task usercontrol()

{

// User control code here, inside the loop

while (true)

{

int manualcontrol;

/\*Code reading guide:

1. vexRT means remote control

2. Btn??Xmtr means partner remote

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

/\* DR4B(1,0);

wait1Msec(1000);

float offsetLeft = SensorValue[leftDR4BPot];

float offsetRight = SensorValue[rightDR4BPot];

float wantedHeight = 0;

float restHeight = 0;

float coneHeight = 25; //needs to be set

float stationaryGoalHeight = 500; //needs to be set

float maxHeight = 950; //needs to be set

float manualcontrol;

DR4BTargetLeft = SensorValue[leftDR4BPot];

DR4BTargetRight = SensorValue[rightDR4BPot];

startTask(DR4BPID);

int DR4BcontrolState = 0;

\*/

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

while (true)

{

/\*NOTES:

Main controller is Stacking and DR4B controls

Partner is Drive and MOGO

\*/

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//DR4B

/\* if(vexRT(Btn7U) == 1)//DR4B moves up 1 cone height

{

wantedHeight = coneHeight;

coneHeight = coneHeight + 1;

}

if(vexRT(Btn7D) == 1)//DR4B moves down 1 cone height

{

wantedHeight = coneHeight - 1;

}

else if(vexRT(Btn7L) == 1)//DR4B moves to stationary goal height

{

wantedHeight = stationaryGoalHeight;

}

else if(vexRT(Btn7R) == 1)//DR4B moves all the way down

{

wantedHeight = 0;

}

else if(vexRT(Btn5U) == 1)//Calculation of offset and wanted height making Target height

{

DR4BTargetLeft = wantedHeight + offsetLeft;

DR4BTargetRight = wantedHeight + offsetRight;

}

if(vexRT(Btn8R) == 1)//Recalibrate offset for when Potentiometer malfunctions

{

offsetLeft = SensorValue(leftDR4BPot);

offsetRight = SensorValue(rightDR4BPot);

}

\*/

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//DR4B Manualcontrol

if(vexRT(Btn8L) == 1 && manualcontrol != 1)//Enable manual control

{

manualcontrol = 1;

}

if(vexRT(Btn8L) == 1 && manualcontrol == 1)//Disable manual control

{

manualcontrol = 0;

}

if(vexRT(Btn8U) == 1 && manualcontrol == 1)//Manual control DR4B moves up

{

motor[leftDR4B] = 90;

motor[rightDR4B] = 90;

}

else if(vexRT(Btn8D) == 1 && manualcontrol == 1)//Manual control DR4B moves down

{

motor[leftDR4B] = -90;

motor[rightDR4B] = -90;

}

else if(manualcontrol == 1 && (vexRT(Btn8D) == 0) && vexRT(Btn8U) == 0)

{

motor[leftDR4B] = 0;

motor[rightDR4B] = 0;

}

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//Stacking

/\* if(vexRT(Btn6U) == 1)//Starts stacking process depending on arm encoder

{

stacking(1);

}

\*/

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

// Drive

rightDrive(vexRT(Ch2Xmtr2));//Right side drive responds to right joystick (PID code not used here)

leftDrive(vexRT(Ch3Xmtr2));//Left side driving responds to left joystick (PID code not used here)

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//MOGO

if(vexRT(Btn6UXmtr2) == 1)//MoGO lift moves up

{

moGo(1,0);

}

else if(vexRT(Btn6DXmtr2) == 1)//MoGo lift moves down

{

moGo(0,1);

}

else// else stay

{

moGo(0,0);

}

}

}

//UNAUTOMATED STACKING

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//Arm Control

if(vexRT(Btn7UXmtr2) == 1)

{

armControl(0,1);

}

else if(vexRT(Btn7DXmtr2) == 1)

{

armControl(1,0);

}

else

{

armControl(0,0);

}

/\*--------------------------------------------------------------------------------------------------------------------------------\*/

//Rollers

if(vexRT(Btn7LXmtr2) == 1)

{

motor[claw] = 90;

}

else if(vexRT(Btn7RXmtr2) == 1)

{

motor[claw] = -90;

}

else

{

motor[claw] = 0;

}

} /\*--------------------------------------------------------------------------------------------------------------------------------\*/