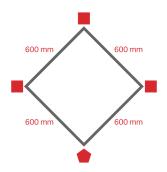
VEXEXP Activity



Play Ball!

Use comment blocks to organize running bases.

Step by Step

- In programming, a comment is a note in the project that helps to explain
 what a programmer wants the project to do. For this challenge, you will
 run a project for your BaseBot to "run bases". Then, you will revise the
 comments and adapt a project to have the robot complete additional
 actions.
- 2. Build the <u>BaseBot</u> and open the BaseBot (Drivetrain 2-motor) template in VEXcode EXP. Build the code shown in the image to the right. Download the project to the Brain
- 3. Place the BaseBot at home plate, facing first base. Run the project, which directs the BaseBot to run to each plate, stopping to make a move or print something on it's screen.
- 4. Find the Comment block that says "Second Base". Add to the project to have the BaseBot "look" (turn) to the left and right after printing "Stealing Third". The BaseBot should go to the left 30 degrees, to the right 60 degrees and then 30 degrees back to the center before continuing on to third base. Add to the comments so they describe the actions you want the robot to take.
- 5. Find the Comment block that says "Third Base". Add to the project to have the BaseBot print "I made it" on its screen before doing any other movements. Revise the comments to reflect the changes you made.

'I FVFI UP'

- Speed it up! Change the code to have the BaseBot race from first to second base at 90 % velocity.
- Celebrate it!! Add to the project to have the BaseBot do a celebration dance after it crosses home plate.

drive forward v for 600 mm v b print Made ltt on Brain v b turn left v for 90 degrees b wait 2 seconds Second Base drive forward v for 600 mm v b print Stealing Third! on Brain v b turn left v for 90 degrees b Third Base drive forward v for 600 mm v b play sound tada v wait 2 seconds turn left v for 90 degrees b Home drive forward v for 600 mm v b play sound siren v print Score! on Brain v b

First Base

Pro Tips

 Professional programmers use comments throughout their programs to help others understand their code. Comments can also help with troubleshooting and collaboration.



| 2 , 1, 1, 0, 27, 4, 4, 1, 2, 4, 2, 4, 1 | | | | <i>5</i> : 1 :: |
|--|----------------------|-----------------------|-----------------------|-------------------------|
| Standard: CSTA 1A-AP-11: Decompose (bre | ak down) the steps n | eeded to solve a prob | lem into a precise se | equence of instructions |
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