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Assignment: 8838E Virtual Skills Online Challenge Submission Code/PDF

Notes: Middle School Team 8838E from Irvine California.

Playground: VRC Virtual Skills - Over Under

Project Name: 8838E Virtual Skills Code

Project Type: Blocks

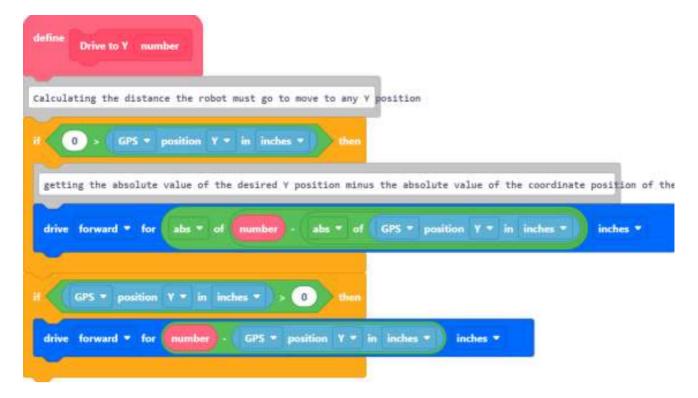
Date: Tue Jan 30 2024

Playground Screenshot Not Found

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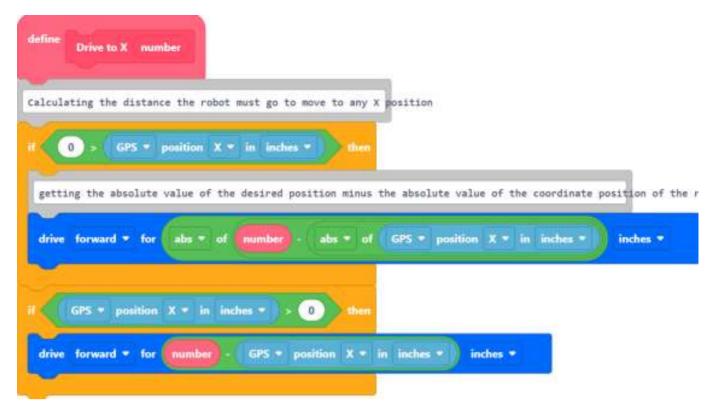
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```
define
        Xpid
               to 7.6
    TargetX ▼
Get Current X position
                             position X -
    DistancX
                      GPS T
                                                inches .
              DistancX
 Get the Needed Distance by adding the ABS of X Position with the T
      NeededDistance ▼
                                                         TargetX
                               abs
                       NeededDistance
                  to
      DistancX
      NeededDistance *
                              DistancX
                                            TargetX
                       NeededDistance
                  to
```

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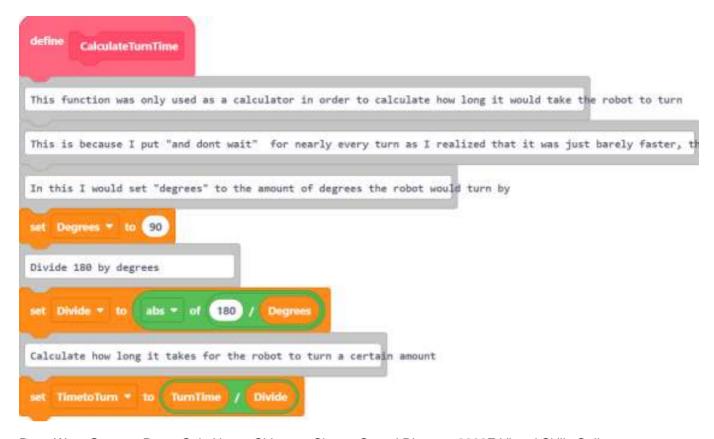
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```
TrianglePID
Not Really PID but acts similarly
   TargetX * to 3
Get Current X and Y positions
                   GPS * position X * in inches
   TargetY * to 8
                   GPS * position Y * in inches *
Multiple IF statements for every scenario
 Get the Needed Distance by adding the ABS of X Position with the Target X
                   0
                           DistancX
     NeededDistance * to
      0
             Distancy
                              abs * of DistancX
                  0
Get the variable A^2 and B^2 then add them to get C^2, then get the Square Root of C^2 (Pythagrorean Theorem)
                                                                                       NeededDistanceV
                                                                      NeededDistanceV
Get the timing by dividing the shortest distance by the speed in Enches/Sec.
set TimingTri * to FindDistanceTri // Incs
```

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```
Set both Target X and Target Y
    TatgetX * to 2
                   GPS * position X * In Inches *
                 7.8
                   GPS - position Y - In inches -
 Get the Needed Distance by adding the ABS of X Position with the Target X
                           abs - of Distanck
 Get the Needed Y Distance by adding the absolute value of Y Position with the Target Y
                            DistancX
Get the variable A^2 and B^2 then add them to get C^2, then get the Square Root of C^2 (Pythagrorean is Theorem)
                         sqrt - of TriangleDistanceNeed
Get the timing by dividing the shortest distance by the speed in Inches/Sec
set TimingTri * to FindDistanceTri //
Get the outtake timing by getting the absolute value of TimingTri minus Intake Dispense Time
                         abs * of TimingTri - idpa
```

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```
define
        ITimePID
set TargetX * to 5.6
Get Current X position
                   GPS ▼ position X ▼ in inches ▼
             DistancX
 Get the Needed Distance by adding the ABS of X Position with the Target X
                             abs v of
                                       DistancX
 set NeededDistance * to
                                                     TargetX
 Get the TimingX by dividing the Needed Distance by the speed in Inches/Sec
                     NeededDistance
      DistancX
 set NeededDistance *
                            DistancX
                     NeededDistance
      TimingX * to
Get the timing for the intake by subtracting the time it takes to get to the position by time i
set TimingIntake * to
```

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Scaled up images of our code.

