<b>Media Kit</b>	None	DVD	APX000ELMXM81	€ 35

Cijene u crvenom sadrže 10% promotivnog popusta do 15.05.2013.

do 20.05.2013. za  
sudionike konferencije

# Zadatak

```
TVrstaPiće = (žuja, karlovačko, kola);
```

```
function dajRucak(odabir: Integer): TRucak;
```

```
var piće: TVrstaPiće;
```

```
begin
```

```
  if (odabir = 1) then
```

```
    begin
```

```
      ćevapi + piće
```

```
    end
```

```
  else if (odabir = 2) then
```

```
    begin
```

```
      pljeskavice + tri suđukice + pola sarajevskog somuna + piće
```

```
    end
```

```
  else if (odabir = 3) then
```

```
    begin
```

```
      tri teleće suđukice + tri teleći šiš ćevap + somun + piće
```

```
    end;
```

```
end;
```

# Welcome and Introduction

# Embarcadero Technologies

A dark blue world map with city lights glowing in yellow and white. Several colored dots (yellow and red) are scattered across the map, indicating global locations. The dots are concentrated in North America, Europe, and Asia.

Founded 1993

3.2 Million Customers

500+ Employees in 29 Countries





5 R&D Centers of Excellence

World Wide Sales & Support







# Embarcadero Products






## Application Development

-  RAD Studio
-  C++Builder
-  Delphi
-  HTML5 Builder

## Data Architecture and Modeling

-  ER/Studio Data Architect
-  ER/Studio Portal
-  ER/Studio Business Architect
-  ER/Studio Software Architect

## Database Development, Administration and Performance Optimization

-  DB Power Studio
-  DBArtisan
-  Rapid SQL
-  DB Optimizer
-  DB Change Manager

## Embedded and Workgroup Databases

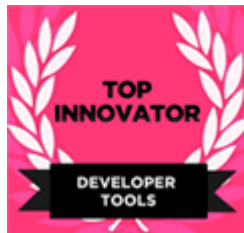
-  InterBase

# Product and Industry Awards

- Embarcadero products have received numerous awards for product innovation – *here are just a few*



- AWARDED TO -  
**Embarcadero Technologies**  
RAD STUDIO



**DeveloperWeek 2013 Top Innovator for Developer Tools – RAD Studio**



**SD Times 100 2012 Database & Data Tools**



SQL Server Magazine's 2011 Editors' Best Awards  
DBArtisan XE2 - Silver in Database Management  
Rapid SQLXE - Bronze in Database Development



2011 Members Choice Winner  
DELPHI Programming Languages



2011 Jolt Productivity Award  
DB Change Manager XE  
Change and Configuration Management Tools



**Software 500**  
Embarcadero Technologies  
2002-2007



JBuilder 2004



**Delphi VCL**  
Best Library or Framework 2008



# Multi-Device, True Native App Development

# Announcing...

The first  
Multi-Device,  
True Native App  
Development  
solution

# What is RAD Studio?



- **RAD Studio** is the app development platform for companies who need to create true native apps for desktops, tablets, and smartphones and get them to market fast

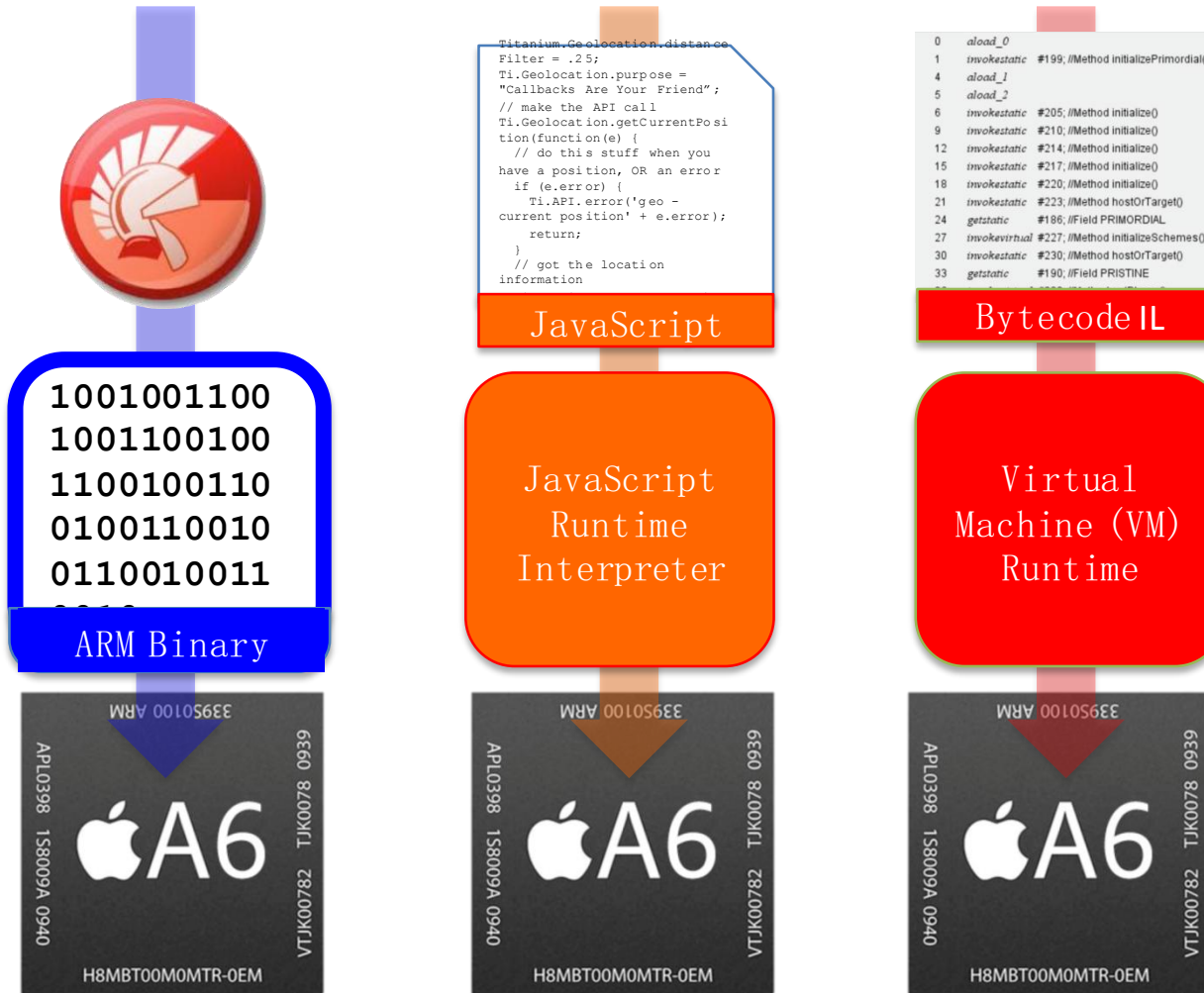


# Multi Device, True Native

- Automatically optimized for multiple target platforms
- 100% native and script-free development for the best app performance and tighter security
- Take advantage of the full range of capabilities available on each device to build a better user experience



# Delphi builds True Native iOS Apps

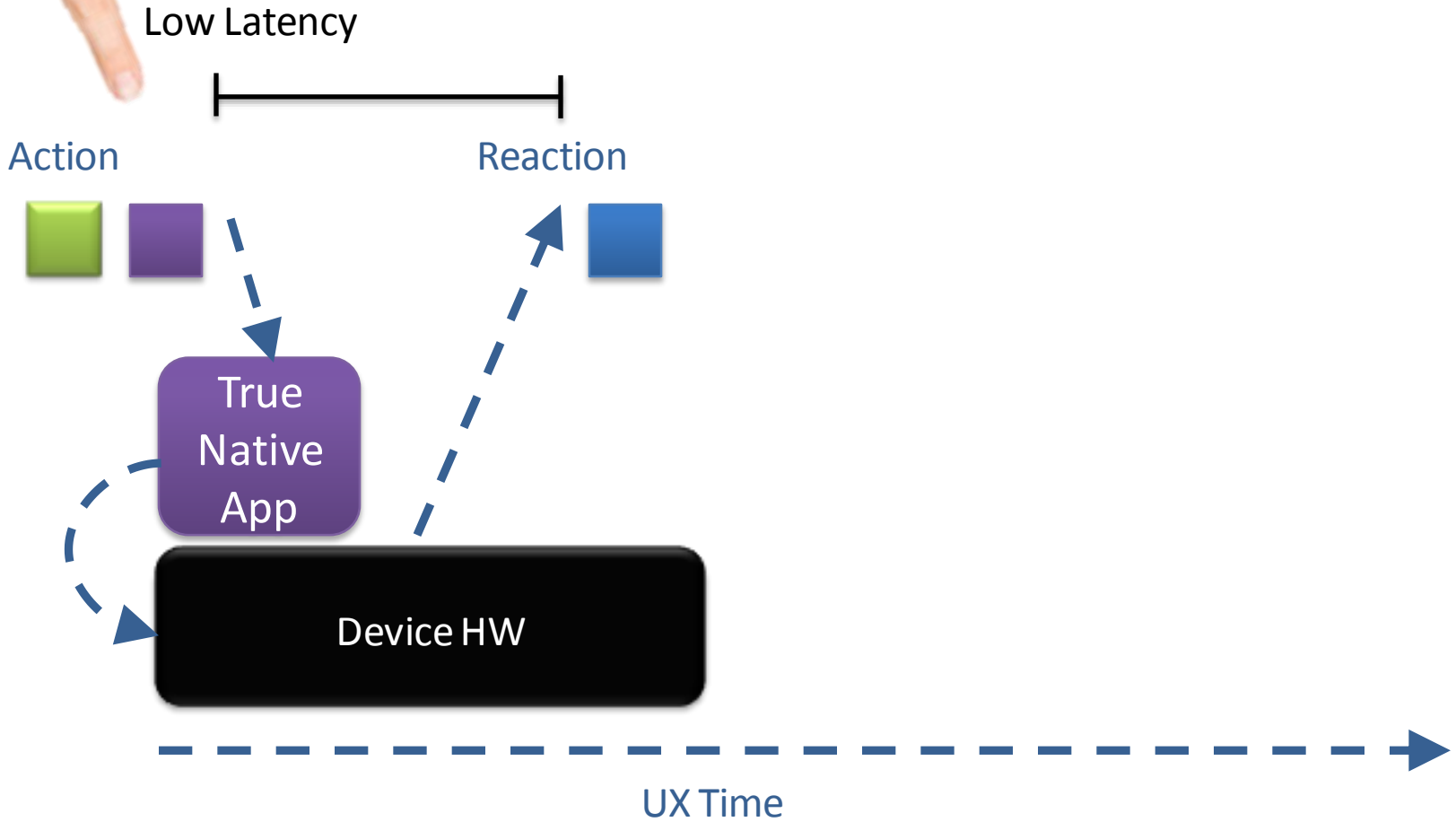


**True Native**

**Scripted**

**VM**

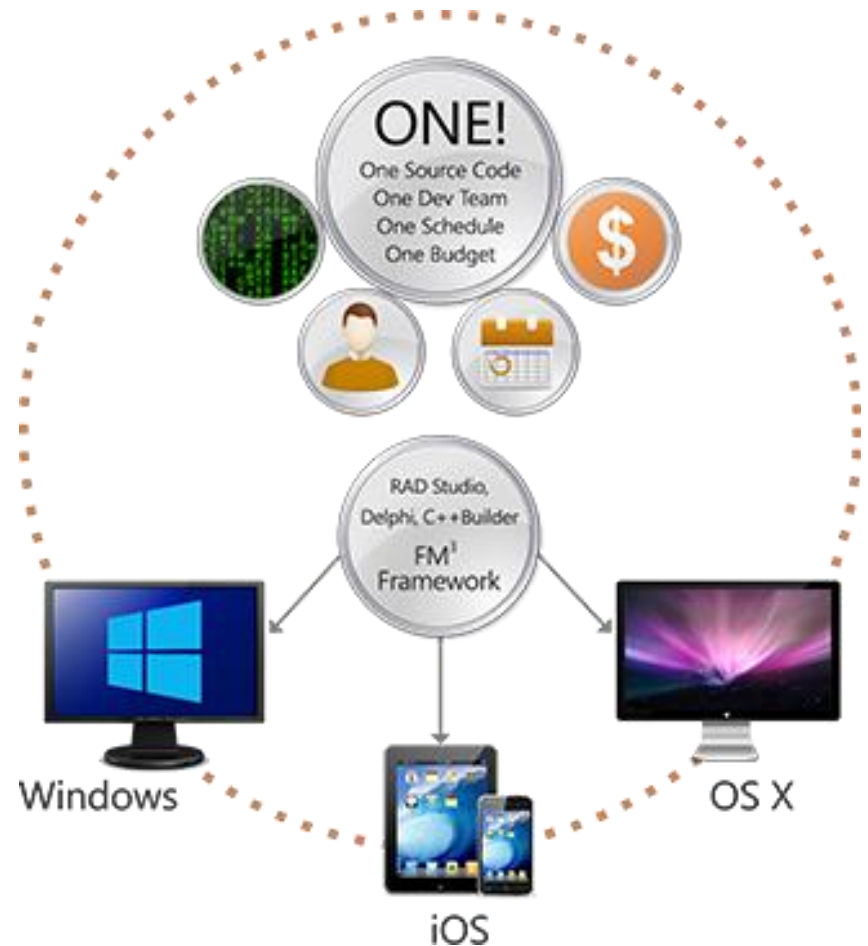
# Low Latency = Great UX



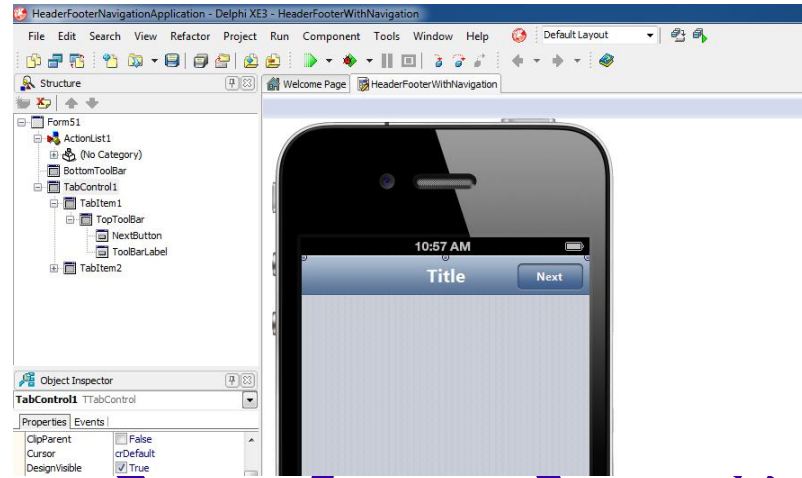


# One Codebase, One Team

- One set of development resources to create apps for multiple platforms
  - one codebase
  - one team
  - one schedule
- Reduced budgets and complexity

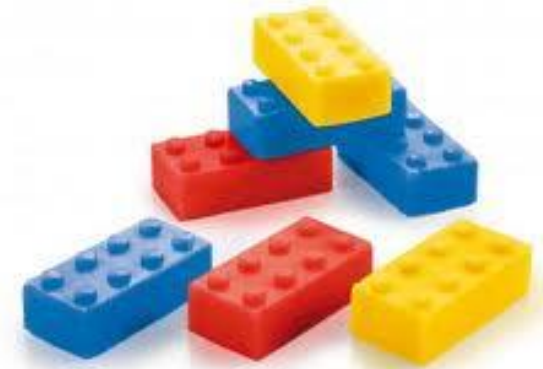


# Rapid Prototyping



# Get To Market Fast!

- Rapid prototyping and project bootstrapping
- Quick, easy connectivity to enterprise databases
- Stay ahead and competitive in the dynamic, multi-device, mobile landscape
- Extendable and reusable visual component building blocks for faster and highly maintainable development



# Building Mobile and Desktop Apps from One Codebase

# FireMonkey Architecture

Application



Framework



Platform



iOS

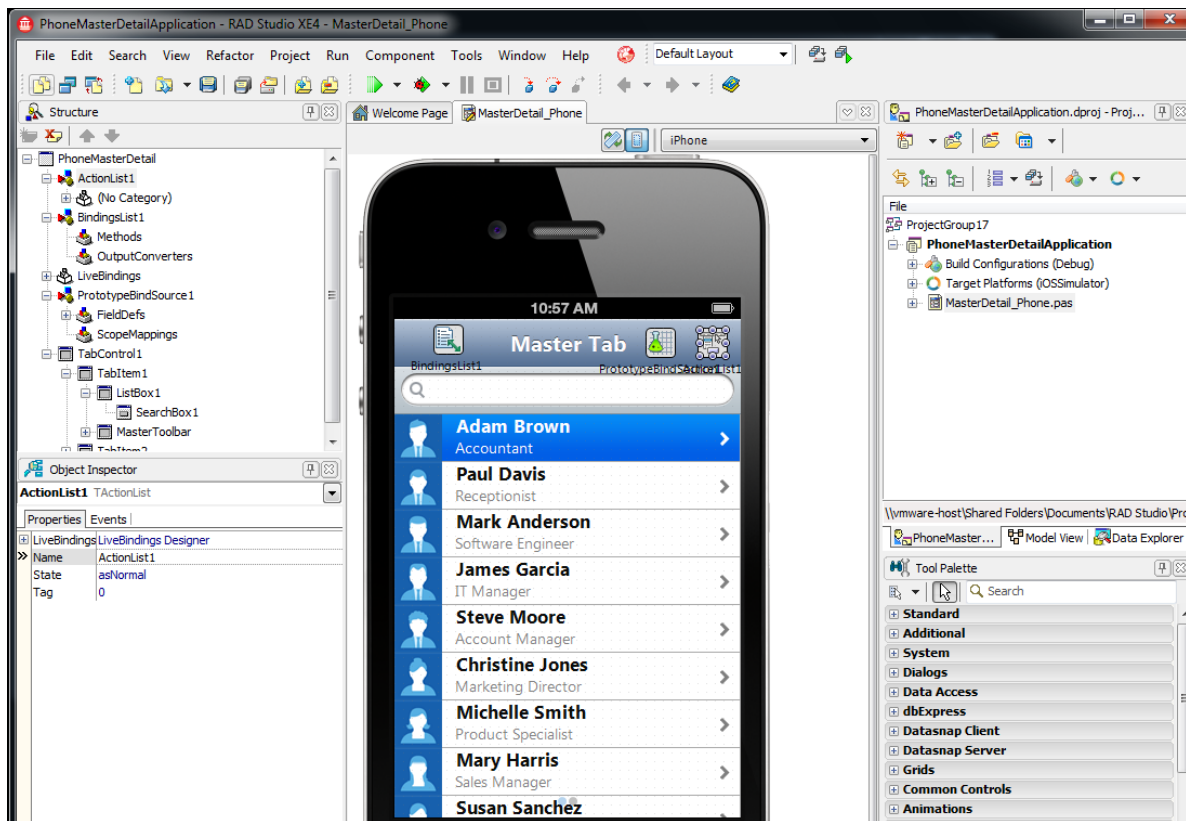


Desktop

Mobile

# Delphi FireMonkey on iOS

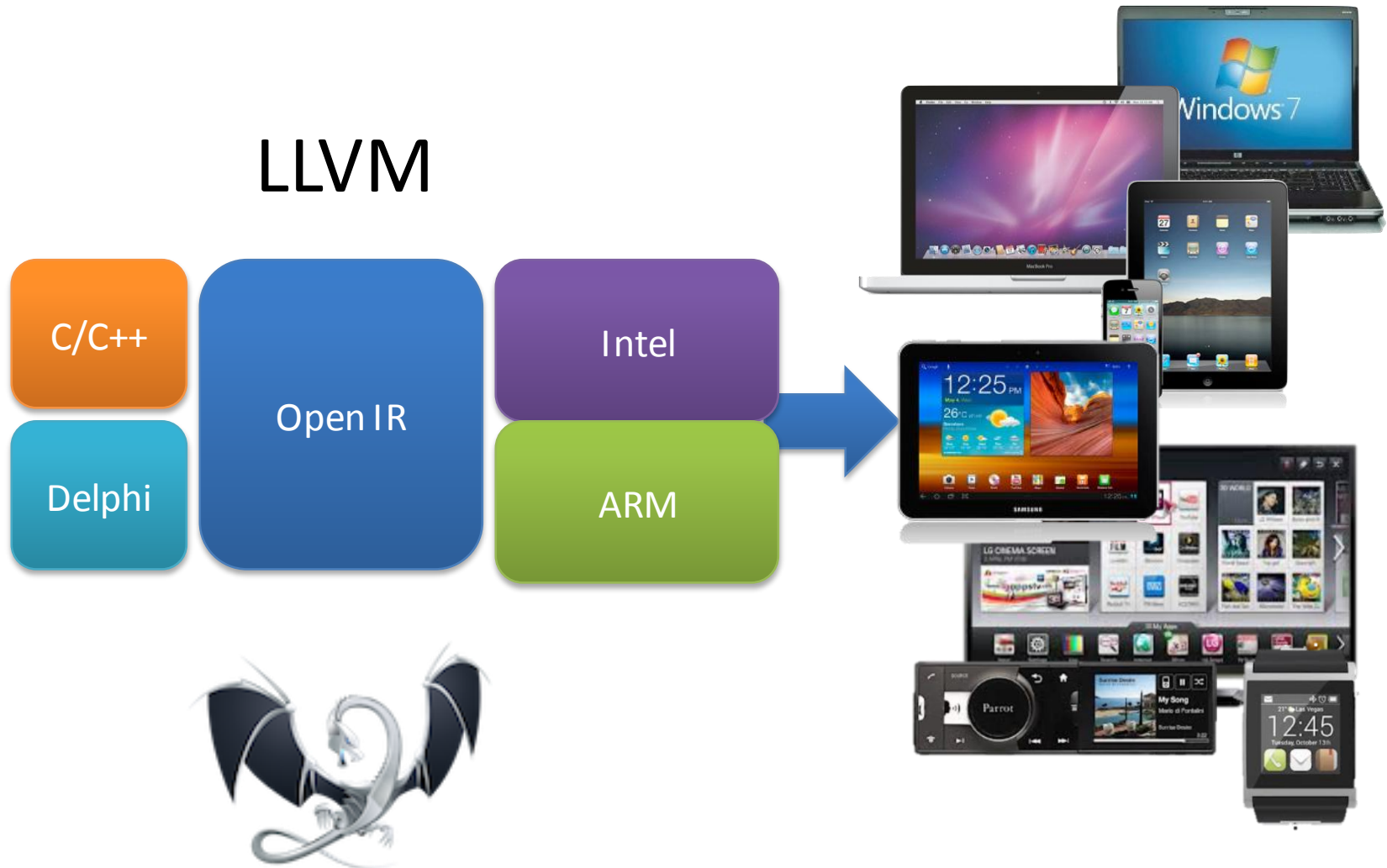
- iOS “Native” Style
- True Native Apps
- Delphi-like components and development model



# Delphi Multi-Device

- Replicate Delphi RAD experience in mobile / multi-device space
- “Single experience + one codebase”
  - One easy language across platform
  - Same IDE
  - Same file access, database access, sensors and device capabilities
  - Same user interface library and components

# New Compiler Architecture





# Delphi “NextGen” Compiler

- New Compiler Architecture
  - Based on LLVM, <http://llvm.org/>
  - Used also by Apple
- Uses Automatic Reference Counting (ARC)
- New Language and RTL features



# OS Support for iOS Development

- Mac OS X – “Lion” and “Mountain Lion”
- iOS 5.1 and 6.x



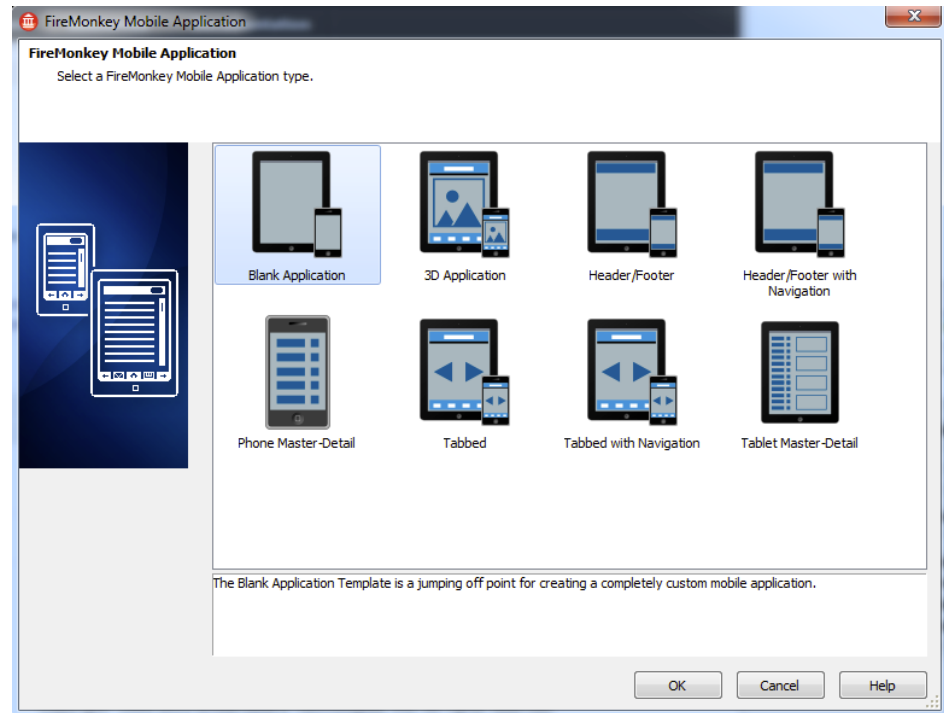
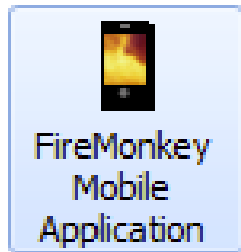
iOS 5.1 iOS 6

# Delphi Workflow

- Use Delphi or RAD Studio IDE on Windows
- Requires a Mac OS X
  - PA Server installed
  - XCode installed
  - ADC account
  - Provisioned devices
- Very different from Delphi XE2 workflow
  - XCode compilation + FP + XCode debugging

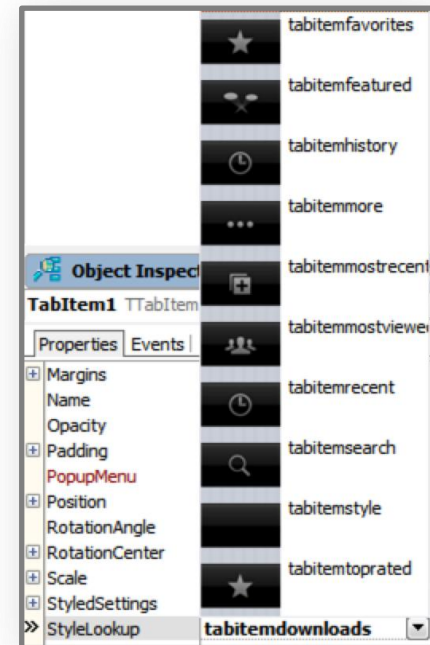
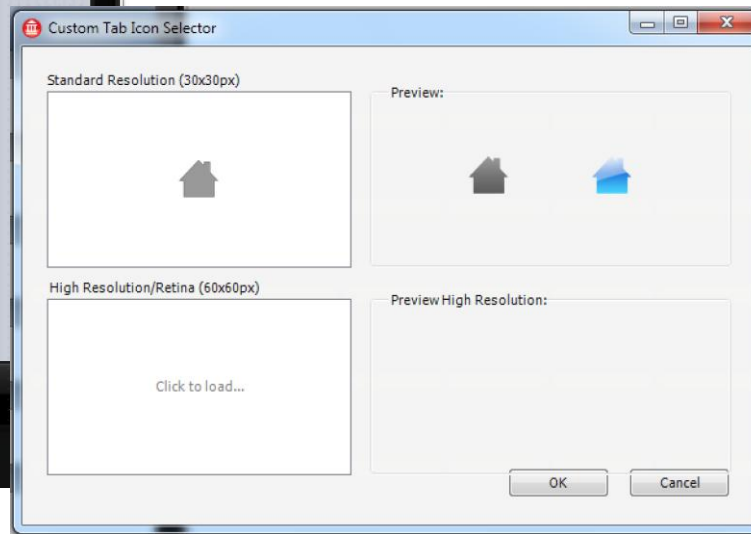
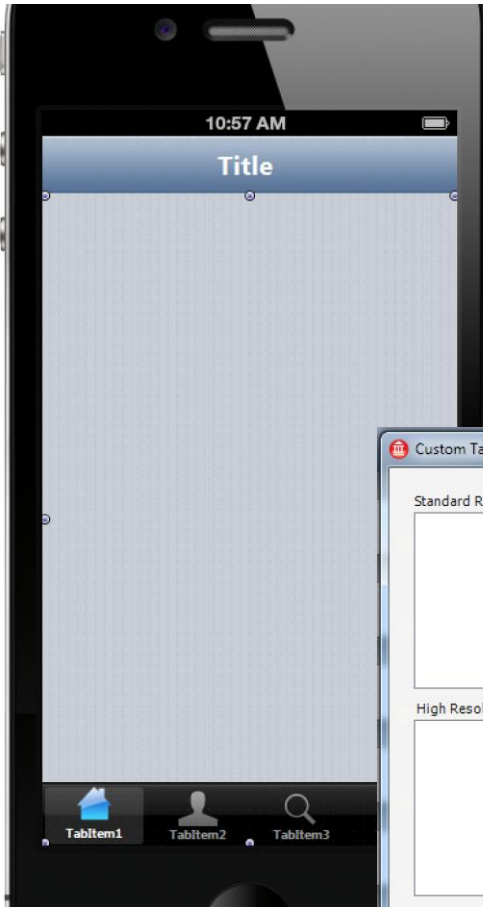
# My First iOS Application

- Delphi “FireMonkey Mobile Application” wizard

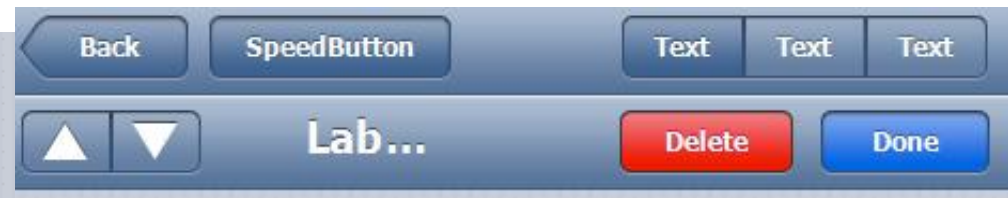
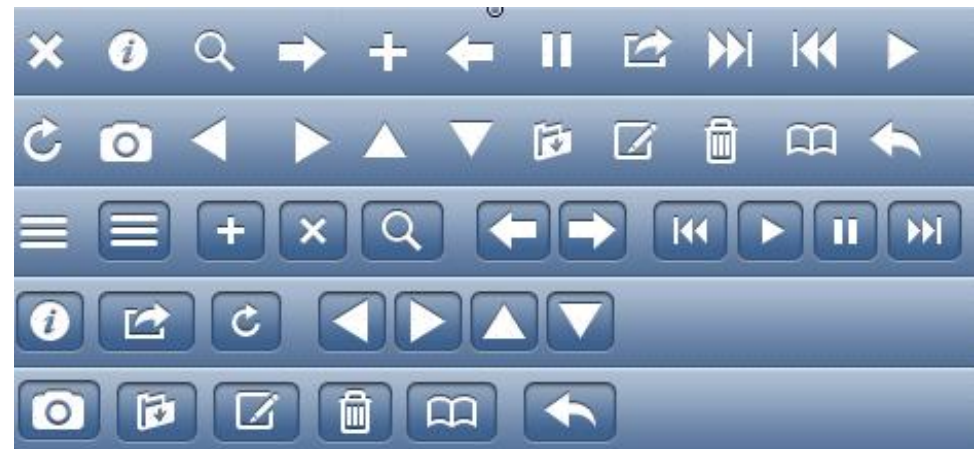
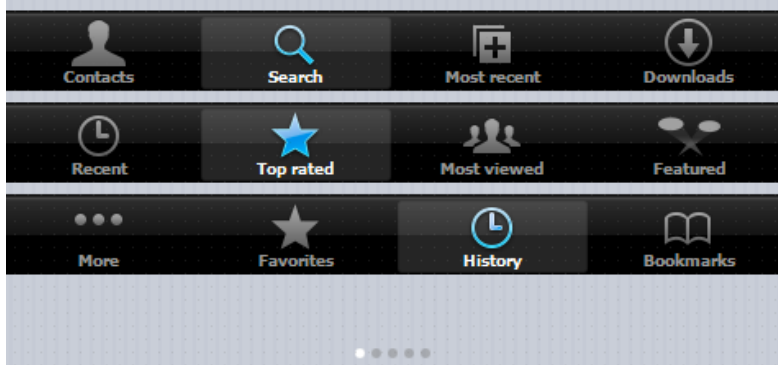


# Native and Custom Styling

- Support for custom tab icons
- Support for Retina images
- “StyleLookup” property



# Native iOS Look-and-Feel



# Native iOS controls and support

- Message alerts
- Custom Pickers
- Date Picker
- Text Editing – Cut/Copy/Paste
- Virtual keyboard types



October	11	2009
November	12	2010
December	13	2011
January	14	2012
February	15	2013

Mountain View
Sunnyvale
Cupertino
Santa Clara
San Jose

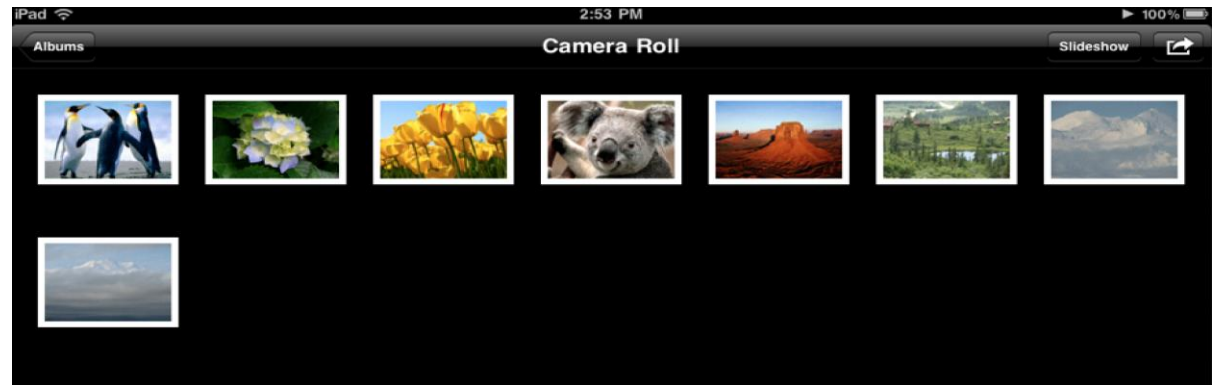
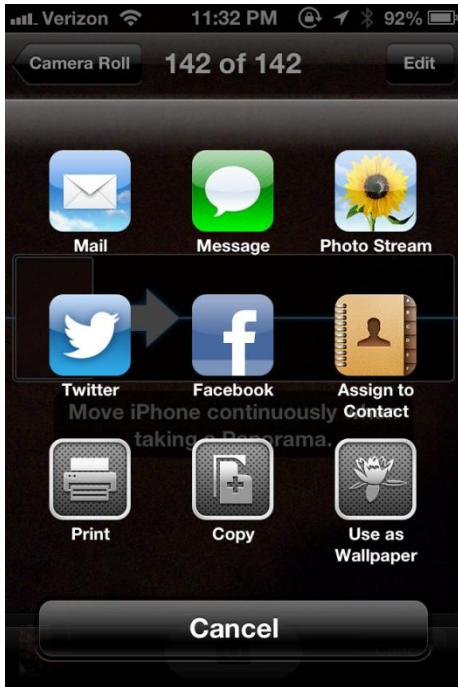
# More iOS Components

- **TWebBrowser** for embedded web browsing
- **TMagnifier** used with text editing, but can be used with other components as well
- **TCamera** - access front/back camera, flash etc.
- **TListBox** for short lists with no or minimal scrolling, header/footer/group/search styling
- **TListView** for long, scrollable, data-bound lists
- **TSwitch** for on/off selections
- **TProgressBar** for flexible progress control visualization
- **TSpeedButton** with variety of iOS-like icon options
- ... and more!



# Extended Actions Support

- Accessing the Camera App
- Accessing the Camera Roll
- Sharing content i.e. photos via Message (SMS), Mail, Facebook, Twitter etc.
- Slide Transitions for Tabs

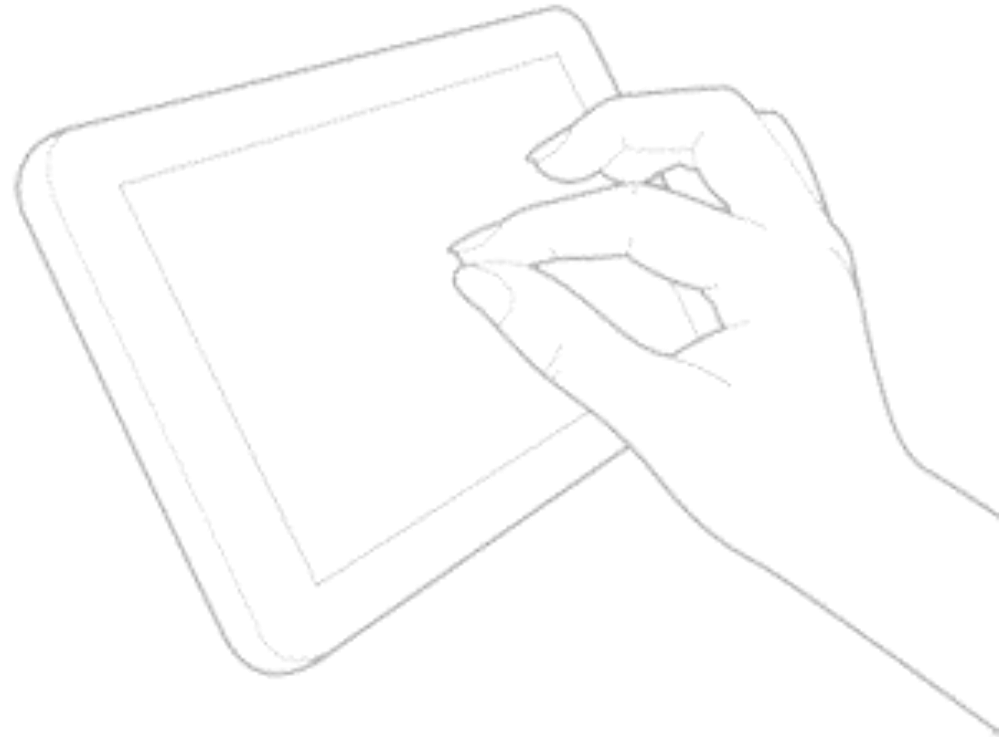


(No Category)	▶
Edit	▶
Window	▶
File	▶
Tab	▶
View	▶
Media Library	▶
LiveBindings	▶

TTakePhotoFromLibraryAction
TTakePhotoFromCameraAction
TShowShareSheetAction

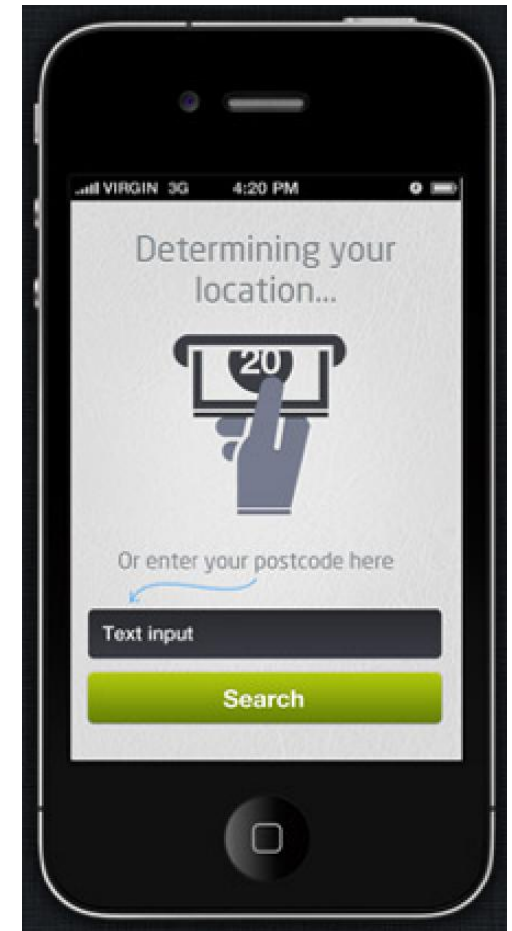
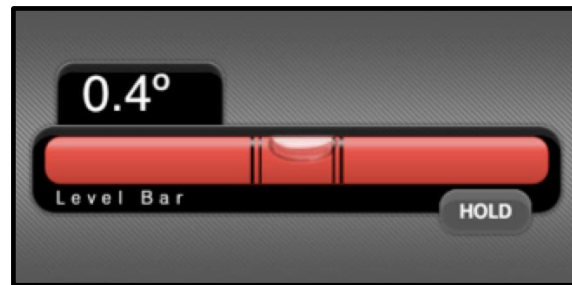
# Gestures

- Swipe
- Tap
- Pinch & Zoom
- Tap & Hold



# Sensor Components

- Location Sensor (GPS)
- Motion Sensor (Accelerometer)
- Orientation Sensor (Gyroscope)



# iOS Services

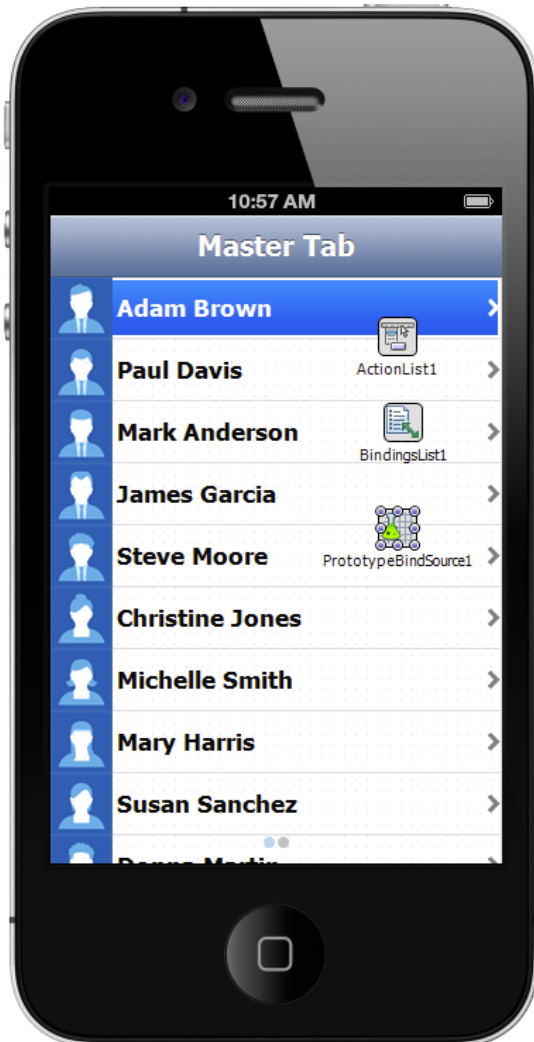
- Notification Center
- ... and more



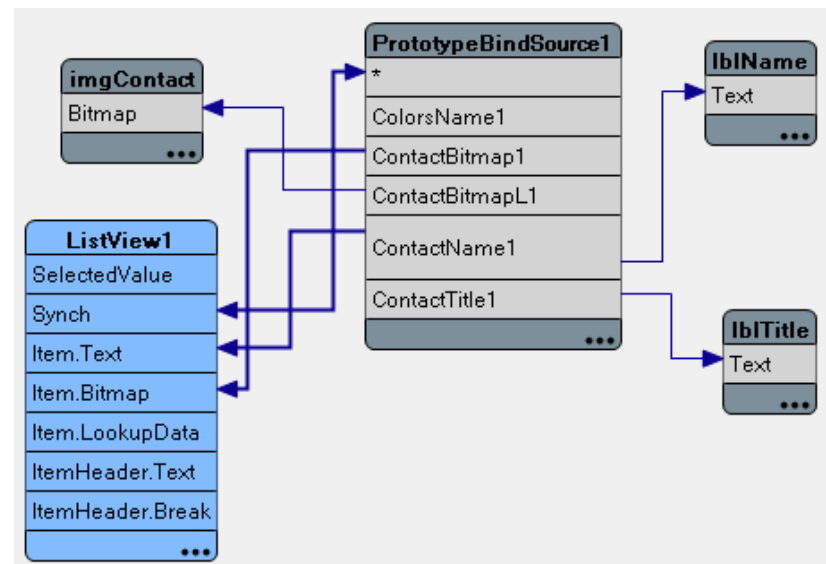
Break

# Creating Apps that Work with Data and Services

# Visual LiveBindings



- Bind controls to data
- Rapid Prototyping



# Local Databases

SQLite	InterBase ToGo
Free	Commercial
Feature light	Fully featured
No security	Secure Encryption
Simple Data Storage	Full SQL-92 RDBMS
Single read/write	Fast multi read/write





# Enterprise Database Connectivity



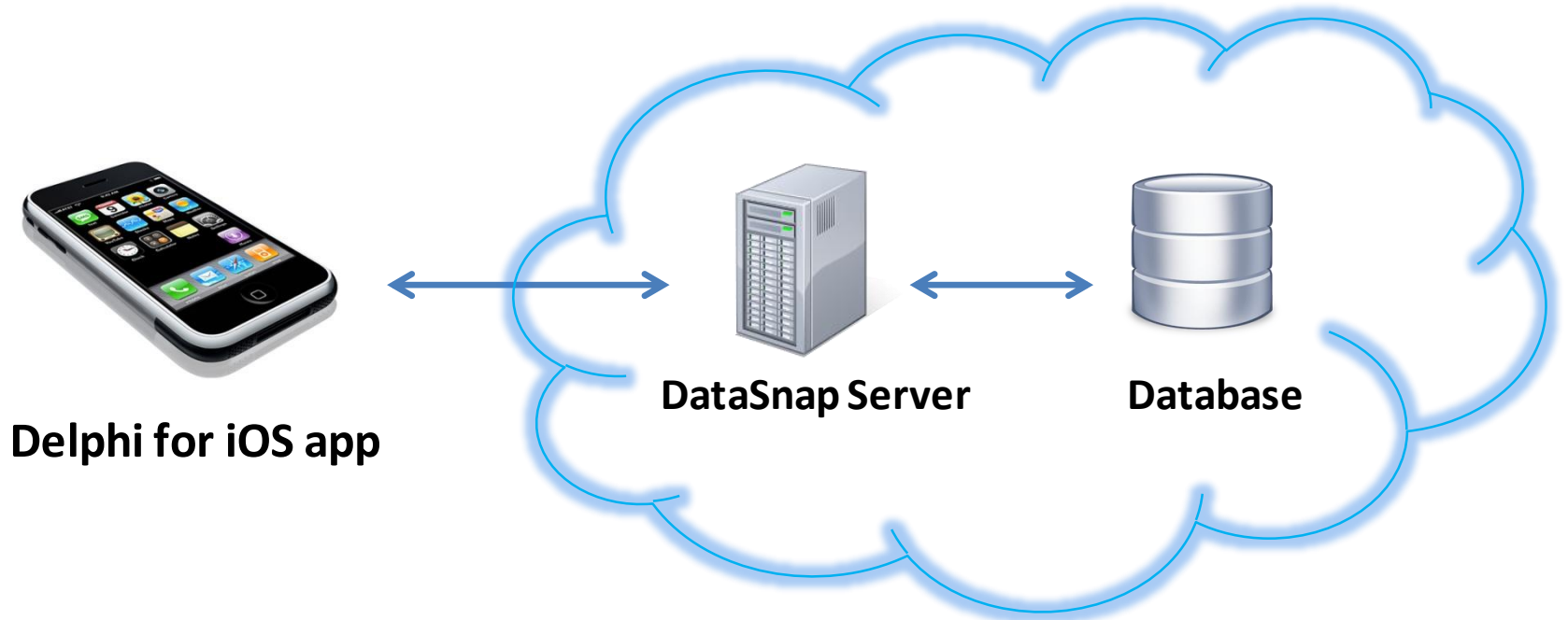
Multiple Devices



Multiple Data Sources

# Multitier Development

- Accessing remote services
- Connecting to DataSnap servers from an iOS device



# Summary

# RAD Studio Summary

- Multi-device, true native application development from a single codebase with apps being automatically, natively optimized for multiple target platforms
- Reduce complexity and cost with just one of everything for your app development: one dev team, one code base, one budget, one schedule
- Be fast to market with extendable and reusable visual component building blocks for faster and highly maintainable development

# Q2 Developer Direct Webinars

Date	Topic
April 19	Welcome to the New Season – News, RAD iOS App Dev Now!
April 26	The Multi-device Enterprise (Using Enterprise Data in Your Mobile Strategy)
May 3	From Desktop to Multi-Device User Experience and Beyond
May 10	What's True Native and Why Does True Native Matter?
May 17	Multi-Device Development - From Data to Business Information
May 24	On-Device Rapid Prototyping
June 7	Building Your Model To Scale
June 14	Season finale – Bringing it all together



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# More Information

- <http://www.embarcadero.com>
- <http://edn.embarcadero.com>





Q & A