Team 21350B Eliminators

Names: Drago, Logan and Milo

Team: 21350B

Location: Trinity Grammar School, Australia

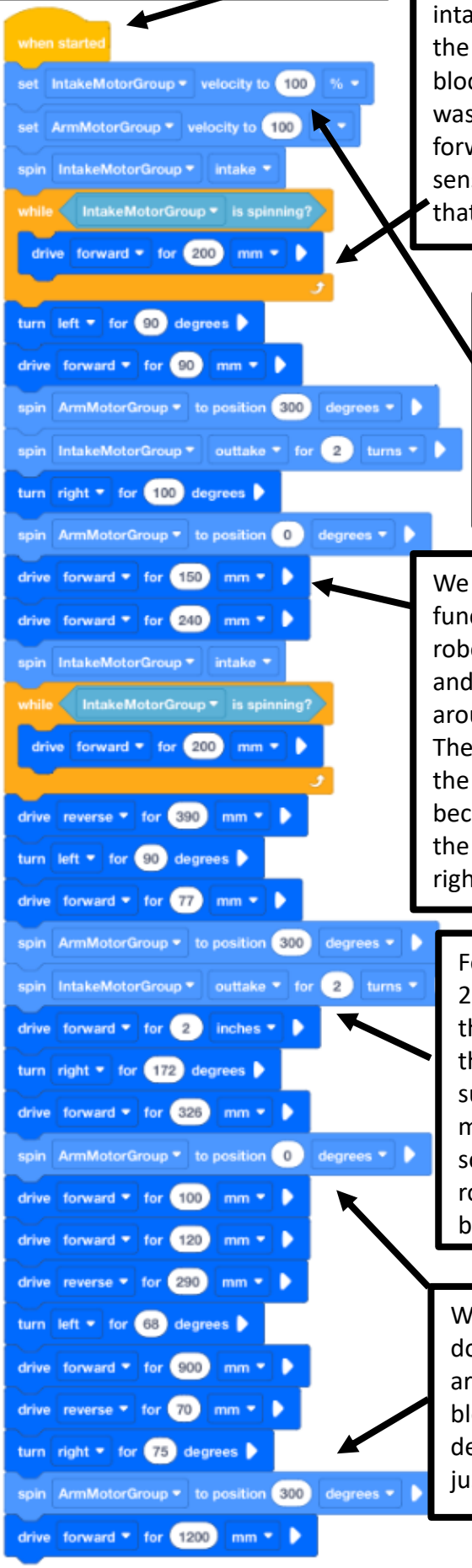
This is my beginner code of the VEX VR Challenge. This is my first time doing VEX and I have been learning a lot about how to do the coding which is also new to me.

I have got a lot better at coding from the VEX VR and I can't wait to be able to use my new coding skills in the VEX challenge next year or if my team can make it to Worlds. My team was only new at coding so we have been working really hard to get better and now we will be ready for new challenges. I think we also need to learn more about how to use the other sensors because some I tried, and I couldn't work it out. But in Australia we are on school holidays for like the whole time of these Online Challenges so I couldn't ask my teacher to show us or teach us anything about it.

This code is all my teams own work and we didn't even get any help from adults.

The Code:

Always start with a control function. We used when started to start the code this is so when you press play on the playground for VEX IQ the code will start straight away.



We used sensors to make sure that the intake is spinning and moving forward at the same time this made sure that the blocks were always collected and there wasn't any mistakes, and the robot moves forward both at the same time. Having the sensors made sure that it was accurate and that's why they are important.

Just cut this for the photo in our real code it was connected.

Turn the velocity to 100% because that makes it intake and lift heaps faster.

We used the drive function to make our robot move forward and be able to turn around all the corners. The drive program is the easiest to make because you look for the angles and find the right direction.

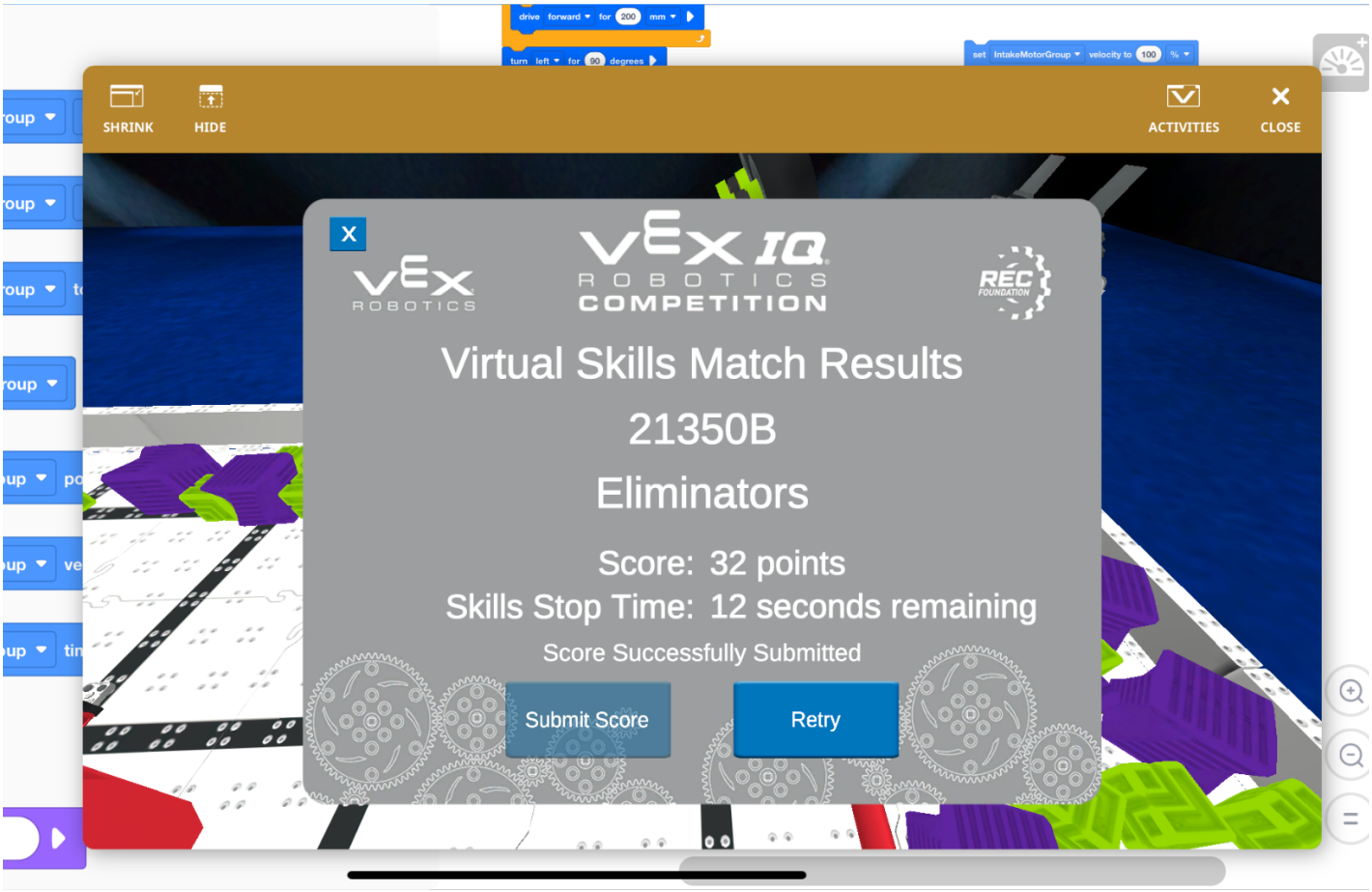
For outtake its always 2 turns this is so that the robot had time for the block to make sure it gets out of the mouth part and is scored before the robot goes to the next block.

The end of the code is to the robot can partial park in the supply zone for the bonus points.

We used the arm movement function to make the arm go up and down to certain degrees. When we wanted to collect blocks the arm had to be at 0 degrees and then when we were shooting the blocks we had to make the arm move up to 300 degrees. 300 degrees made sure the arm was higher than the goal so the blocks just fall in.

The Results:

This was the second attempt:



Our best score at the end of the challenge was 56 points and 17 seconds which is a big improvement so on the last day of the VR Challenge we were ranked 110 in the world and 3rd for our school.

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
101	66	0	7919E	Tritt United Robotics Club	Tritt Elementary School	Georgia	United States
102	65	0	27661D	RBE D	RUCKER BOULEVARD ELEMENTARY SCHOOL	Alabama	United States
103	62	4	38677B	Best Bots	ROBERT F HUNT ELEMENTARY SCHOOL	Texas - Region 2	United States
104	61	5	48500A	QW IQ E1	Guangzhou Overseas Chinese Foreign Language School	China	China
105	61	0	69582A	Eagle Squad	Bradford Elementary School	Arkansas	United States
106	61	0	34196A	ABGPS1	ABGPS	Hong Kong	Hong Kong
107	61	0	6656T	Trazing ThunderXS	Xavier School	Philippines	Philippines
108	60	8	3580B	Stingbots Beans	SEMINOLE SCIENCE CHARTER SCHOOL	Florida - North/Central	United States
109	60	0	25595A	Lord Fartquads	St Vincent's Primary School	Australia	Australia
110	56	17	21350B	Eliminators	Trinity Grammar School	Australia	Australia