

# Windows Phone Developer Guidance Map v2.0

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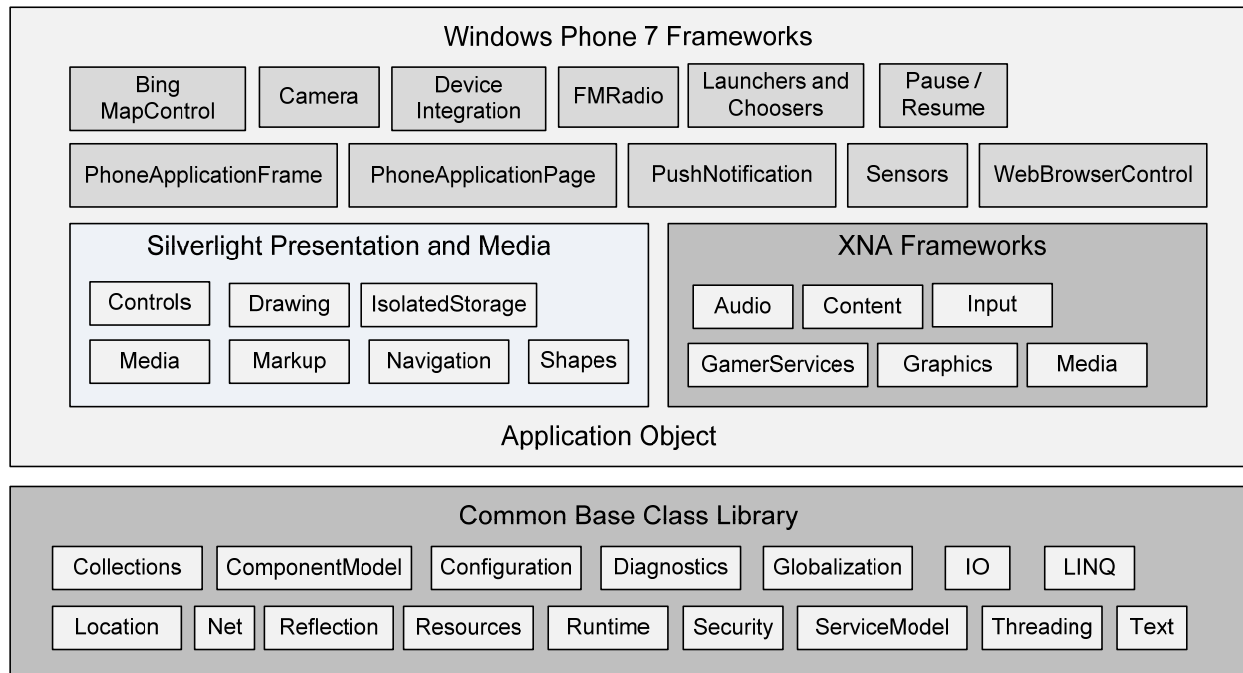
## Sources of Windows Phone Developer Guidance

You can think of this as a “topology map” of some of the main sources of Windows Phone developer guidance from Microsoft. Simply by knowing what types of resources are available (code, forums, documentation, training, etc.), and by knowing where to look, you improve your success at finding the resources you need to get your job done, whether that’s figuring out how to code for a particular scenario, ramping up on the technology, or finding the latest news. Here is a summary of the various channels and some of what they have to offer:

Category	Items
<i>App Hub</i>	<ul style="list-style-type: none"><li>• App Hub Home - <a href="http://create.msdn.com/">http://create.msdn.com/</a></li><li>• App Hub Content Catalog - <a href="http://create.msdn.com/en-US/education/catalog/">http://create.msdn.com/en-US/education/catalog/</a></li></ul>
<i>Documentation</i>	<ul style="list-style-type: none"><li>• Windows Phone- <a href="http://msdn.microsoft.com/en-us/library/ff402535(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402535(VS.92).aspx</a></li><li>• API Reference - <a href="http://msdn.microsoft.com/en-us/library/ff626516(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff626516(VS.92).aspx</a></li></ul>
<i>MSDN Phone Hub</i>	<ul style="list-style-type: none"><li>• MSDN Phone Hub - <a href="http://msdn.microsoft.com/en-us/ff380145.aspx">http://msdn.microsoft.com/en-us/ff380145.aspx</a></li></ul>
<i>Channel 9</i>	Tags <ul style="list-style-type: none"><li>• Windows Phone - <a href="http://channel9.msdn.com/Tags/windows+phone">http://channel9.msdn.com/Tags/windows+phone</a></li></ul>
<i>Code Samples</i>	MSDN Library <ul style="list-style-type: none"><li>• Code Samples- <a href="http://msdn.microsoft.com/en-us/library/ff431744(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431744(VS.92).aspx</a></li></ul>
<i>Forums</i>	<ul style="list-style-type: none"><li>• App Hub Forums - <a href="http://forums.create.msdn.com/forums/">http://forums.create.msdn.com/forums/</a></li><li>• MSDN Forums - <a href="http://social.msdn.microsoft.com/Forums/en-US/category/windowsphone">http://social.msdn.microsoft.com/Forums/en-US/category/windowsphone</a></li></ul>
<i>How Tos</i>	<ul style="list-style-type: none"><li>• How Tos Index - <a href="http://msdn.microsoft.com/en-us/library/gg278408(VS.92).aspx">http://msdn.microsoft.com/en-us/library/gg278408(VS.92).aspx</a></li></ul>
<i>Training</i>	Channel9 <ul style="list-style-type: none"><li>• Windows Phone 7 Training Course - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx</a></li></ul>
<i>Videos</i>	<ul style="list-style-type: none"><li>• YouTube Channel - <a href="http://www.youtube.com/user/windowsphone">http://www.youtube.com/user/windowsphone</a></li></ul>
<i>Support</i>	<ul style="list-style-type: none"><li>• App Hub Forums - <a href="http://forums.create.msdn.com/forums/">http://forums.create.msdn.com/forums/</a></li><li>• Windows Phone Solution Center -</li></ul>

	<a href="http://support.microsoft.com/gp/windows_mobile_master">http://support.microsoft.com/gp/windows_mobile_master</a>
<i>MSDN Magazine</i>	<ul style="list-style-type: none"><li>• Mobility topic - <a href="http://msdn.microsoft.com/en-us/magazine/ee532094.aspx?sdmr=mobile&amp;sdmi=topics">http://msdn.microsoft.com/en-us/magazine/ee532094.aspx?sdmr=mobile&amp;sdmi=topics</a></li></ul>
<i>Blogs</i>	<ul style="list-style-type: none"><li>• Windows Phone Team Developer Blog - <a href="http://windowsteamblog.com/windows_phone/b/wpdev/">http://windowsteamblog.com/windows_phone/b/wpdev/</a></li></ul>

# Windows Phone Architecture (Runtime / Frameworks)



# Topics and Features Map (a “Lens” for Finding Windows Phone Content)

One of the simplest ways to find content for a product or technology is to actually know what the most common topics or categories are, the main features, and the APIs or families of APIs. When you know the label for a topic, feature or API, it makes it easier to search or browse for the information. Here is a map of common topics, features, and APIs for Windows Phone:

<b>Topics</b>	
<ul style="list-style-type: none"><li>• Controls</li><li>• Data Access</li><li>• Deployment</li><li>• Device Management</li><li>• Location</li></ul>	<ul style="list-style-type: none"><li>• Media and Media Player</li><li>• Model, View, ViewModel</li><li>• Navigation, Pages, and Frames</li><li>• Security</li><li>• Tombstoning</li></ul>
<b>Features</b>	
<ul style="list-style-type: none"><li>• Application Bar</li><li>• Camera extensibility</li><li>• Gamer Services</li><li>• Graphics and Animation</li><li>• Location API's</li></ul>	<ul style="list-style-type: none"><li>• Pause/Resume</li><li>• Push notifications</li><li>• Sensors</li><li>• Touch and Gestures</li><li>• XNA</li></ul>
<ul style="list-style-type: none"><li>• App Bar</li><li>• Background image</li><li>• Bing map control</li><li>• Camera extensibility</li><li>• FM Tuner</li><li>• Gamer Services</li><li>• Geolocation</li><li>• Interop Services</li><li>• Isolated Storage</li><li>• Launchers and Choosers</li><li>• ListView</li><li>• Lite player</li><li>• Live Tokens</li><li>• LiveID</li></ul>	<ul style="list-style-type: none"><li>• Multi-touch</li><li>• Media Hub</li><li>• Network State</li><li>• Page/Frame/Navigation</li><li>• Pause/Resume</li><li>• Push notifications</li><li>• Reactive LINQ</li><li>• Ringtone registry</li><li>• Sensors</li><li>• Vibrate device</li><li>• Web browser control</li><li>• WM Legacy API support</li><li>• XNA Dynamic audio and microphone</li><li>• XNA Media</li></ul>
<b>API's</b>	
<ul style="list-style-type: none"><li>• Microsoft.Devices</li><li>• Microsoft.Devices.Radio</li><li>• Microsoft.Devices.Sensors</li><li>• Microsoft.Phone</li><li>• Microsoft.Phone.Controls</li><li>• Microsoft.Phone.Controls.Primitives</li><li>• Microsoft.Phone.Info</li><li>• Microsoft.Phone.Marketplace</li><li>• Microsoft.Phone.Net.NetworkInformation</li><li>• Microsoft.Phone.Notification</li></ul>	<ul style="list-style-type: none"><li>• Microsoft.Phone.Reactive</li><li>• Microsoft.Phone.Shell</li><li>• Microsoft.Phone.Tasks</li><li>• System</li><li>• System.Device.Location</li><li>• System.Diagnostics</li><li>• System.Windows.Automation.Peers</li><li>• System.Windows.Controls</li><li>• System.Windows.Media.Imaging</li><li>• System.Windows.Navigation</li></ul>

## How The Map is Organized (Organizing the “Content Collections”)

The content collections for Windows Phone are organized in this map by chunking it up into Getting Started, Architecture and Design, and Content Types (Code Samples, How Tos, Videos, and Training.) The following table summarizes the organization:

<b>Category</b>	<b>Description</b>
<i>Getting Started</i>	This section provides some of the main starting points for ramping up on Windows Phone and building your first application.
<i>Architecture and Design</i>	This section provides some of the main starting points for learning about how to design effective Windows Phone applications.
<i>Content Types</i>	<p>The developer guidance content is organized by the following content types:</p> <ul style="list-style-type: none"><li>• Code Samples</li><li>• How Tos</li><li>• Videos</li><li>• Training</li><li>• Tools</li></ul> <p>The content within each content type is then organized using common topics, common tasks, or features for a simple browsing experience.</p>

## Getting Started

This section provides some great starting points for getting an overview of Windows Phone and getting started building Windows Phone applications:

Category	Items
<i>Download</i>	<ul style="list-style-type: none"><li>• Download the Windows Phone Developer Tools - <a href="http://msdn.microsoft.com/en-us/library/ff402523(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402523(VS.92).aspx</a></li></ul>
<i>Getting Started</i>	<ul style="list-style-type: none"><li>• Windows Phone Documentation - <a href="http://msdn.microsoft.com/en-us/library/ff402535(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402535(VS.92).aspx</a></li><li>• Getting Started with Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402529(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402529(VS.92).aspx</a></li><li>• Application Platform Overview for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402531(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402531(VS.92).aspx</a></li><li>• Fundamental Concepts for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967549(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967549(VS.92).aspx</a></li></ul> <p>Video</p> <ul style="list-style-type: none"><li>• Getting Started with Windows Phone 7 Series - <a href="http://msdn.microsoft.com/en-us/ff728583.aspx">http://msdn.microsoft.com/en-us/ff728583.aspx</a></li></ul>
<i>Build Your First Applications</i>	<ul style="list-style-type: none"><li>• How To Create Your First Silverlight Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402526(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402526(VS.92).aspx</a></li><li>• How To Create Your First XNA Framework for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff472340(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff472340(VS.92).aspx</a></li><li>• Creating Trial Applications for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967554(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967554(VS.92).aspx</a></li></ul> <p>Videos</p> <ul style="list-style-type: none"><li>• Build Your First XNA Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/ff728584.aspx">http://msdn.microsoft.com/en-us/ff728584.aspx</a></li><li>• Silverlight: Build your first Silverlight application for Windows Phone - <a href="http://msdn.microsoft.com/ff728585.aspx">http://msdn.microsoft.com/ff728585.aspx</a></li></ul>
<i>Videos</i>	<ul style="list-style-type: none"><li>• Getting Started Videos - <a href="http://www.silverlight.net/learn/videos/windows-phone/">http://www.silverlight.net/learn/videos/windows-phone/</a></li></ul>
<i>Training</i>	<ul style="list-style-type: none"><li>• Windows Phone 7 Training Course - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx</a></li></ul>

## Architecture and Design

This section provides some of the main starting points for learning about how to design effective Windows Phone applications:

Category	Items
<i>What's New</i>	<ul style="list-style-type: none"><li>• What's New in Windows Phone Developer Tools - <a href="http://msdn.microsoft.com/en-us/library/ff637516(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637516(VS.92).aspx</a></li></ul>
<i>Architecture and Design</i>	<ul style="list-style-type: none"><li>• Application Platform Overview for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402531(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402531(VS.92).aspx</a></li><li>• Application Features - <a href="http://msdn.microsoft.com/en-us/library/ff402551(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402551(VS.92).aspx</a></li><li>• Class Library Reference - <a href="http://msdn.microsoft.com/en-us/library/ff626516(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff626516(VS.92).aspx</a></li><li>• The Silverlight and XNA Frameworks for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402528(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402528(VS.92).aspx</a></li></ul>
<i>patterns &amp; practices</i>	<ul style="list-style-type: none"><li>• Windows 7 Developer Guide - <a href="http://wp7guide.codeplex.com/">http://wp7guide.codeplex.com/</a></li></ul>
<i>Performance</i>	<ul style="list-style-type: none"><li>• Creating High Performance Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967560(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967560(VS.92).aspx</a></li></ul>
<i>User Experience</i>	<ul style="list-style-type: none"><li>• Design Resources for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff637515(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637515(VS.92).aspx</a></li></ul>

## Code Samples

The code samples map points to code samples from following sources:

- App Hub Content Catalog - <http://create.msdn.com/en-US/education/catalog/>
- MSDN code Samples for Windows Phone - [http://msdn.microsoft.com/en-us/library/ff431744\(VS.92\).aspx](http://msdn.microsoft.com/en-us/library/ff431744(VS.92).aspx)

### *Categories*

- Accelerometer
- Application Bar
- Audio
- Control Tilt Effect
- Data Access
- Gameplay
- General
- Globalization
- Graphics
- Location
- Maps
- Media
- Networking
- Orientation
- Panorama / Pivot
- Performance
- Progress Bar
- Push Notifications
- Sensors
- Settings Page
- Splash Screen
- Storage
- Tombstoning
- Touch
- WebBrowser Control
- Web Services
- XNA

### *Code Samples Map*

Category	Items
<b>Accelerometer</b>	<ul style="list-style-type: none"><li>• Accelerometer - <a href="http://create.msdn.com/sample/accelerometer">http://create.msdn.com/sample/accelerometer</a></li><li>• Accelerometer Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=185154">http://go.microsoft.com/fwlink/?LinkID=185154</a></li></ul>
<b>Application Bar</b>	<ul style="list-style-type: none"><li>• Application Bar Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=185156">http://go.microsoft.com/fwlink/?LinkID=185156</a></li></ul>
<b>Audio</b>	<ul style="list-style-type: none"><li>• 3D Audio - <a href="http://create.msdn.com/education/catalog/sample/3d_audio">http://create.msdn.com/education/catalog/sample/3d_audio</a></li><li>• Microphone Echo - <a href="http://create.msdn.com/education/catalog/sample/microphone_echo">http://create.msdn.com/education/catalog/sample/microphone_echo</a></li><li>• Sound and Music - <a href="http://create.msdn.com/education/catalog/sample/sound_and_music">http://create.msdn.com/education/catalog/sample/sound_and_music</a></li></ul>
<b>Control Tilt Effect</b>	<ul style="list-style-type: none"><li>• The Effect Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=200720">http://go.microsoft.com/fwlink/?LinkID=200720</a></li></ul>
<b>Data Access</b>	<ul style="list-style-type: none"><li>• ODATA; Developing a Windows Phone 7 Application that Consumes</li></ul>

	<p>ODATA -  <a href="http://blogs.msdn.com/phaniraj/archive/2010/03/19/developing-a-windows-phone-7-application-that-consumes-odata.aspx">http://blogs.msdn.com/phaniraj/archive/2010/03/19/developing-a-windows-phone-7-application-that-consumes-odata.aspx</a></p> <ul style="list-style-type: none"> <li>• ODATA; Odata Client Library for WP7 -  <a href="http://www.microsoft.com/downloads/details.aspx?FamilyID=b251b247-70ca-4887-bab6-dccdec192f8d&amp;displaylang=en">http://www.microsoft.com/downloads/details.aspx?FamilyID=b251b247-70ca-4887-bab6-dccdec192f8d&amp;displaylang=en</a></li> </ul>
<b>Gameplay</b>	<ul style="list-style-type: none"> <li>• Platformer -  <a href="http://create.msdn.com/education/catalog/sample/platformer">http://create.msdn.com/education/catalog/sample/platformer</a></li> <li>• Role-Playing Game -  <a href="http://create.msdn.com/education/catalog/sample/roleplaying_game">http://create.msdn.com/education/catalog/sample/roleplaying_game</a></li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>• Aiming - <a href="http://create.msdn.com/education/catalog/sample/aiming">http://create.msdn.com/education/catalog/sample/aiming</a></li> <li>• Chase and Evade -  <a href="http://create.msdn.com/education/catalog/sample/chase_evade">http://create.msdn.com/education/catalog/sample/chase_evade</a></li> <li>• Content Manifest Extensions -  <a href="http://create.msdn.com/sample/contentmanifestextensions">http://create.msdn.com/sample/contentmanifestextensions</a></li> <li>• Fuzzy Logic -  <a href="http://create.msdn.com/education/catalog/sample/fuzzy_logic">http://create.msdn.com/education/catalog/sample/fuzzy_logic</a></li> <li>• Game State Management -  <a href="http://create.msdn.com/education/catalog/sample/game_state_management">http://create.msdn.com/education/catalog/sample/game_state_management</a></li> <li>• Pathfinding -  <a href="http://create.msdn.com/education/catalog/sample/pathfinding">http://create.msdn.com/education/catalog/sample/pathfinding</a></li> <li>• Photos Sample - <a href="http://go.microsoft.com/fwlink/?LinkId=196273">http://go.microsoft.com/fwlink/?LinkId=196273</a></li> <li>• Unit Converter Starter Kit -  <a href="http://create.msdn.com/education/catalog/sample/unit_converter">http://create.msdn.com/education/catalog/sample/unit_converter</a></li> <li>• User Interface Controls -  <a href="http://create.msdn.com/education/catalog/sample/ui_controls">http://create.msdn.com/education/catalog/sample/ui_controls</a></li> <li>• Waypoint Navigation -  <a href="http://create.msdn.com/education/catalog/sample/waypoints">http://create.msdn.com/education/catalog/sample/waypoints</a></li> </ul>
<b>Globalization</b>	<ul style="list-style-type: none"> <li>• Globalization Sample - <a href="http://go.microsoft.com/fwlink/?LinkId=190350">http://go.microsoft.com/fwlink/?LinkId=190350</a></li> <li>• Localization -  <a href="http://create.msdn.com/education/catalog/sample/localization">http://create.msdn.com/education/catalog/sample/localization</a></li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>• 2D Graphics -  <a href="http://create.msdn.com/education/catalog/sample/graphics_2d">http://create.msdn.com/education/catalog/sample/graphics_2d</a></li> <li>• 3D Graphics -  <a href="http://create.msdn.com/education/catalog/sample/graphics_3d">http://create.msdn.com/education/catalog/sample/graphics_3d</a></li> <li>• Avatar Animation Blending Sample -  <a href="http://create.msdn.com/education/catalog/sample/avatar_animation_blending">http://create.msdn.com/education/catalog/sample/avatar_animation_blending</a></li> </ul>

- Avatar Multiple Animations Sample - [http://create.msdn.com/education/catalog/sample/avatar\\_multiple\\_animations](http://create.msdn.com/education/catalog/sample/avatar_multiple_animations)
- Billboards - <http://create.msdn.com/education/catalog/sample/billboard>
- Bitmap Font Maker - [http://create.msdn.com/education/catalog/utility/bitmap\\_font\\_maker](http://create.msdn.com/education/catalog/utility/bitmap_font_maker)
- Bloom Postprocess - <http://create.msdn.com/education/catalog/sample/bloom>
- Bounce - <http://create.msdn.com/sample/bounce>
- Camera Shake - [http://create.msdn.com/education/catalog/sample/camera\\_shake](http://create.msdn.com/education/catalog/sample/camera_shake)
- Card Game Starter Kit: Blackjack - <http://create.msdn.com/education/catalog/sample/blackjack>
- Catapult Wards Extension Kit - [http://create.msdn.com/education/catalog/trainingkit/catapult\\_wars](http://create.msdn.com/education/catalog/trainingkit/catapult_wars)
- Chase Camera - <http://create.msdn.com/education/catalog/sample/chasecamera>
- Collision - <http://create.msdn.com/education/catalog/sample/collision>
- Collision Series 4: Collision with a Heightmap - [http://create.msdn.com/education/catalog/sample/collision\\_3d\\_heightmap](http://create.msdn.com/education/catalog/sample/collision_3d_heightmap)
- Collision Series 5: heightmap Collision with Normals - [http://create.msdn.com/education/catalog/sample/collision\\_3d\\_heightmap\\_normals](http://create.msdn.com/education/catalog/sample/collision_3d_heightmap_normals)
- Color Replacement - [http://create.msdn.com/education/catalog/sample/color\\_replacement](http://create.msdn.com/education/catalog/sample/color_replacement)
- CPU Skinning - [http://create.msdn.com/education/catalog/sample/cpu\\_skinning](http://create.msdn.com/education/catalog/sample/cpu_skinning)
- Custom Model Class - [http://create.msdn.com/education/catalog/sample/custom\\_model\\_class](http://create.msdn.com/education/catalog/sample/custom_model_class)
- Custom Model Importer - [http://create.msdn.com/education/catalog/sample/custom\\_model\\_importer](http://create.msdn.com/education/catalog/sample/custom_model_importer)
- Customer Avatar Animation Sample - [http://create.msdn.com/education/catalog/sample/custom\\_avatar\\_animation](http://create.msdn.com/education/catalog/sample/custom_avatar_animation)
- Custom Model Effect - [http://create.msdn.com/education/catalog/sample/custom\\_model\\_effect](http://create.msdn.com/education/catalog/sample/custom_model_effect)
- Distortion - <http://create.msdn.com/education/catalog/sample/distortion>
- Flocking - <http://create.msdn.com/education/catalog/sample/flocking>
- Generated Geometry - [http://create.msdn.com/education/catalog/sample/generated\\_geometry](http://create.msdn.com/education/catalog/sample/generated_geometry)
- Input Sequence -

[http://create.msdn.com/education/catalog/sample/input\\_sequence\\_sample](http://create.msdn.com/education/catalog/sample/input_sequence_sample)

- Instanced Model - [http://create.msdn.com/education/catalog/sample/mesh\\_instancing](http://create.msdn.com/education/catalog/sample/mesh_instancing)
- Lens Flare - [http://create.msdn.com/education/catalog/sample/lens\\_flare](http://create.msdn.com/education/catalog/sample/lens_flare)
- Multi-Platform Game Training Kit - [http://create.msdn.com/education/catalog/trainingkit/honeycomb\\_rush\\_tk](http://create.msdn.com/education/catalog/trainingkit/honeycomb_rush_tk)
- Non-Realistic Rendering - [http://create.msdn.com/education/catalog/sample/nonrealistic\\_rendering](http://create.msdn.com/education/catalog/sample/nonrealistic_rendering)
- Normal Mapping - [http://create.msdn.com/education/catalog/sample/normal\\_mapping](http://create.msdn.com/education/catalog/sample/normal_mapping)
- Object Placement on Avatar Sample - [http://create.msdn.com/education/catalog/sample/object\\_placement\\_on\\_avatar](http://create.msdn.com/education/catalog/sample/object_placement_on_avatar)
- Particles - <http://create.msdn.com/education/catalog/sample/particle>
- Particles 3D - [http://create.msdn.com/education/catalog/sample/particle\\_3d](http://create.msdn.com/education/catalog/sample/particle_3d)
- Particles Pipeline - [http://create.msdn.com/education/catalog/sample/particles\\_pipeline](http://create.msdn.com/education/catalog/sample/particles_pipeline)
- Picking - <http://create.msdn.com/education/catalog/sample/picking>
- Picking with Triangle Accuracy - [http://create.msdn.com/education/catalog/sample/picking\\_triangle](http://create.msdn.com/education/catalog/sample/picking_triangle)
- Primitives - <http://create.msdn.com/education/catalog/sample/primitives>
- Primitives3D - [http://create.msdn.com/education/catalog/sample/primitives\\_3d](http://create.msdn.com/education/catalog/sample/primitives_3d)
- Reach Graphics Demo - [http://create.msdn.com/education/catalog/sample/reach\\_graphics\\_demo](http://create.msdn.com/education/catalog/sample/reach_graphics_demo)
- Rim Lighting - [http://create.msdn.com/education/catalog/sample/rim\\_lighting](http://create.msdn.com/education/catalog/sample/rim_lighting)
- Safe Area - [http://create.msdn.com/education/catalog/sample/safe\\_area](http://create.msdn.com/education/catalog/sample/safe_area)
- Shader Series 1: Vertex Lighting - [http://create.msdn.com/education/catalog/sample/shader\\_series\\_1](http://create.msdn.com/education/catalog/sample/shader_series_1)
- Shader Series 2: Textures and Colors - [http://create.msdn.com/education/catalog/sample/shader\\_series\\_2](http://create.msdn.com/education/catalog/sample/shader_series_2)
- Shader Series 3: Per-Pixel Lighting - [http://create.msdn.com/education/catalog/sample/shader\\_series\\_3](http://create.msdn.com/education/catalog/sample/shader_series_3)
- Shadow Mapping - [http://create.msdn.com/education/catalog/sample/shadow\\_mapping\\_1](http://create.msdn.com/education/catalog/sample/shadow_mapping_1)
- Shape Rendering -

	<p><a href="http://create.msdn.com/education/catalog/sample/shape_rendering">http://create.msdn.com/education/catalog/sample/shape_rendering</a></p> <ul style="list-style-type: none"> <li>• Shatter - <a href="http://create.msdn.com/education/catalog/sample/shatter">http://create.msdn.com/education/catalog/sample/shatter</a></li> <li>• Silverlight Microsoft Sample - <a href="http://create.msdn.com/education/catalog/sample/silverlight_microphone">http://create.msdn.com/education/catalog/sample/silverlight_microphone</a></li> <li>• Simple Animation - <a href="http://create.msdn.com/education/catalog/sample/simple_animation">http://create.msdn.com/education/catalog/sample/simple_animation</a></li> <li>• Skinned Model - <a href="http://create.msdn.com/education/catalog/sample/skinned_model">http://create.msdn.com/education/catalog/sample/skinned_model</a></li> <li>• Snow Shovel - <a href="http://create.msdn.com/education/catalog/sample/snow_shovel">http://create.msdn.com/education/catalog/sample/snow_shovel</a></li> <li>• Soccer Pitch - <a href="http://create.msdn.com/education/catalog/sample/soccer_pitch">http://create.msdn.com/education/catalog/sample/soccer_pitch</a></li> <li>• Spacewar (4.0 Coming Soon) - <a href="http://create.msdn.com/education/catalog/sample/spacewar">http://create.msdn.com/education/catalog/sample/spacewar</a></li> <li>• Split Screen - <a href="http://create.msdn.com/education/catalog/sample/split_screen">http://create.msdn.com/education/catalog/sample/split_screen</a></li> <li>• Sprite Effects - <a href="http://create.msdn.com/education/catalog/sample/sprite_effects">http://create.msdn.com/education/catalog/sample/sprite_effects</a></li> <li>• Sprite Sheet - <a href="http://create.msdn.com/education/catalog/sample/sprite_sheet">http://create.msdn.com/education/catalog/sample/sprite_sheet</a></li> <li>• Stock Effects - <a href="http://create.msdn.com/education/catalog/sample/stock_effects">http://create.msdn.com/education/catalog/sample/stock_effects</a></li> <li>• Tilt Perspective - <a href="http://create.msdn.com/education/catalog/sample/tilt_perspective">http://create.msdn.com/education/catalog/sample/tilt_perspective</a></li> <li>• WinForms Series 1: Graphics Device - <a href="http://create.msdn.com/education/catalog/sample/winforms_series_1">http://create.msdn.com/education/catalog/sample/winforms_series_1</a></li> <li>• WinForms Series 2: Content Loading - <a href="http://create.msdn.com/education/catalog/sample/winforms_series_2">http://create.msdn.com/education/catalog/sample/winforms_series_2</a></li> </ul>
<b>Location</b>	<ul style="list-style-type: none"> <li>• Geolocation - <a href="http://create.msdn.com/education/catalog/sample/geolocation">http://create.msdn.com/education/catalog/sample/geolocation</a></li> <li>• Location Service Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=185153">http://go.microsoft.com/fwlink/?LinkID=185153</a></li> <li>• Reactive Extensions Location Service Emulator Sample - <a href="http://go.microsoft.com/fwlink/?LinkId=190352">http://go.microsoft.com/fwlink/?LinkId=190352</a></li> </ul>
<b>Maps</b>	<ul style="list-style-type: none"> <li>• Bing Maps Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=200734">http://go.microsoft.com/fwlink/?LinkID=200734</a></li> <li>• Bing Maps for Games - <a href="http://create.msdn.com/education/catalog/sample/bing_maps">http://create.msdn.com/education/catalog/sample/bing_maps</a></li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>• Music + Videos Hub Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=203588">http://go.microsoft.com/fwlink/?LinkID=203588</a></li> </ul>

<b>Networking</b>	<ul style="list-style-type: none"> <li>• HTTP Multiplayer: Tic Tac Toe - <a href="http://create.msdn.com/en-US/education/catalog/sample/tic_tac_toe">http://create.msdn.com/en-US/education/catalog/sample/tic tac toe</a></li> <li>• Invites - <a href="http://create.msdn.com/education/catalog/sample/invites">http://create.msdn.com/education/catalog/sample/invites</a></li> <li>• Network Architecture: Client/Server - <a href="http://create.msdn.com/education/catalog/sample/network_cs">http://create.msdn.com/education/catalog/sample/network cs</a></li> <li>• Network Architecture: Peer-to-Peer - <a href="http://create.msdn.com/education/catalog/sample/network_p2p">http://create.msdn.com/education/catalog/sample/network p2p</a></li> <li>• Network Game State Management - <a href="http://create.msdn.com/education/catalog/sample/network_game_state_management">http://create.msdn.com/education/catalog/sample/network game state management</a></li> <li>• Network Prediction - <a href="http://create.msdn.com/education/catalog/sample/network_prediction">http://create.msdn.com/education/catalog/sample/network prediction</a></li> <li>• Network Rumble (4.0 Coming Soon) - <a href="http://create.msdn.com/education/catalog/sample/net_rumble">http://create.msdn.com/education/catalog/sample/net_rumble</a></li> </ul>
<b>Orientation</b>	<ul style="list-style-type: none"> <li>• Orientation - <a href="http://create.msdn.com/education/catalog/sample/orientation">http://create.msdn.com/education/catalog/sample/orientation</a></li> <li>• Orientation Sample (XNA) - <a href="http://creators.xna.com/sample/orientation">http://creators.xna.com/sample/orientation</a></li> </ul>
<b>Panorama / Pivot</b>	<ul style="list-style-type: none"> <li>• Panorama / Pivot Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=200733">http://go.microsoft.com/fwlink/?LinkID=200733</a></li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>• Performance Measuring Sample - <a href="http://create.msdn.com/education/catalog/sample/performance_sample">http://create.msdn.com/education/catalog/sample/performance_sample</a></li> </ul>
<b>Progress Bar</b>	<ul style="list-style-type: none"> <li>• Custom Indeterminate Progress Bar Sample - <a href="http://create.msdn.com/education/catalog/sample/custom_indeterminate_progress_bar">http://create.msdn.com/education/catalog/sample/custom indeterminate progress bar</a></li> </ul>
<b>Push Notifications</b>	<ul style="list-style-type: none"> <li>• Push Notification - <a href="http://create.msdn.com/education/catalog/sample/push_notifications">http://create.msdn.com/education/catalog/sample/push_notifications</a></li> </ul>
<b>Sensors</b>	<ul style="list-style-type: none"> <li>• Level Starter Kit - <a href="http://create.msdn.com/education/catalog/sample/level_starter_kit">http://create.msdn.com/education/catalog/sample/level_starter_kit</a></li> </ul>
<b>Settings Page</b>	<ul style="list-style-type: none"> <li>• Settings Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=196271">http://go.microsoft.com/fwlink/?LinkID=196271</a></li> </ul>
<b>Splash Screen</b>	<ul style="list-style-type: none"> <li>• Splash Screen Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=196274">http://go.microsoft.com/fwlink/?LinkID=196274</a></li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>• Saving Embedded Images - <a href="http://create.msdn.com/education/catalog/sample/saving_embedded_images">http://create.msdn.com/education/catalog/sample/saving_embedded images</a></li> </ul>

<b>Tombstoning</b>	<ul style="list-style-type: none"><li>• Tombstoning Sample - <a href="http://create.msdn.com/education/catalog/sample/tombstoning">http://create.msdn.com/education/catalog/sample/tombstoning</a></li></ul>
<b>Touch</b>	<ul style="list-style-type: none"><li>• Path Drawing - <a href="http://create.msdn.com/en-US/education/catalog/sample/path_drawing">http://create.msdn.com/en-US/education/catalog/sample/path_drawing</a></li><li>• Touch Gestures - <a href="http://create.msdn.com/education/catalog/sample/gestures">http://create.msdn.com/education/catalog/sample/gestures</a></li><li>• Touch Thumsticks - <a href="http://create.msdn.com/sample/touchthumbsticks">http://create.msdn.com/sample/touchthumbsticks</a></li></ul>
<b>WebBrowser Control</b>	<ul style="list-style-type: none"><li>• Mini-Browser Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=185155">http://go.microsoft.com/fwlink/?LinkID=185155</a></li></ul>
<b>Web Services</b>	<ul style="list-style-type: none"><li>• Weather Forecast Sample - <a href="http://go.microsoft.com/fwlink/?LinkID=196272">http://go.microsoft.com/fwlink/?LinkID=196272</a></li></ul>
<b>XNA</b>	<ul style="list-style-type: none"><li>• Hello XNA Framework Sample - <a href="http://go.microsoft.com/fwlink/?LinkId=190351">http://go.microsoft.com/fwlink/?LinkId=190351</a></li></ul>

# How Tos

## Categories

- Getting Started
- App Features
- App Tasks
- Fundamentals
- Globalization and Localization
- Media
- Photos
- Push Notification
- Visual Studio 2010 Express for Windows Phone
- WebBrowser Control
- Windows Phone Developer Tools
- Windows Phone Emulator

## How Tos Map

Category	Items
<b>Getting Started</b>	<ul style="list-style-type: none"><li>• How to: Create Your First Silverlight Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402526(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402526(VS.92).aspx</a></li><li>• How to: Create Your First XNA Framework Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff472340(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff472340(VS.92).aspx</a></li></ul>
<b>Visual Studio 2010 Express for Windows Phone</b>	<ul style="list-style-type: none"><li>• How to: Deploy a Windows Phone Application Using Visual Studio - <a href="http://msdn.microsoft.com/en-us/library/ff928362(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff928362(VS.92).aspx</a></li><li>• How to: Change the Orientation of a Windows Phone Project - <a href="http://msdn.microsoft.com/en-us/library/ff402575(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402575(VS.92).aspx</a></li><li>• How to: Debug When the Windows Phone Application State Changes - <a href="http://msdn.microsoft.com/en-us/library/ff806372(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff806372(VS.92).aspx</a></li></ul>
<b>Windows Phone Emulator</b>	<ul style="list-style-type: none"><li>• How to: Start Windows Phone Emulator - <a href="http://msdn.microsoft.com/en-us/library/ff402565(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402565(VS.92).aspx</a></li><li>• How to: Stop and Restart an Application in Windows Phone Emulator - <a href="http://msdn.microsoft.com/en-us/library/ff402564(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402564(VS.92).aspx</a></li><li>• How to: Change the Orientation in Windows Phone Emulator - <a href="http://msdn.microsoft.com/en-us/library/ff402568(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402568(VS.92).aspx</a></li><li>• How to: Adjust the Zoom Setting in Windows Phone Emulator - <a href="http://msdn.microsoft.com/en-us/library/ff402566(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402566(VS.92).aspx</a></li></ul>
<b>Fundamentals</b>	<ul style="list-style-type: none"><li>• How to: Preserve and Restore Page State for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967548(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967548(VS.92).aspx</a></li><li>• How to: Preserve and Restore Application State for Windows Phone -</li></ul>

	<p><a href="http://msdn.microsoft.com/en-us/library/ff967547(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967547(VS.92).aspx</a></p> <ul style="list-style-type: none"> <li>• How to: Perform Page Navigation on Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff626521(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff626521(VS.92).aspx</a></li> <li>• How to: Handle Orientation Changes on Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769553(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769553(VS.92).aspx</a></li> <li>• How to: Use Launchers for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769550(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769550(VS.92).aspx</a></li> <li>• How to: Use Choosers for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769543(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769543(VS.92).aspx</a></li> <li>• How to: Add Files and Folders for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff626519(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff626519(VS.92).aspx</a></li> </ul> <p>How to: Apply Theme Resources for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769545(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769545(VS.92).aspx</a></p>
<b>App Tasks</b>	<ul style="list-style-type: none"> <li>• How to: Create a Splash Screen for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769511(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769511(VS.92).aspx</a></li> <li>• How to: Create and Modify an Application Tile for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff462080(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff462080(VS.92).aspx</a></li> <li>• How to: Create a Settings Page for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769510(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769510(VS.92).aspx</a></li> <li>• How to: Implement the Trial experience in Your Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967559(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967559(VS.92).aspx</a></li> <li>• How to: Test and Debug your Trial Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967557(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967557(VS.92).aspx</a></li> <li>• How to: Use the Developer Registration Tool for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769508(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769508(VS.92).aspx</a></li> <li>• How to: Use the Application Deployment Tool for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769512(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769512(VS.92).aspx</a></li> <li>• How to: Link to Windows Phone Marketplace Content - <a href="http://msdn.microsoft.com/en-us/library/ff967553(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967553(VS.92).aspx</a></li> </ul>
<b>Globalization and Localization</b>	<ul style="list-style-type: none"> <li>• How to: Build a Globalized Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff637519(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637519(VS.92).aspx</a></li> <li>• How to: Build a Localized Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff637520(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637520(VS.92).aspx</a></li> <li>• How to: Localize an Application Title for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff967550(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967550(VS.92).aspx</a></li> </ul>
<b>App Features</b>	<ul style="list-style-type: none"> <li>• How to: Get Data From the Accelerometer for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431810(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431810(VS.92).aspx</a></li> </ul>

	<ul style="list-style-type: none"> <li>• How to: Use Reactive Extensions to Emulate and Filter Accelerometer Data for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff637521(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637521(VS.92).aspx</a></li> <li>• How to: Add an Application Bar to Your Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431786(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431786(VS.92).aspx</a></li> <li>• How to: Use the Bing Maps Silverlight Control for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff941093(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff941093(VS.92).aspx</a></li> <li>• How to: Create a Panorama Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff941109(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff941109(VS.92).aspx</a></li> <li>• How to: Create a Pivot Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff941103(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff941103(VS.92).aspx</a></li> <li>• How to: Use the Control Tilt Effect for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff941108(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff941108(VS.92).aspx</a></li> <li>• How to: Get Data from the Location Service for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431782(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431782(VS.92).aspx</a></li> <li>• How to: Use Reactive Extensions to Emulate and Filter Location Data for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff637517(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff637517(VS.92).aspx</a></li> </ul>
<b>WebBrowser Control</b>	<ul style="list-style-type: none"> <li>• How to: Display Web Content from the Network Using the WebBrowser Control for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431807(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431807(VS.92).aspx</a></li> <li>• How to: Display Static Web Content Using the WebBrowser Control for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431811(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431811(VS.92).aspx</a></li> <li>• How to: Display Dynamically Generated Web Content Using the WebBrowser Control for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff431815(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff431815(VS.92).aspx</a></li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>• How to: Play or Stream a Video File for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769551(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769551(VS.92).aspx</a></li> <li>• How to: Integrate with the Music and Videos Hub for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769558(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769558(VS.92).aspx</a></li> <li>• How to: Set up and Tune the FM Radio for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769541(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769541(VS.92).aspx</a></li> </ul>
<b>Photos</b>	<ul style="list-style-type: none"> <li>• How to: Create a Photo Extras Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff817010(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff817010(VS.92).aspx</a></li> <li>• How to: Decode a JPEG for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769559(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769559(VS.92).aspx</a></li> <li>• How to: Encode a JPEG for Windows Phone and Save to Pictures Library - <a href="http://msdn.microsoft.com/en-us/library/ff769549(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769549(VS.92).aspx</a></li> <li>• How to: Use Share Picker Extensibility for Windows Phone -</li> </ul>

	<a href="http://msdn.microsoft.com/en-us/library/ff967563(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff967563(VS.92).aspx</a>
<b>Push Notification</b>	<ul style="list-style-type: none"> <li>• How to: Set up an Authenticated Web Service for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff941099(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff941099(VS.92).aspx</a></li> <li>• How to: Send a Push Notification for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402545(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402545(VS.92).aspx</a></li> <li>• How to: Set up a Callback Registration Request for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402554(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402554(VS.92).aspx</a></li> <li>• How to: Receive Push Notifications in an Application for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff402556(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff402556(VS.92).aspx</a></li> <li>• How to: Update Your Tile Without Push Notifications for Windows Phone - <a href="http://msdn.microsoft.com/en-us/library/ff769548(VS.92).aspx">http://msdn.microsoft.com/en-us/library/ff769548(VS.92).aspx</a></li> </ul>
<b>Windows Phone Developer Tools</b>	<ul style="list-style-type: none"> <li>• How to: Use the Windows Phone Capability Detection Tool - <a href="http://msdn.microsoft.com/en-us/library/gg180730(VS.92).aspx">http://msdn.microsoft.com/en-us/library/gg180730(VS.92).aspx</a></li> <li>• How to: Use the Windows Phone Connect Tool - <a href="http://msdn.microsoft.com/en-us/library/gg180729(VS.92).aspx">http://msdn.microsoft.com/en-us/library/gg180729(VS.92).aspx</a></li> </ul>

## Videos

Note that there is a Windows Phone YouTube channel at <http://www.youtube.com/user/windowsphone>

### Categories

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- Audio and Voice
- General
- Globalization / Localization
- Graphics / Animation
- Navigation, Pages, and Frames
- Push Notifications
- Sensors
- Themes

### Videos Map

Category	Items
<b>Application Bar</b>	Silverlight Developer Center <ul style="list-style-type: none"><li>• Using the ApplicationBar for Windows Phone - <a href="http://www.silverlight.net/learn/videos/windows-phone/windows-phone-application-bar/">http://www.silverlight.net/learn/videos/windows-phone/windows-phone-application-bar/</a></li></ul>
<b>Audio and Voice</b>	Channel 9 <ul style="list-style-type: none"><li>• Windows Phone Design Days: Voice - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Voice/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Voice/</a></li><li>• Windows Phone Design Days: Audio - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Audio/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Audio/</a></li></ul>
<b>General</b>	Channel 9 <ul style="list-style-type: none"><li>• Windows Phone Design Days: Applications - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Applications/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Applications/</a></li><li>• Windows Phone Design Days: Target Sizes - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Target-Sizes/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Target-Sizes/</a></li><li>• Windows Phone Design Days: Blend - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Blend/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Blend/</a></li><li>• Windows Phone Design Days: Documentation - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Documentation/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Documentation/</a></li></ul>

	<p><a href="#">Design-Days-Documentation/</a></p> <ul style="list-style-type: none"> <li>• Windows Phone Design Days: Metro - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Metro/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Metro/</a></li> <li>• Windows Phone Design Days: Personas - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Personas/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Personas/</a></li> </ul> <p>Silverlight Developer Center</p> <ul style="list-style-type: none"> <li>• An iPhone Developer’s First Windows Phone 7 Application - <a href="http://www.silverlight.net/learn/videos/windows-phone/an-iphone-developers-first-windows-phone-7-application/">http://www.silverlight.net/learn/videos/windows-phone/an-iphone-developers-first-windows-phone-7-application/</a></li> <li>• Your First Windows Phone 7 Application - <a href="http://www.silverlight.net/learn/videos/windows-phone/your-first-windows-phone-7-application/">http://www.silverlight.net/learn/videos/windows-phone/your-first-windows-phone-7-application/</a></li> <li>• Windows Phone Application Splash Screen - <a href="http://www.silverlight.net/learn/videos/windows-phone/windows-phone-splash-screen/">http://www.silverlight.net/learn/videos/windows-phone/windows-phone-splash-screen/</a></li> <li>• Get Started with Silverlight for Windows Phone - <a href="http://www.silverlight.net/learn/videos/windows-phone/get-started-with-silverlight-for-windows-phone/">http://www.silverlight.net/learn/videos/windows-phone/get-started-with-silverlight-for-windows-phone/</a></li> </ul> <p>Windows Phone Developer Center</p> <ul style="list-style-type: none"> <li>• Get started developing applications for Windows Phone - <a href="http://msdn.microsoft.com/ff728583.aspx">http://msdn.microsoft.com/ff728583.aspx</a></li> </ul> <p>Other sources</p> <ul style="list-style-type: none"> <li>• Expression Blend 4 for Windows Phone Tour - <a href="http://www.microsoft.com/showcase/en/us/details/61ed7e86-0b1c-432e-a1fb-a882f95ec250">http://www.microsoft.com/showcase/en/us/details/61ed7e86-0b1c-432e-a1fb-a882f95ec250</a></li> </ul>
<p><b>Globalization / Localization</b></p>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>• Windows Phone Design Days: Globalization - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Globalization/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Globalization/</a></li> </ul>
<p><b>Graphics and Animation</b></p>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>• Windows Phone Design Days: Animation - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Animation/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Animation/</a></li> </ul>

	<p>Silverlight Developer Center</p> <ul style="list-style-type: none"> <li>Windows Phone Application Splash Screen - <a href="http://www.silverlight.net/learn/videos/windows-phone/windows-phone-splash-screen/">http://www.silverlight.net/learn/videos/windows-phone/windows-phone-splash-screen/</a></li> </ul>
<b>Navigation, Pages, and Frames</b>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>Windows Phone Design Days: Pivot and Pano - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Pivot-and-Pano/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Pivot-and-Pano/</a></li> </ul> <p>Silverlight Developer Center</p> <ul style="list-style-type: none"> <li>Windows Phone Navigation - <a href="http://www.silverlight.net/learn/videos/windows-phone/windows-phone-silverlight-navigation/">http://www.silverlight.net/learn/videos/windows-phone/windows-phone-silverlight-navigation/</a></li> </ul>
<b>Push Notifications</b>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>Windows Phone Push Notification - <a href="http://channel9.msdn.com/posts/yochay/Windows-Phone-Push-Notification/">http://channel9.msdn.com/posts/yochay/Windows-Phone-Push-Notification/</a></li> </ul>
<b>Sensors</b>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>Windows Phone Design Days: Pivot and Pano - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Pivot-and-Pano/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Pivot-and-Pano/</a></li> </ul>
<b>Themes</b>	<p>Channel 9</p> <ul style="list-style-type: none"> <li>Windows Phone Design Days: Templates - <a href="http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Templates/">http://channel9.msdn.com/posts/Jaime+Rodriguez/Windows-Phone-Design-Days-Templates/</a></li> </ul>

## Training

This training map helps expose the variety of training content available for Windows Phone. You can find the breadth of offerings available here, and the sources of the training materials. Content may be in the form of tutorials, lessons, exercises and related training content types.

The training resources are organized by the following sources:

- Getting Started with Windows Phone - <http://www.silverlight.net/getstarted/devices/windows-phone/>
- Offline Training Kit for Windows Phone 7 - <http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx>
- Getting Started with Windows Phone - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_wp7gettingstarted\\_unit.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7gettingstarted_unit.aspx)
- App Hub Content Catalog - <http://create.msdn.com/en-US/education/catalog/>
- Silverlight for Windows Phone - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_wp7silverlight\\_unit.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7silverlight_unit.aspx)
- XNA Framework 4.0 for Windows Phones - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_wp7xna\\_unit.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7xna_unit.aspx)

### *Training Resources Map*

Category	Items
<b>Getting Started</b>	www.Silverlight.net <ul style="list-style-type: none"><li>• Getting Started with Windows Phone - <a href="http://www.silverlight.net/getstarted/devices/windows-phone/">http://www.silverlight.net/getstarted/devices/windows-phone/</a></li></ul>
<b>Offline Training Kit</b>	Download the Offline Training Kit <ul style="list-style-type: none"><li>• Windows Phone 7 Training Course - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse.aspx</a></li></ul>
<b>Getting Started with Windows Phone</b>	<ul style="list-style-type: none"><li>• Home - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7gettingstarted_unit.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7gettingstarted_unit.aspx</a></li></ul> Hands-On Labs <ul style="list-style-type: none"><li>• Hello Windows Phone - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_hellophonewp7lab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_hellophonewp7lab.aspx</a></li><li>• Building Your First Windows 7 Phone Application - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_yourfirstwp7applab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_yourfirstwp7applab.aspx</a></li></ul> Exercises <ul style="list-style-type: none"><li>• Exercise 1: Creating Windows Phone Applications with Microsoft</li></ul>

Visual Studio 2010 Express for Windows Phone -

[http://msdn.microsoft.com/en-us/wp7trainingcourse\\_hellophonewp7lab\\_topic2.aspx# Toc264635360](http://msdn.microsoft.com/en-us/wp7trainingcourse_hellophonewp7lab_topic2.aspx#Toc264635360)

- Exercise 2: Using Expression Blend to Design the UX of your Windows Phone Application - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_hellophonewp7lab\\_topic3.aspx# Toc264635366](http://msdn.microsoft.com/en-us/wp7trainingcourse_hellophonewp7lab_topic3.aspx#Toc264635366)
- Exercise 1: Creating Windows Phone Applications with Microsoft Visual Studio 2010 Express for Windows Phone - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_yourfirstwp7applab\\_topic2.aspx# Toc266187816](http://msdn.microsoft.com/en-us/wp7trainingcourse_yourfirstwp7applab_topic2.aspx#Toc266187816)
- Exercise 2: Creating the Puzzle Board in Visual Studio - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_yourfirstwp7applab\\_topic3.aspx# Toc266187822](http://msdn.microsoft.com/en-us/wp7trainingcourse_yourfirstwp7applab_topic3.aspx#Toc266187822)
- Exercise 3: Persisting the State of the Game Using Isolated Storage - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_yourfirstwp7applab\\_topic4.aspx# Toc266187828](http://msdn.microsoft.com/en-us/wp7trainingcourse_yourfirstwp7applab_topic4.aspx#Toc266187828)

#### Videos

- Overview of the Windows Phone 7 Application Platform - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph203video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph203video.aspx)
- Understanding Marketplace and Making Money with Windows Phone 7 Applications - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph312video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph312video.aspx)
- Understanding the Windows Phone 7 Development Tools - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph303video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph303video.aspx)
- Windows Phone 7 Architecture Deep Dive - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph313video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph313video.aspx)
- Deploying Windows Phone 7 with Microsoft Exchange Server 2010 and Microsoft SharePoint Server 2010 - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph202video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph202video.aspx)
- Designing and Developing for the Rich Mobile Web - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph310video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph310video.aspx)
- Windows Phone 7: Deploy Microsoft Forefront Unified Access Gateway for Access Control to SharePoint, Exchange, and More -

	<p><a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph301video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph301video.aspx</a></p>
<p><b>App Hub Content Catalog</b></p>	<ul style="list-style-type: none"> <li>• Authoring Particle Systems Using XML and the Content Pipeline - <a href="http://create.msdn.com/education/catalog/tutorial/particle_xml">http://create.msdn.com/education/catalog/tutorial/particle_xml</a></li> <li>• Best Practices for Indie Games 3.1 - <a href="http://create.msdn.com/education/catalog/article/bestpractices_31">http://create.msdn.com/education/catalog/article/bestpractices_31</a></li> <li>• Catapult Wars Lab - <a href="http://create.msdn.com/education/catalog/lab/catapult_wars">http://create.msdn.com/education/catalog/lab/catapult_wars</a></li> <li>• Collision Series 1: 2D Rectangle Collision - <a href="http://create.msdn.com/education/catalog/tutorial/collision_2d_rectangle">http://create.msdn.com/education/catalog/tutorial/collision_2d_rectangle</a></li> <li>• Collision Series 2: 2D Per-Pixel Collisions - <a href="http://create.msdn.com/education/catalog/tutorial/collision_2d_perpixel">http://create.msdn.com/education/catalog/tutorial/collision_2d_perpixel</a></li> <li>• Collision Series 3: 2D Collision with Transformed Objects - <a href="http://create.msdn.com/education/catalog/tutorial/collision_2d_perpixel_transformed">http://create.msdn.com/education/catalog/tutorial/collision_2d_perpixel_transformed</a></li> <li>• Honeycomb Rush Lab - <a href="http://create.msdn.com/education/catalog/lab/honeycomb_rush">http://create.msdn.com/education/catalog/lab/honeycomb_rush</a></li> <li>• Marble Maze - <a href="http://create.msdn.com/education/catalog/lab/marble_maze">http://create.msdn.com/education/catalog/lab/marble_maze</a></li> <li>• Memory Madness Lab - <a href="http://create.msdn.com/education/catalog/lab/memory_madness">http://create.msdn.com/education/catalog/lab/memory_madness</a></li> <li>• Skinned Model Extensions Tutorial - <a href="http://create.msdn.com/education/catalog/tutorial/skinned_model_extensions">http://create.msdn.com/education/catalog/tutorial/skinned_model_extensions</a></li> </ul>
<p><b>Silverlight for Windows Phone</b></p>	<ul style="list-style-type: none"> <li>• Home - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7silverlight_unit.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7silverlight_unit.aspx</a></li> </ul> <p>Hands-On Labs</p> <ul style="list-style-type: none"> <li>• Windows Phone Navigation and Controls - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_windowsphonenavigationandcontrolslab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_windowsphonenavigationandcontrolslab.aspx</a></li> <li>• Using Push Notifications - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpushnotificationslab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpushnotificationslab.aspx</a></li> <li>• Launchers and Choosers - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_launchersandchooserswp7lab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_launchersandchooserswp7lab.aspx</a></li> <li>• Application Lifecycle - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_applicationlifetimewp7lab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_applicationlifetimewp7lab.aspx</a></li> <li>• Using Bing Maps - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmapslab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmapslab.aspx</a></li> <li>• Using Pivot and Panorama Controls - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramalab.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramalab.aspx</a></li> </ul>

[us/wp7trainingcourse\\_usingpivotandpanoramacontrols.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols.aspx)

#### Exercises

- Exercise 1: Introduction to the Windows Phone Navigation Model - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_windowsphonenavigationandcontrolslab\\_topic2.aspx#Toc265065623](http://msdn.microsoft.com/en-us/wp7trainingcourse_windowsphonenavigationandcontrolslab_topic2.aspx#Toc265065623)
- Exercise 2: Introduction to the Controls Available for Windows Phone Applications - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_windowsphonenavigationandcontrolslab\\_topic3.aspx#Toc265065626](http://msdn.microsoft.com/en-us/wp7trainingcourse_windowsphonenavigationandcontrolslab_topic3.aspx#Toc265065626)
- Exercise 3: Introduction to Windows Phone Services - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_windowsphonenavigationandcontrolslab\\_topic4.aspx#Toc265065630](http://msdn.microsoft.com/en-us/wp7trainingcourse_windowsphonenavigationandcontrolslab_topic4.aspx#Toc265065630)
- Exercise 1: Introduction to the Windows Phone RAW Notifications for Updates - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_usingpushnotificationslab\\_topic2.aspx#Toc271294136](http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpushnotificationslab_topic2.aspx#Toc271294136)
- Exercise 2: Introduction to the Toast and Tile Notifications for Alerts - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_usingpushnotificationslab\\_topic3.aspx#Toc271294141](http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpushnotificationslab_topic3.aspx#Toc271294141)
- Exercise 1: Introduction to the Windows Phone Launchers - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_launchersandchooserswp7lab\\_topic2.aspx#Toc266271568](http://msdn.microsoft.com/en-us/wp7trainingcourse_launchersandchooserswp7lab_topic2.aspx#Toc266271568)
- Exercise 2: Introduction to the Windows Phone Choosers - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_launchersandchooserswp7lab\\_topic3.aspx#Toc266271571](http://msdn.microsoft.com/en-us/wp7trainingcourse_launchersandchooserswp7lab_topic3.aspx#Toc266271571)
- Exercise 1: Introducing the Windows Phone Application Life Cycle— Tombstoning - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_applicationlifetimewp7lab\\_topic2.aspx#Toc266462784](http://msdn.microsoft.com/en-us/wp7trainingcourse_applicationlifetimewp7lab_topic2.aspx#Toc266462784)
- Exercise 1: Introduction to the Bing Map Control - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_usingbingmaps\\_slab\\_topic2.aspx#Toc271039352](http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmaps_slab_topic2.aspx#Toc271039352)
- Exercise 2: Handling and Customizing Pushpins - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_usingbingmaps\\_slab\\_topic3.aspx#Toc271039355](http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmaps_slab_topic3.aspx#Toc271039355)

	<ul style="list-style-type: none"> <li>• Exercise 3: Calculating a Route - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmapslab_topic4.aspx#_Toc271039358">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingbingmapslab_topic4.aspx#_Toc271039358</a></li> <li>• Exercise 1: Introduction to Navigation in Windows Phone - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic2.aspx#_Toc271817405">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic2.aspx#_Toc271817405</a></li> <li>• Exercise 2: Introduction to Pivot Control - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic3.aspx#_Toc271817409">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic3.aspx#_Toc271817409</a></li> <li>• Exercise 3: Introduction to Panorama Control - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic4.aspx#_Toc271817412">http://msdn.microsoft.com/en-us/wp7trainingcourse_usingpivotandpanoramacontrols_topic4.aspx#_Toc271817412</a></li> </ul> <p>Videos</p> <ul style="list-style-type: none"> <li>• Inside Windows Phone Show - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_insidewindowsphoneshowvideo.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_insidewindowsphoneshowvideo.aspx</a></li> <li>• An In-Depth View of Building Applications for Windows Phone 7 with Microsoft Silverlight (Part 1) - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph304video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph304video.aspx</a></li> <li>• An In-Depth View of Building Applications for Windows Phone 7 with Microsoft Silverlight (Part 2) - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph305video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph305video.aspx</a></li> <li>• Developing Mobile Code Today that will run on Windows Phone 7 Tomorrow - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph311video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph311video.aspx</a></li> <li>• Developing Occasionally Connected Applications for Windows Phone 7- <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph306video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph306video.aspx</a></li> <li>• Microsoft Silverlight Performance on Windows Phone - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph309video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph309video.aspx</a></li> </ul>
<p><b>XNA Framework 4.0 for Windows Phones</b></p>	<ul style="list-style-type: none"> <li>• Home - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7xna_unit.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_wp7xna_unit.aspx</a></li> </ul> <p>Hands-On Labs</p> <ul style="list-style-type: none"> <li>• Game Development with XNA Framework - <a href="http://msdn.microsoft.com/en-">http://msdn.microsoft.com/en-</a></li> </ul>

[us/wp7trainingcourse\\_gamedevelopmentwithxnalab.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_gamedevelopmentwithxnalab.aspx)

- Catapult Wars Lab - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnalab.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnalab.aspx)
- Tombstoning, Launcher and Chooser, and then some with XNA Framework - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab.aspx)
- 3D Game Development with XNA Framework - 3D Game Development with XNA Framework

#### Exercises

- Exercise 1: XNA Game Studio Games on the Windows Phone 7 - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_gamedevelopmentwithxnalab\\_topic2.aspx#Toc265144525](http://msdn.microsoft.com/en-us/wp7trainingcourse_gamedevelopmentwithxnalab_topic2.aspx#Toc265144525)
- Exercise 1: Basic XNA Framework Game with Game State Management - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnalab\\_topic2.aspx#Toc271900416](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnalab_topic2.aspx#Toc271900416)
- Exercise 2: Game polish and menus - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnalab\\_topic3.aspx#Toc271900420](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnalab_topic3.aspx#Toc271900420)
- Exercise 1: Basic XNA Framework Game with Game State Management - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnalab\\_topic2.aspx#Toc271900416](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnalab_topic2.aspx#Toc271900416)
- Exercise 2: Game polish and menus - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnalab\\_topic3.aspx#Toc271900420](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnalab_topic3.aspx#Toc271900420)
- Exercise 1: Play Background Music - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic2.aspx#Toc271904495](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic2.aspx#Toc271904495)
- Exercise 2: Save and Restore the Game State - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic3.aspx#Toc271904498](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic3.aspx#Toc271904498)
- Exercise 3: Launch Another Application from the Game - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic4.aspx#Toc271904500](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic4.aspx#Toc271904500)
- Exercise 1: Play Background Music - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic2.aspx#Toc271904495](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic2.aspx#Toc271904495)
- Exercise 2: Save and Restore the Game State -

[http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic3.aspx#Toc271904498](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic3.aspx#Toc271904498)

- Exercise 3: Launch Another Application from the Game - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic4.aspx#Toc271904500](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic4.aspx#Toc271904500)
- Exercise 1: Basic XNA Game Studio Game with game state management - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_3dgamedevelopmentwithxnalab\\_topic2.aspx#Toc272316868](http://msdn.microsoft.com/en-us/wp7trainingcourse_3dgamedevelopmentwithxnalab_topic2.aspx#Toc272316868)
- Exercise 2: Game polish and menus - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_3dgamedevelopmentwithxnalab\\_topic3.aspx#Toc272316873](http://msdn.microsoft.com/en-us/wp7trainingcourse_3dgamedevelopmentwithxnalab_topic3.aspx#Toc272316873)
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- Exercise 2: Save and Restore the Game State - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic3.aspx#Toc271904498](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic3.aspx#Toc271904498)
- Exercise 3: Launch Another Application from the Game - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_2dgamedevelopmentwithxnapart2lab\\_topic4.aspx#Toc271904500](http://msdn.microsoft.com/en-us/wp7trainingcourse_2dgamedevelopmentwithxnapart2lab_topic4.aspx#Toc271904500)
- Exercise 1: Basic XNA Game Studio Game with game state management - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_3dgamedevelopmentwithxnalab\\_topic2.aspx#Toc272316868](http://msdn.microsoft.com/en-us/wp7trainingcourse_3dgamedevelopmentwithxnalab_topic2.aspx#Toc272316868)
- Exercise 2: Game polish and menus - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_3dgamedevelopmentwithxnalab\\_topic3.aspx#Toc272316873](http://msdn.microsoft.com/en-us/wp7trainingcourse_3dgamedevelopmentwithxnalab_topic3.aspx#Toc272316873)

#### Videos

- Inside Windows Phone Show - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_insidewindowsphoneshowvideo.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_insidewindowsphoneshowvideo.aspx)
- Building a High Performance 3D Game for Windows Phone - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph308video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph308video.aspx)
- Building Windows Phone Games with Microsoft XNA Game Studio - [http://msdn.microsoft.com/en-us/wp7trainingcourse\\_tena10wph307video.aspx](http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph307video.aspx)
- Coding4Fun: Learn Windows Phone 7 Development by Creating a

	Robotic T-Shirt Cannon - <a href="http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph314video.aspx">http://msdn.microsoft.com/en-us/wp7trainingcourse_tena10wph314video.aspx</a>
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## Tools

A key source for tools is the App Hub Content Catalog at:

<http://create.msdn.com/en-US/education/catalog/?contenttype=6&devarea=0&platform=0&sort=1>

### *Tools Map*

Category	Items
Tools	<ul style="list-style-type: none"><li>• Avatar Animation Pack - <a href="http://create.msdn.com/education/catalog/utility/avatar_animation_pack">http://create.msdn.com/education/catalog/utility/avatar_animation_pack</a></li><li>• Avatar Animation Rig - <a href="http://create.msdn.com/education/catalog/utility/avatar_animation_rig">http://create.msdn.com/education/catalog/utility/avatar_animation_rig</a></li><li>• Avatar Shadows - <a href="http://create.msdn.com/education/catalog/sample/avatar_shadows">http://create.msdn.com/education/catalog/sample/avatar_shadows</a></li><li>• Curve Editor - <a href="http://create.msdn.com/education/catalog/utility/curve_editor">http://create.msdn.com/education/catalog/utility/curve_editor</a></li><li>• Graphics Profile Checker - <a href="http://create.msdn.com/education/catalog/utility/graphics_profile_checker">http://create.msdn.com/education/catalog/utility/graphics_profile_checker</a></li><li>• Input Reporter - <a href="http://create.msdn.com/education/catalog/utility/input_reporter">http://create.msdn.com/education/catalog/utility/input_reporter</a></li><li>• Network Lobby and Chat Icons - <a href="http://create.msdn.com/education/catalog/utility/lobby_chat_icons">http://create.msdn.com/education/catalog/utility/lobby_chat_icons</a></li><li>• Performance Utility - <a href="http://create.msdn.com/education/catalog/utility/performance_utility">http://create.msdn.com/education/catalog/utility/performance_utility</a></li><li>• SoundLab - <a href="http://create.msdn.com/education/catalog/utility/soundlab">http://create.msdn.com/education/catalog/utility/soundlab</a></li><li>• Xbox 360 Controller Button Images - <a href="http://create.msdn.com/education/catalog/utility/controller_buttons">http://create.msdn.com/education/catalog/utility/controller_buttons</a></li><li>• Xbox 360 Controller Images - <a href="http://create.msdn.com/education/catalog/utility/controller_images">http://create.msdn.com/education/catalog/utility/controller_images</a></li></ul>