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Research Reference Paper  
  
Electronic Wings:  
<https://www.electronicwings.com/avr-atmega/hc-05-bluetooth-module-interfacing-with-atmega1632>  
  
This website in the link covers extensive details of AVR ATmega Controllers and how to set them up and interface with other types of hardware, including HC-05 Bluetooth Modules. Our project’s goal is to use a Bluetooth module to control the speed of a motor run through an AVR microcontroller, so this website is a guide to setting up the hardware, interface, and firmware code to accomplish this goal.  
The first part of the website page covers hardware details of the HC-05 Bluetooth Module, as well as links to other parts of the website that cover more details on how to use the module, as well USART serial communication used for AVR microcontrollers. This will be essential for our project as we need to know how to hook up and interface the module with the AVR controller.  
The next part of the web page has a very simple explanation of how receive and transmit data serially to the module with the ATmega controller. It uses a basic example of turning on/off a led light using a smartphone with the module to interact with the microcontroller. It also contains basic c program code to show how to set up the USART and Bluetooth module communication, toggle the correct bits set for the pins, and to perform such a task as turning the led on and off. Although our project has a more complicated task of controlling speed of a motor (using a device such as a smart phone) this website’s c code of turning a LED on and off is a good starting place for us to learn the basics of the firmware set up with the hardware.  
Lastly, the website includes a video at the bottom of the page which allows us to see the physical set up of the microcontroller, the module, and the led on the breadboard. It even shows the user interaction with a smartphone to toggle and alter the state of the LED. This will be an immense help to see the physical set up and how to use something such as a smartphone to add in UI with the entire motor speed control circuit.