



Windows Phone

Getting Started  
with  
Windows Phone



7

Rob Miles & Andy Wigley  
Windows Phone 7 Jump Start  
Microsoft Corporation

---

---

---

---

---

---

---

# Agenda

Becoming a developer

Setting up your system

Creating Windows Phone applications

Building our first application

2

Windows Phone Jump Start

---

---

---

---

---

---

---



Windows Phone

Becoming a  
developer

---

---

---

---

---

---

---

# What you need to do

- Get the Windows Phone Developer Tools
- Build your Silverlight or XNA Framework application
- Register to publish
- Distribute your application



Windows Phone Jump Start

---

---

---

---

---

---

---

# Developer Portal

- The Portal is where you manage your MarketPlace presence
- Registered developers can sign in and submit applications for sale
- You can also obtain software



<http://developer.windowsphone.com>

Windows Phone Jump Start

---

---

---

---

---

---

---

# Getting Started

## Windows Phone Developer Portal

- **Get the tools** you need for all the development and design of Windows Phone apps
- **Get inspired** by blog entries, white papers, events and other resources
- **Get assistance** from the Developer Community through Forums
- **Submit your applications** for verification and deployment

---

---

---

---

---

---

---



Setting up your system

---

---

---

---

---

---

---

Developer Tools

One single **free** download gets you all the tools

- Microsoft Visual Studio 2010
  - Express Edition for Windows Phone
  - Integrate with already installed 'paid' Visual Studio 2010 editions
- Microsoft Expression Blend for Windows Phone
- Microsoft XNA Game Studio 4.0
- Works fine alongside existing Visual Studio 2010 installations

8

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

System Requirements

- Supported Operating Systems
  - Windows® Vista® (x86 and x64) ENU with Service Pack 2 – all editions except Starter Edition
  - Windows 7 (x86 and x64) ENU – all editions except Starter Edition

9

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

# System Requirements

- Hardware
  - Installation requires 3 GB of free disk space
  - 2 GB RAM
- Graphics Card
  - XNA® Game Studio deployment to Windows® Phone Emulator requires a DirectX® 10 or later graphics card with WDDM 1.1 driver.
  - DirectX 10 capable card with a WDDM 1.1 driver is needed to take advantage of GPU acceleration on the Windows Phone Emulator for an XNA application

10

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

# Getting the Tools

# Demo

Demo 1: Downloading Visual Studio 2010

11

Windows Phone Jump Start

---

---

---

---

---

---

---



# Creating Windows Phone applications

---

---

---

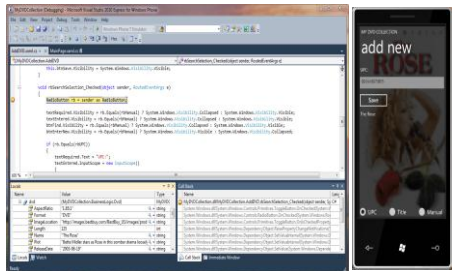
---

---

---

---

# Microsoft Visual Studio 2010 Express for Windows Phone



---

---

---

---

---

---

---

# Windows Phone 7 Emulator

- Application behavior on the emulator is identical to a physical device
- Great device to initially test your applications
  - Direct deployment from within Visual Studio 2010
  - One emulator can host applications from multiple Visual Studio 2010 instances
  - You can add breakpoints and step through code
- Performance behavior and user experience will be (slightly) different on the emulator
- Can use multiple mice to simulate multi-touch

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

# Windows Phone 7 device

- It is easy to change deployment to a physical device
- Your device is bound to your Marketplace Developer id
- You can debug programs in the device as easily as ones on the emulator
- Programs that you create are held on the phone and can run without Visual Studio being present

15

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

Windows  
Phone

Types of applications

---

---

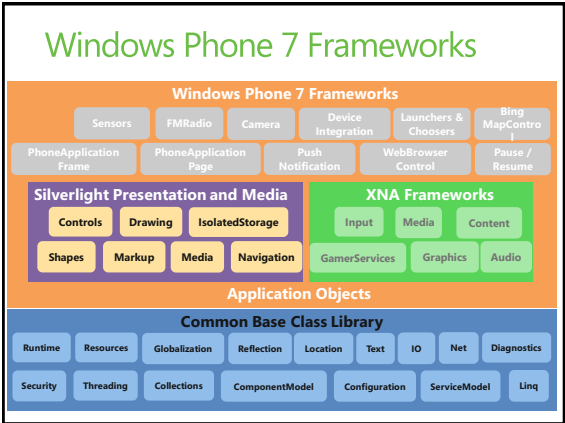
---

---

---

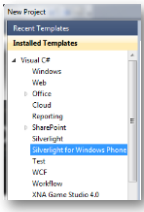
---

---



Development Choices

- You can use Silverlight or you can use XNA to write your phone applications
- You select the type when you make a new project



18

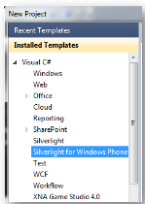
Windows Phone Microsoft confidential

© 2010 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.

6

## Development Choices

- Sometimes you use elements of one framework within another
  - XNA uses the Silverlight accelerometer
  - Silverlight uses XNA to play sound effects



19

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

---

## XNA Development

- If you have written XNA before you will find it really easy to move onto the phone platform
- The Touch and Accelerometer support allow you to explore really interesting game types
- ..and you have high performance 3D support available



20

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

---

## Silverlight Development

- A great way to quickly produce good looking, high quality mobile applications
- Set of Silverlight controls that match the Windows Phone 7 "look and feel"



21

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

---

# Silverlight and XAML

- Everything can be done in code, but not always the best way
  - Coders are not always great UI designers
  - XAML defines what the user sees on the phone
  - Code behind defines the behavior of the application
- You can leverage this way of working on Windows Phone platform

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

# Microsoft Expression Blend for Windows Phone

- You can build amazing experiences relatively easy
- The tool is powerful but use it 'wisely' for Windows Phone UI design (keep to the design standards)
- The tool of choice for transitions / animations
- Has great support for showing / testing data driven UI elements
- Works great with Visual Studio 2010 for Windows Phone
- Use Windows Phone Emulator to test experiences

Windows Phone Microsoft confidential

---

---

---

---

---

---

---

# Creating a Silverlight App

# Demo

Demo 2: Creating an empty application

24

Windows Phone Jump Start

---

---

---

---

---

---

---



# Lab 1 – Complete After Session Before Thursday Morning Session

Hello Windows Phone 7

- <http://channel9.msdn.com/learn/courses/WP7TrainingKit/WP7GettingStarted/HelloPhoneWP7Lab/>
- Complete Exercise 1 Tasks 1 and 2

We'll hold office hours tomorrow from 1-4 pm PST in the BTL Forum – if you have any questions or need support while doing your labs

---

---

---

---

---

---

---

# Review

- You need to join the Developer Marketplace to write WP7 apps
- You need to download the Windows Phone Emulator separately
- You must have a 3D graphics card to write WP7 apps
- The emulator only works for Silverlight applications
- You can use Expression Blend to design your User Interfaces

26

Windows Phone Jump Start

---

---

---

---

---

---

---

# Review

- You need to join the Developer Marketplace to write WP7 apps
- You need to download the Windows Phone Emulator separately
- You must have a 3D graphics card to write WP7 apps
- The emulator only works for Silverlight applications
- You can use Expression Blend to design your User Interfaces

27

Windows Phone Jump Start

---

---

---

---

---

---

---

# Review

You need to join the Developer Marketplace to write WP7 apps

You need to download the Windows Phone Emulator separately

You must have a 3D graphics card to write WP7 apps

The emulator only works for Silverlight applications

You can use Expression Blend to design your User Interfaces

28

Windows Phone Jump Start

---

---

---

---

---

---

---

# Review

You need to join the Developer Marketplace to write WP7 apps

You need to download the Windows Phone Emulator separately

You must have a 3D graphics card to write WP7 apps

The emulator only works for Silverlight applications

You can use Expression Blend to design your User Interfaces

29

Windows Phone Jump Start

---

---

---

---

---

---

---

# Review

You need to join the Developer Marketplace to write WP7 apps

You need to download the Windows Phone Emulator separately

You must have a 3D graphics card to write WP7 apps

The emulator only works for Silverlight applications

You can use Expression Blend to design your User Interfaces

30

Windows Phone Jump Start

---

---

---

---

---

---

---

# Review

You need to join the Developer Marketplace to write WP7 apps

You need to download the Windows Phone Emulator separately

You must have a 3D graphics card to write WP7 apps

The emulator only works for Silverlight applications

You can use Expression Blend to design your User Interfaces

31

Windows Phone Jump Start

---

---

---

---

---

---

---

# Coming Up Next...

Building a Silverlight program for Windows Phone

Creating a Silverlight user interface

32

Windows Phone Jump Start

---

---


---

---

---

---

---



Windows

Phone

© 2010 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names and/or may be registered trademarks and/or trademarks in the U.S. and/or other countries.

The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of the company, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation.

MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.

---

---

---

---

---

---

---

© 2010 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.

11