

STUDENT ACTIVITY 2.4A_2 KEY: USER INPUT REVIEW

MTA Course: Windows Development Fundamentals

Topic: Implement user input (One 50-minute class period)

File name: WinDevFund_SA_2.4A_2_Key

Lesson Objective:

2.4: Validate and implement user input. *This objective may include but is not limited to:* implementing the correct user input model based on application design and requirements; accepting keyboard and mouse input; validating user input through GUI controls such as text boxes and dialog controls.

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

- Microsoft Visual Studio® 2008, or
 - Microsoft Visual Basic® 2008, Express Edition
(<http://www.microsoft.com/express/downloads/#2008-Visual-Basic>)
 - Microsoft Visual C#® 2008, Express Edition
(<http://www.microsoft.com/express/downloads/#2008-Visual-CS>)

Directions to the student:

Answer the following questions.

Content:

Part 1: Answer each question.

1. Which event is raised when a user releases a key?
KeyUp
2. Name the event that is raised when the mouse pointer stops over a control.
MouseHover
3. What is the *first* event raised when a user clicks a button?
MouseDown

4. Which event is raised multiple times while the user holds down a key?
KeyPress
5. What is the first event raised when a user presses a key on the keyboard?
KeyDown
6. List the events (in order) raised when a user moves the mouse pointer over a *CheckBox*, pauses, then moves the pointer away without clicking.
MouseEnter, MouseHover, MouseLeave

Part 2: Create a form that uses mouse events to change the background of a button when the mouse pointer moves over the button, then changes back when the pointer moves off the button.

The students' solutions should use a *MouseEnter* event handler to change the *BackColor* property of the *Button*. It should use a *MouseLeave* event handler to change the *BackColor* property back to its original setting.