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package org.firstinspires.ftc.teamcode;

import com.qualcomm.robotcore.hardware.DcMotor;
import com.qualcomm.robotcore.hardware.Gamepad;
import com.qualcomm.robotcore.hardware.CRServo;
import com.qualcomm.robotcore.hardware.Servo;

public class ControlClass {

    DcMotor leftWheel;

    DcMotor rightWheel;

    DcMotor pulley;

    Servo colorArm;

    CRServo grippers;

    boolean isRightWheelInverted;

    boolean isGripperCloseing = false;

    public ControlClass (DcMotor lW, DcMotor rW, DcMotor p, Servo c,
CRServo g, boolean i, boolean iGS)
    {

        leftWheel = lW;

        rightWheel = rW;

        pulley = p;

        colorArm = c;

        grippers = g;

        isRightWheelInverted = i;

        isGripperCloseing = iGS;

    }

    void driveForward (long s) throws InterruptedException
    {

        leftWheel.setPower(-0.3);

        rightWheel.setPower(0.3);

        Thread.sleep(s);

        stopDriving ();
    }
}

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}

void driveBackward (long s) throws InterruptedException
{

    leftWheel.setPower(0.3);

    rightWheel.setPower(-0.3);

    Thread.sleep(s);

    stopDriving ();

}

void turnRight (long s) throws InterruptedException
{

    leftWheel.setPower(-0.3);
    rightWheel.setPower(-0.3);

    Thread.sleep(s);

    stopDriving();

}

void turnLeft (long s) throws InterruptedException
{

    leftWheel.setPower(0.3);
    rightWheel.setPower(0.3);

    Thread.sleep(s);

    stopDriving();

}

void movePulleyDown (long s) throws InterruptedException
{

    s = s * 1000;

    pulley.setPower(0.3);

    Thread.sleep(s);

    stopPulley();

}

void movePulleyUp (long s) throws InterruptedException
{

    s = s * 1000;
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    pulley.setPower(-0.3);

    Thread.sleep(s);

    stopPulley();
}

void closeGrippers (long s) throws InterruptedException
{
    s = s * 1000;

    grippers.setPower(0);

    Thread.sleep(s);

    grippers.setPower(0.4);
}

void openGrippers (long s) throws InterruptedException
{
    s = s * 1000;

    grippers.setPower(0.7);

    Thread.sleep(s);

    stopGrippers();
}

void dropArm ()
{
    colorArm.setPosition(0.2);
}

void liftArm ()
{
    colorArm.setPosition(0.8);
}

void stopDriving ()
{
    leftWheel.setPower(0);
    rightWheel.setPower(0);
}

void stopPulley ()

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{
    pulley.setPower(0);
}

void stopGrippers ()
{
    if (isGripperCloseing == true)
    {
        grippers.setPower(0.4);
    } else
    {
        grippers.setPower(0.5);
    }
}

void delay(long s) throws InterruptedException
{
    Thread.sleep (s);
}

void controllerDrive (Gamepad gamepad1)
{
    if (isRightWheelInverted == true)
    {
        if (gamepad1.left_stick_y >= 0) {
            leftWheel.setPower((gamepad1.left_stick_y * 0.5)-
(gamepad1.right_stick_x * 0.5));
            rightWheel.setPower((gamepad1.left_stick_y * 0.5)+
(gamepad1.right_stick_x * 0.5));
        } else {
            leftWheel.setPower((gamepad1.left_stick_y * 0.5)+
(gamepad1.right_stick_x * 0.5));
            rightWheel.setPower((gamepad1.left_stick_y * 0.5)-
(gamepad1.right_stick_x * 0.5));
        }
        if (gamepad1.left_trigger != 0)
        {

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        pulley.setPower(-0.5);
    } else if (gamepad1.right_trigger != 0)
    {

        pulley.setPower(0.5);

    } else
    {

        pulley.setPower(0);

    }

    if (gamepad1.left_bumper)
    {

        grippers.setPower(0);

        isGripperCloseing = true;

    } else if (gamepad1.right_bumper)
    {

        grippers.setPower(1);

        isGripperCloseing = false;

    } else
    {

        stopGrippers ();

    }

    if (gamepad1.b)
    {

leftWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.BRAKE);

rightWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.BRAKE);

        } else
        {

leftWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.FLOAT);

rightWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.FLOAT);

        }

    } else {

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    if (gamepad1.left_stick_y <= 0) {

        leftWheel.setPower((gamepad1.left_stick_y * 0.5)-
(gamepad1.right_stick_x * 0.5));

        rightWheel.setPower(-((gamepad1.left_stick_y * 0.5)+
(gamepad1.right_stick_x * 0.5)));

    } else {

        leftWheel.setPower((gamepad1.left_stick_y * 0.5)+
(gamepad1.right_stick_x * 0.5));

        rightWheel.setPower(-(gamepad1.left_stick_y * 0.5)-
(gamepad1.right_stick_x * 0.5));

    }

    if (gamepad1.left_trigger != 0)
    {

        pulley.setPower(-0.5);

    } else if (gamepad1.right_trigger != 0)
    {

        pulley.setPower(0.5);

    } else
    {

        pulley.setPower(0);

    }

    if (gamepad1.left_bumper)
    {

        grippers.setPower(0);

    } else if (gamepad1.right_bumper)
    {

        grippers.setPower(1);

    } else
    {

        stopGrippers();

    }

    if (gamepad1.b)
    {

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leftWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.BRAKE);

rightWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.BRAKE);

    } else
    {

leftWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.FLOAT);

rightWheel.setZeroPowerBehavior(DcMotor.ZeroPowerBehavior.FLOAT);

        }

    }

}
```