How to use Fritzing and wire up Motor/Diode
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Fritzing is a very cool program that allows you to create custom breadboard and circuit diagrams. They look very clean, and are useful for teaching beginners how to wire breadboards and Arduinos.

You can download the program from the following link:
http://fritzing.org/download/

Install the program on your computer and open up the software. The following screen will greet you.

Click the new sketch button and a window with a breadboard will open up.
Make sure you are in ‘Breadboard’ mode as indicated by the arrow. On the left hand side there is a bar with items that you can choose from, as well as configuration for them. For the breadboard you can choose a side. Currently it is set to ‘Full +’, but I want to use ‘Half +’ since that is what I have in hand. Simply click the drop down list and select the option that you want.

Drag and drop an Arduino (indicated by the arrow) next to the breadboard and connect the ground to one of the blue rails. Making wires is as easy as clicking a pin and while holding down the left mouse button dragging the other end of the wire to the other pin. The color of the wire can be change in the configurations on the left hand side. As you can see in the picture, some of the breadboard pins light up green. This indicates that they are connected to something, in this case the ground of the Arduino. Same thing happens in the main section of the breadboard, where the rails are connected vertically up to the break. This program lets you see which pins get power, thus helping beginners in understanding how breadboards work. If the pins are green, it means they are connected to something.

This program also allows you to show other devices such as LEDs, motors, transistors and such.
In this next section, I drew up a diagram of what running a motor would look like using a diode, a MOSFET N-type transistor, and an Arduino Mega. In addition to these, one also needs a 10K ohm resistor and some wire.

1. From left to right the leads on the MOSFET (The part with the hole) are Gate, Drain, and Source. The Gate is what controls the operation of the motor, the drain is where the motor gets its power from, and Source is the ground (to complete the circuit when motor is not running.

2. Connect one ground rail to the Arduino ground (green wire). Next connect the Source to that rail.

3. Do the same thing with the Gate; however include a 10K ohm resistor. Make sure that the resistor spans the middle of the breadboard. Additionally connect the Gate to an Arduino pin (in this case pin 6, but this can change) as shown by the blue wire.

4. Put a diode somewhere on the breadboard so that is span two rail as shown. Pay attention to where the white band is. Connect the Drain to the side of the diode that does not have a white band next to it. Connect the other side of the diode to a power supply (in this case the 5V coming from the Arduino). Attach the motor as shown.

Depending on the motor used the power supply on the Arduino might not be strong enough. In that case attach the external + to the side of the diode with the white band and the – to the ground rail used by the Gate and Source.