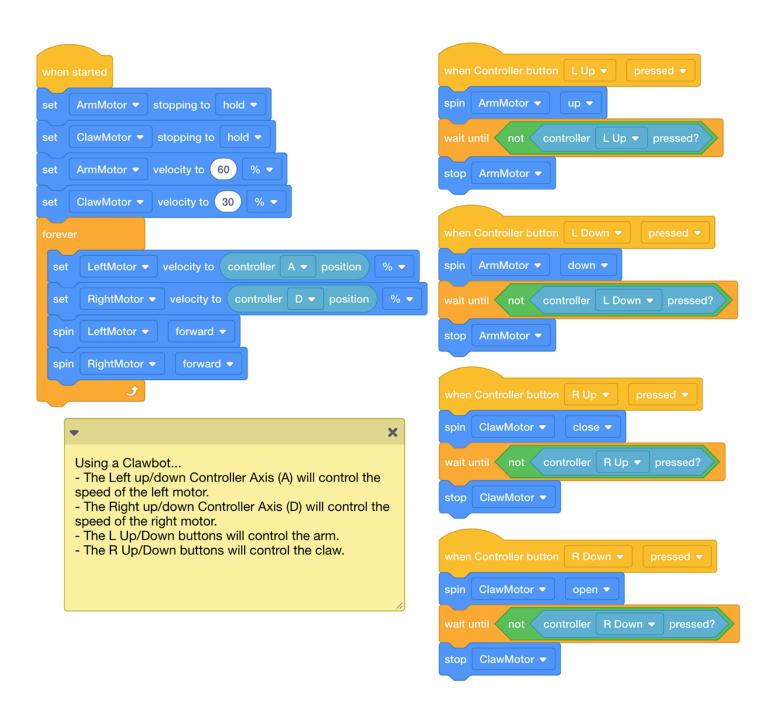
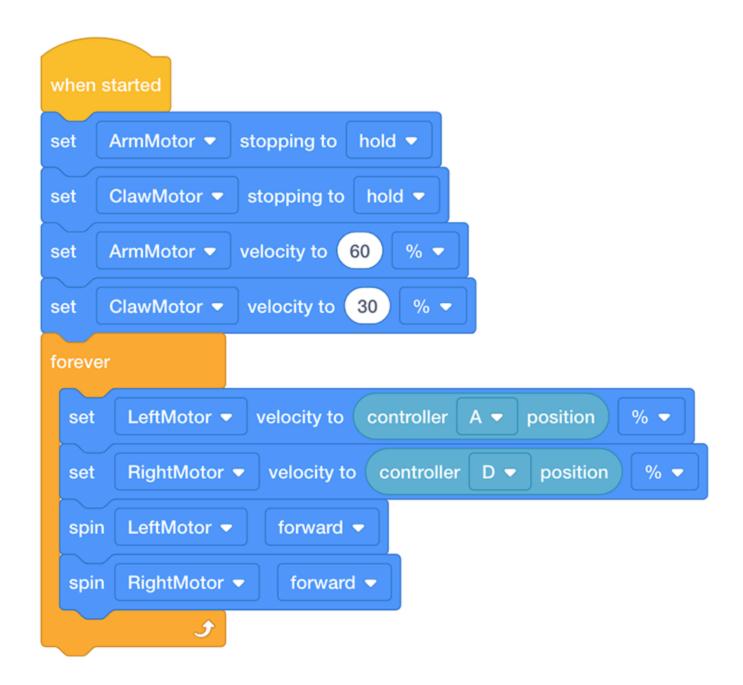


Clawbot Control Example Project

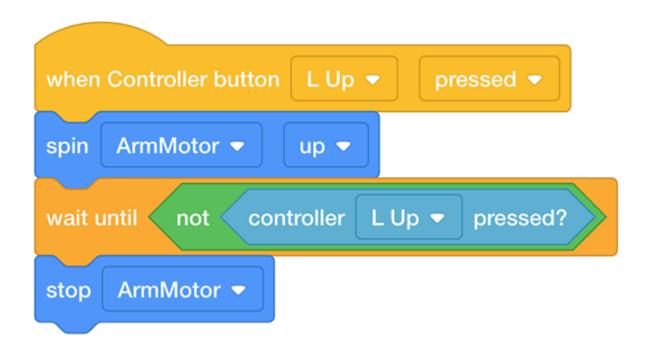
The Clawbot Control example project is as follows:



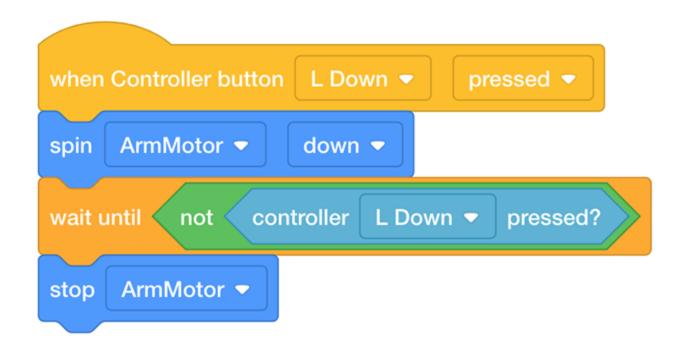


In the stack above, from the Clawbot Control example project, you'll notice that the [Set motor stopping] blocks for both the Arm and Claw Motors are set to hold. The hold setting prevents the Arm from dropping and/or the Claw from closing when the buttons that control their motors are released. Instead, they'll hold or remain in place until they are controlled by the pressing of buttons.

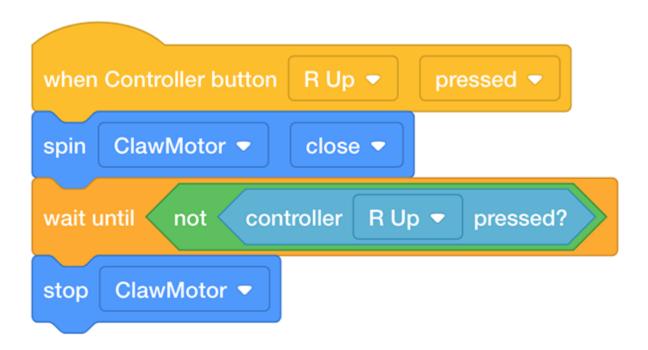
Also, this stack maintains the same blocks from the **Play** section of this STEM lab, for which the left and right Motors are programmed to spin forward as the Joysticks are moved up or down on the A and D axes and all of which repeats indefinitely within the [Forever] block. The project also establishes Arm and Claw movement and velocity.



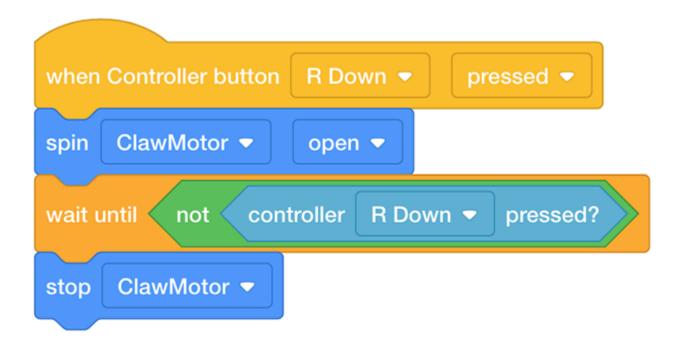
The {When controller} button block runs the attached stack of blocks when the selected VEX IQ Controller button is pressed or released. In this stack, when the L Up button is pressed, the Arm Motor will spin up. The combination of the [Wait until], <Not>, and [Stop] blocks determine that if the L Up button is not pressed, the Arm Motor stops.



This stack above shows that when the L Down button is pressed, the Arm Motor will spin down. The combination of the [Wait until], <Not>, and [Stop] blocks determine that if the L Down button is not pressed, the Arm Motor stops.



This stack above shows that when the R Up button is pressed, the Claw Motor will close. The combination of the [Wait until], <Not>, and [Stop] blocks determine that if the R Up button is not pressed, the Claw Motor stops.



This stack above shows that when the R Down button is pressed, the Claw Motor will open. The combination of the [Wait until], <Not>, and [Stop] blocks determine that if the R Down button is not pressed, the Claw Motor stops.

While this project is being <u>run</u>, any of these events can be triggered by the Controller buttons. In fact, multiple behaviors can even be triggered at the same time.