



instructables

Arduino Vending Machine



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In this instructable, we will be showing you how to build a vending machine that dispenses snickers bars, one at a time.



Step 1: Step 1: Figuring Out Dimensions

The first thing you want to do before you start building, is plan out your design. Here we drew our top, front, and side views showing what size our vending machine will be, and what it will look like inside.

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Step 3: Step 3: Back Door and Front Window

To make it easier to access the arduino and servo inside, we made a back door. We did this by using a jigsaw so cut out the door from the back piece, sanded it down, and then added a hinge at the top so it can be opened and closed. We also added a piece of plexiglass to the front piece so we can see inside. We used a jigsaw for this to cut the hole, then we hot glued on a piece of plexiglass on the inside.



Step 4: Step 4: Assemble

To assemble the pieces together, we used hot glue, wood glue, nail gun, and clamps. First, put wood glue on the corners of your pieces and line them up and clamp them together. Then on the inside, use hot glue to hold it together even better.

Step 5: Step 5: Preparing to Paint

Before painting, make sure to cover up the plexiglass, the switch, and the wires inside from the switch.



Step 6: Step 6: Spray Painting

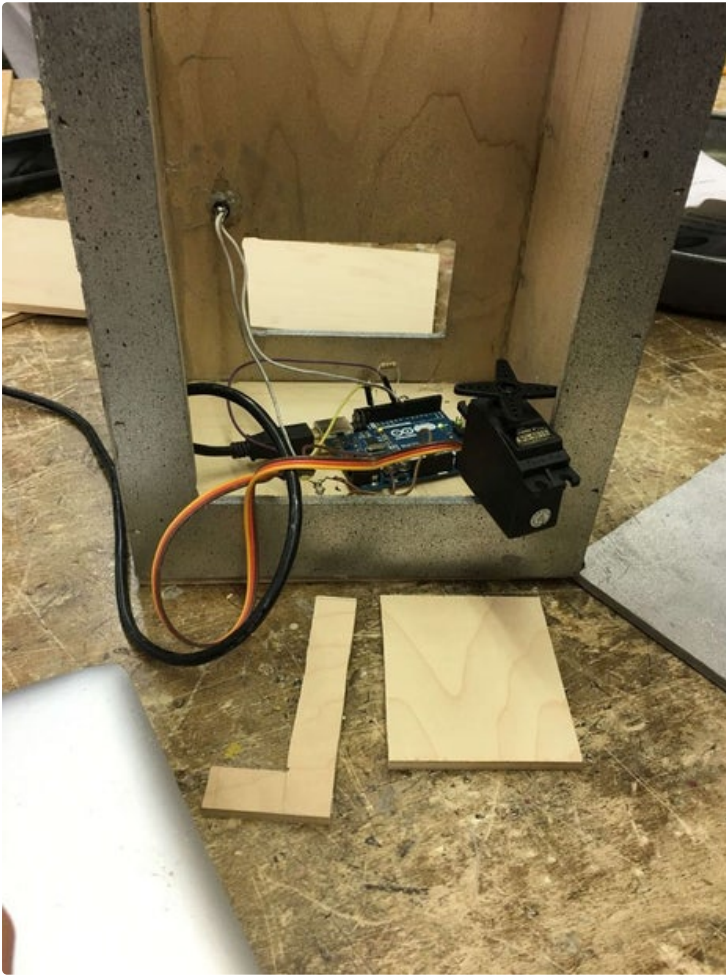
We chose to use grey spray paint on our vending machine, and then have a black splatter effect over it. For the best effect, use about 3 coats of paint.



Step 7: Step 7: Setting Up the Arduino, Servo, and Kicker

For programming the arduino with the servo motor, we used the code and schematic from http://thenscaler.com/?page_id=174

For the kicker, we took a thin piece of wood and cut it into the shape of an L. This will be then be attatched to the servo so it can "kick" the snickers of the platform, which is a 2x2 square which is seen next to the kicker.



Good job guys. I'd like to see some details for the arduino setup and photo of the finished product.
Great drawings!