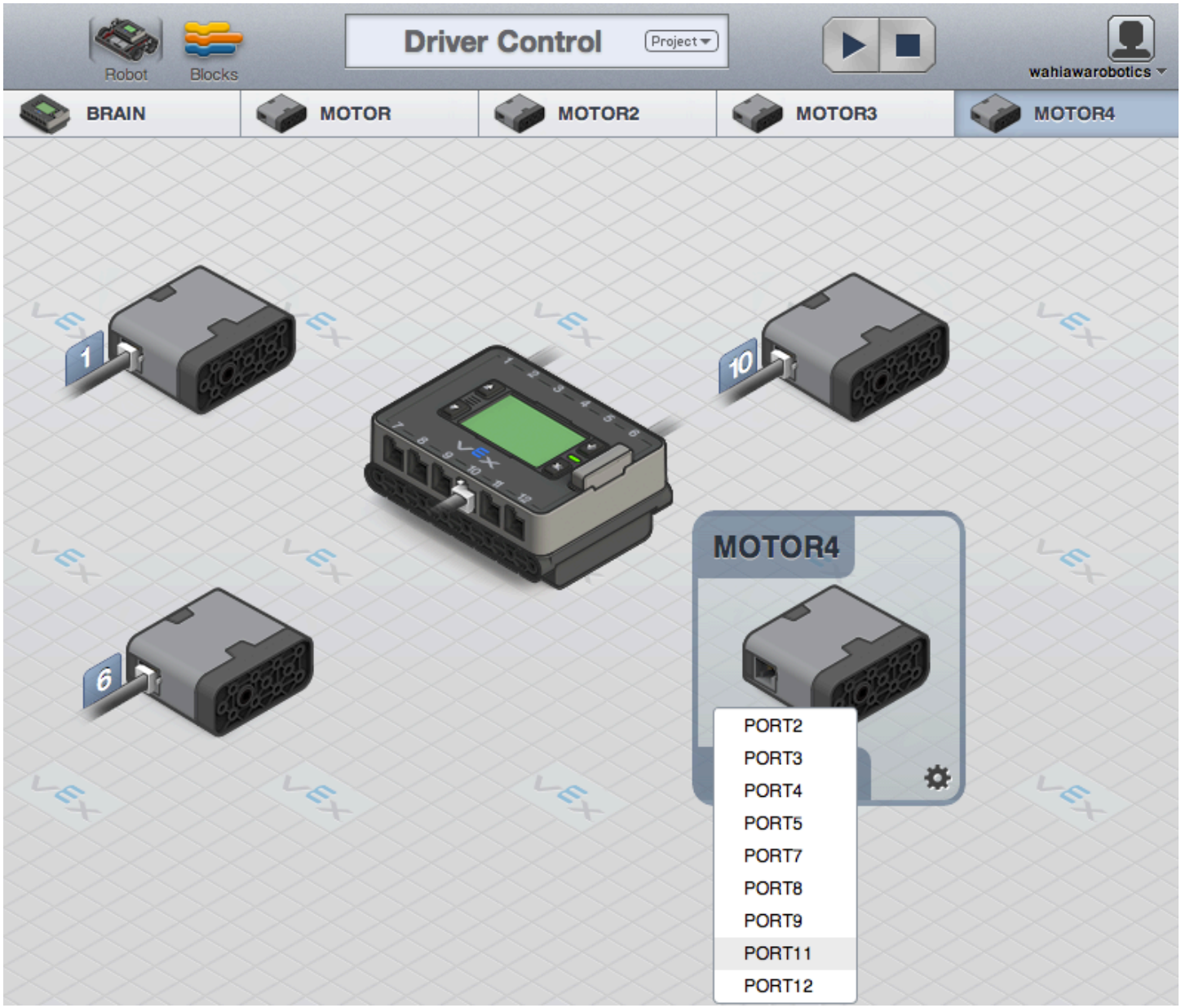
How to Program Driver Control (version 20131006)

Official instructions at: http://www.modkit.com/vex/guides/controller_actions

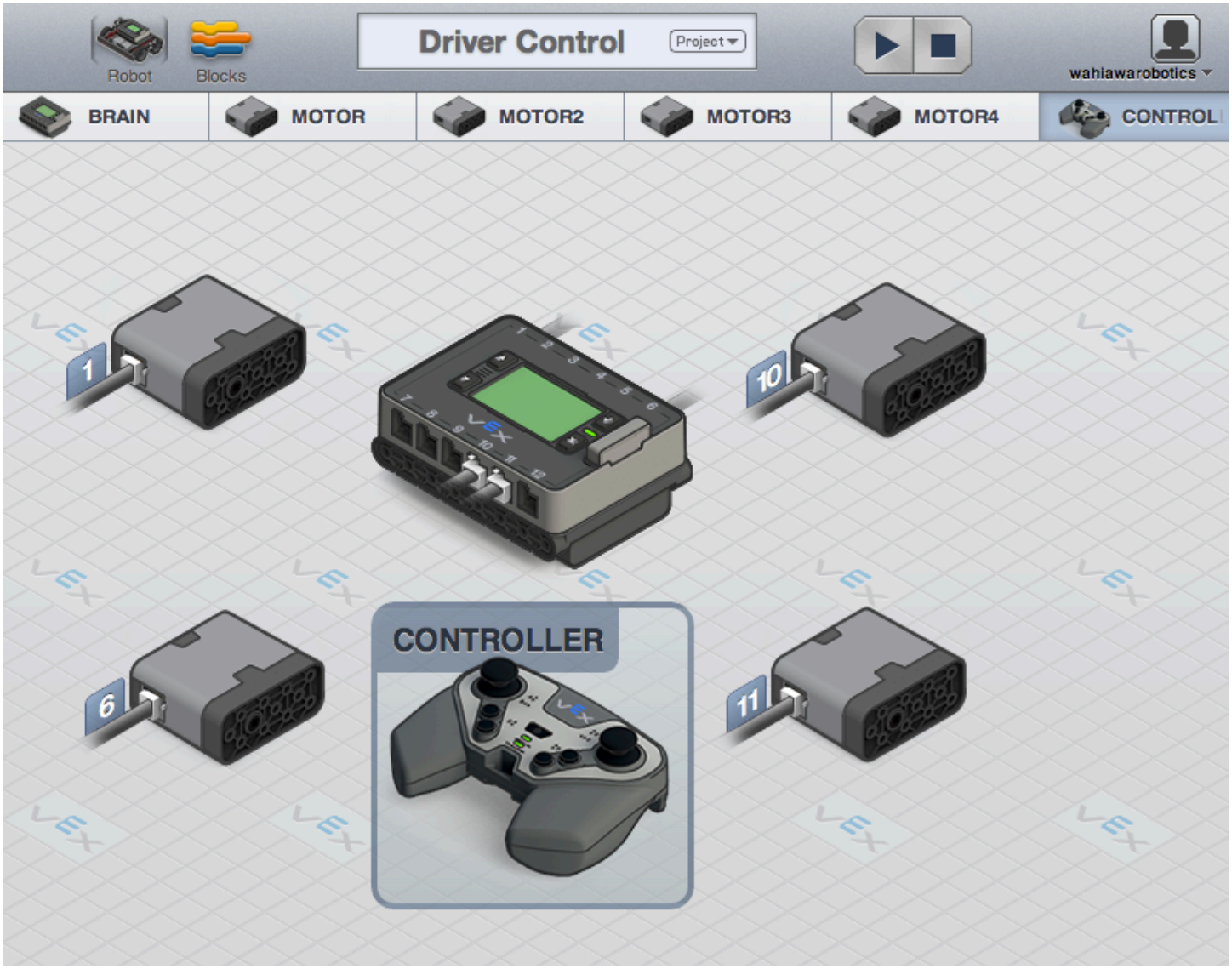
Part 1: Set up Robot

1) Set up your BRAIN and MOTORS on the ROBOT map.



a) For this robot, I have four motors.
   a. Motor 1 (Port 1) will control my Left Wheels.
   b. Motor 2 (Port 6) will control my Right Wheels.
   c. Motor 3 (Port 10) will control my Arm.
   d. Motor 4 (Port 11) will control my Claw.
   e. Although there are 12 Ports, VEXIQ competitions limit you to 6 motors.

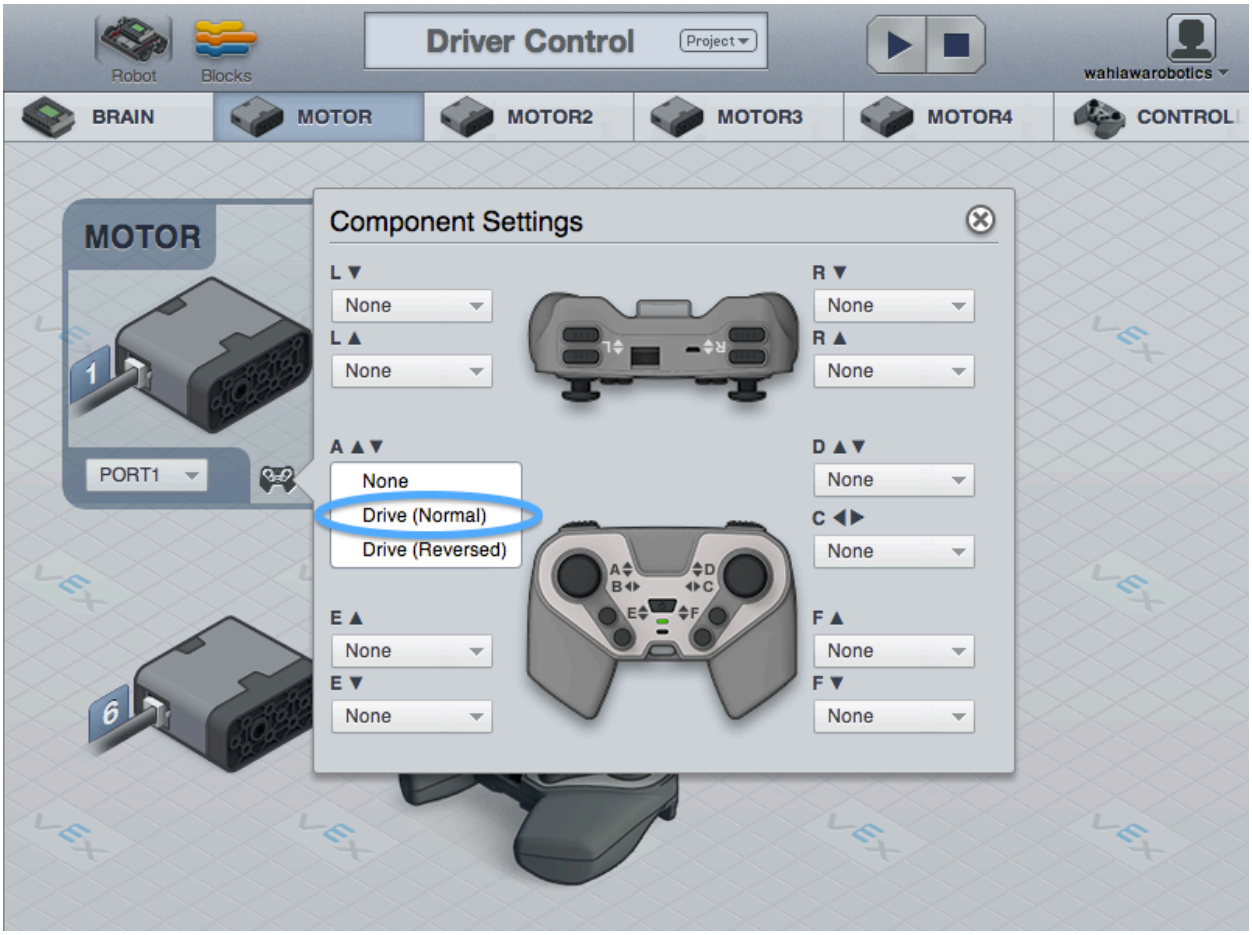
2) Add a Controller to your map



Part II: Configure each Motor

3) Configure each MOTOR to be controlled by the desired Channel / Button.

a) For the wheels, I programmed Motor 1 (Port 1, Left Wheels) to be controlled by Channel A and Motor 2 (Port 6, Right Wheels) to be controlled by Channel D.



a. With this configuration, you drive it with two hands, tank-style.
b. For Motor 2 (Port 6, Right Wheels) I had to Choose "Drive (Reversed)" for Channel D
    i. This allows for true tank-style, with up on both A and D making the robot go forward.

Motor 1 (Port 1, Left Wheels)	Motor 6 (Port 6, Right Wheels)	Direction of Robot
↑	↑	⇈
↓	↓	⇊
↓	↑	↺
↑	↓	↻

b) For the arm and the claw, you have to match both the Up and Down direction of the Channel.

c) Each motor should now be controlled by a specific Channel.

Part III: Download and Test

4) You should be able to download the program and test out the motors.

a) Change the Channels and Orientation based on what the desired control should be like.

b) Just like with the Tank-Style, sometimes you have to reverse a Channel to make it work the way you like.

c) I have my students mark the MOTOR number with blue painter's tape to keep track.