

## POST-CLASS LEARNING AND PRACTICE 2.1: CHOOSE AN INPUT DEVICE

### Lesson Objective 2.1:

Choose an input device. *Topics:* mouse, keyboard, Kinect®, console, mobile.

### Additional learning resources:

#### MSDN®:

Petzold, Charles. **Programming Windows Phone 7:**

[http://blogs.msdn.com/b/microsoft\\_press/archive/2010/10/28/free-ebook-programming-windows-phone-7-by-charles-petzold.aspx](http://blogs.msdn.com/b/microsoft_press/archive/2010/10/28/free-ebook-programming-windows-phone-7-by-charles-petzold.aspx)

**Input on the XNA® Framework (XBox 360® Controller):**

<http://blogs.msdn.com/b/xna/archive/2006/08/25/724607.aspx>

### Other resources (books, e-reference):

**Wikispaces in Education Tutorial:** <http://www.slideshare.net/cliotech/wikispaces-tutorial-306220>

**It's Time to Take Mobile Gaming Seriously:** <http://www.thetechlabs.com/tech-news/its-time-to-take-mobile-gaming-seriously/>

### Resources, software, and additional files if needed for this lesson:

1. A workstation with Windows Phone® SDK 7.1 installed. The SDK is available at:  
[http://create.msdn.com/en-us/home/getting\\_started](http://create.msdn.com/en-us/home/getting_started)

### Student activity:

#### Directions to the student:

Complete the tutorials on the link provided using XNA Game Studio with Windows Phone SDK 7.1. Upon completion of the tutorial and the project, answer the reflection questions below.

#### Scenario:

The Motion API is useful for creating Windows Phone applications that use the device's orientation and movement in space as an input mechanism. There are APIs available to obtain raw sensor data from the device's Compass, Gyroscope, and Accelerometer sensors, but the Motion API handles the complex math necessary to combine the data from these sensors and produce easy-to-use values for the device's attitude and motion.

This tutorial demonstrates creating two different applications that use the Motion API. The first application is very simple and simply rotates a triangle on the screen in response to changes in the device's rotation. The second application is an augmented reality application that uses the device's camera and the Motion API to allow the user to label points in space around the device.

How to: Use the Combined Motion API for Windows Phone

[http://msdn.microsoft.com/en-us/library/hh202984\(v=VS.92\).aspx](http://msdn.microsoft.com/en-us/library/hh202984(v=VS.92).aspx)

**Content:**

1. Summarize the steps you completed to create the projects shown in the tutorial.
2. Did you have any problems creating the project? If so, how did you solve them?
3. What did you learn by completing the tutorial?
4. How does what you learned relate to the objective of this lesson?

## KEY 2.1: CHOOSE AN INPUT DEVICE

### **Content:**

1. Answers will vary.
2. Answers will vary.
3. Answers will vary.
4. Answers will vary.