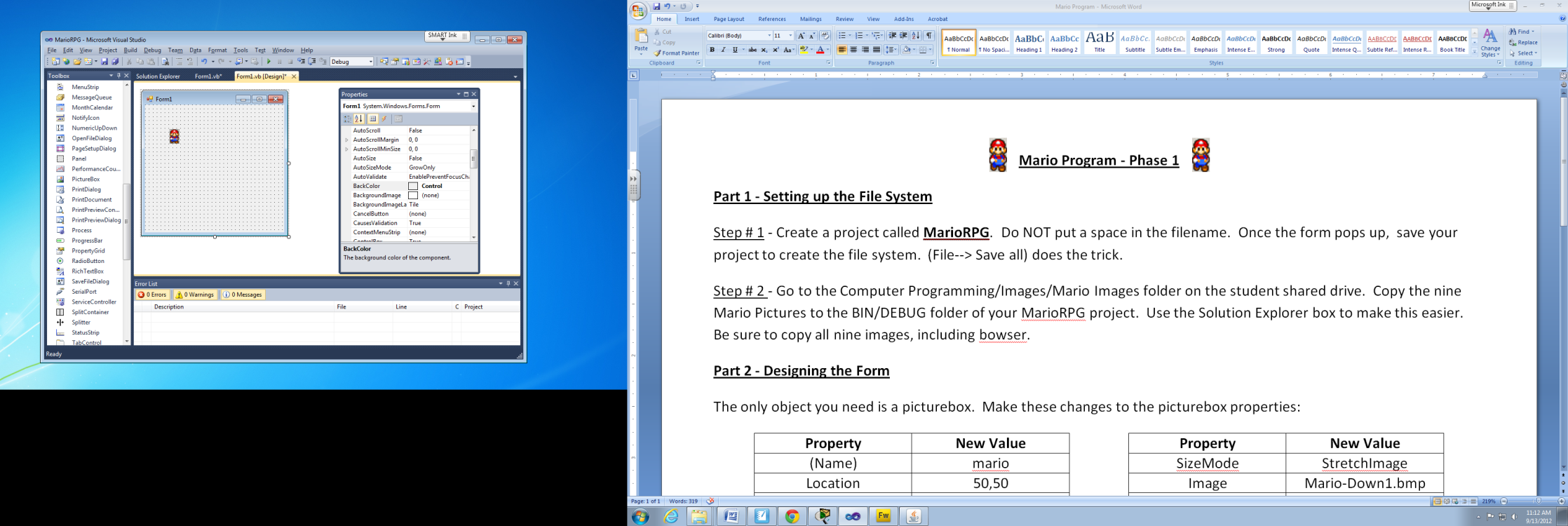
**S:\STUDENTS\Computer Programming\Images\Mario Images\Mario-Down1.bmpS:\STUDENTS\Computer Programming\Images\Mario Images\Mario-Down1.bmpMario Program**

**Part 1 - Setting up the File System**

Step # 1 - Create a project called **Mario**. Do NOT put a space in the filename. Once the form pops up, save your project to create the file system. (File--> Save all) does the trick. Make sure it goes into your student home directory. (H: drive)

Step # 2- Go to mrdixon.weebly.com. Choose Exp of Tech and Assignments Copy the four Mario pictures (up.bmp, down.bmp, left.bmp and right.bmp) to the BIN/DEBUG folder of your Mario project. Use the Solution Explorer box to make this easier. Be sure to copy all four images.

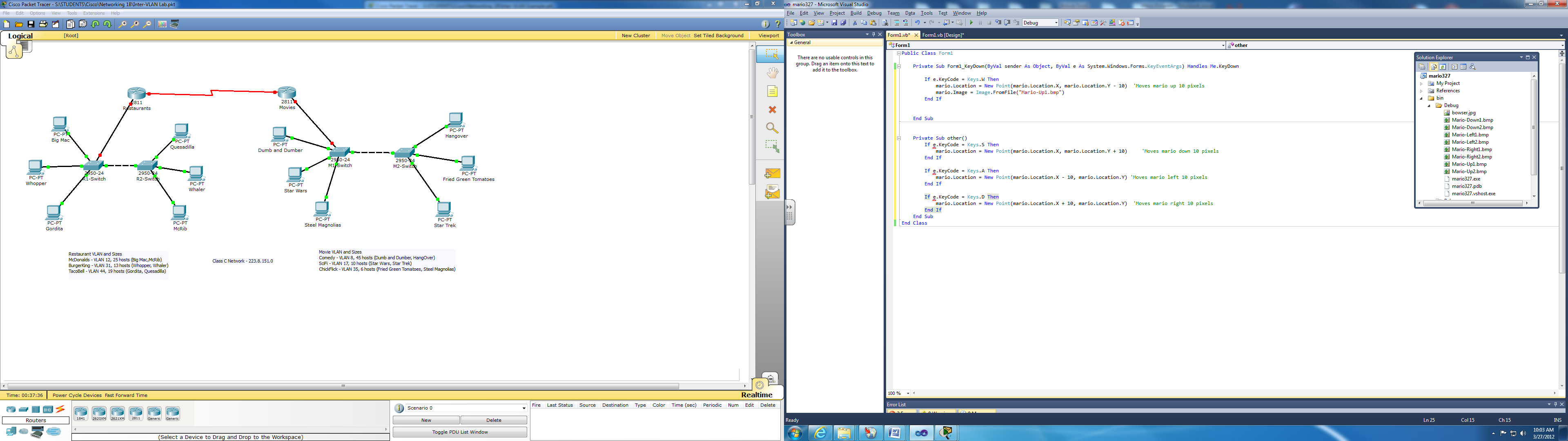
**Part 2 - Designing the Form**

The only object you need is a picturebox. Make these changes to the picturebox properties:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Property** | **New Value** |  | **Property** | **New Value** |
| (Name) | mario |  | SizeMode | StretchImage |
| Location | 50,50 |  | Image | Mario-Down1.bmp |
| Size | 20,30 |  |  |  |

**\*\*Also, change the KeyPreview Property on Form1 to True.**

**Part 3 - Coding** (F7 brings up the coding page)

Form1-KeyDown Event - Create this event from the drop down boxes above the code. Choose *Form1\_events* on the left and *KeyDown* on the right. This sub will run every time the user presses a button. The majority of the code is found here. The first part handles when the user presses the "W" key. We want Mario to move up when this happens. We also want to change the image of the picturebox to show the back of Mario when he moves up. Here's how we do that:

Now try to create three more *IF...Then* statements, similar to that one above that will handle when the user presses S (move down), D (move right) and A (move left). You will have to adjust whether X or Y is changed and the image to display for each subroutine. Here's some help:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Direction | Key Pressed | Image to Display | X Adjustment | Y Adjustment |
| Left | A | Mario-Left1.bmp | -10 | 0 |
| Right | D | Mario-Right1.bmp | +10 | 0 |
| Down | S | Mario-Down1.bmp | 0 | +10 |

**Challenges**

1. Prevent Mario from moving off the form.

2. Add diagonal movements for the Q, E, Z and C keys on the keyboard.