
LINE TRACKING SAMPLE WITH RVW

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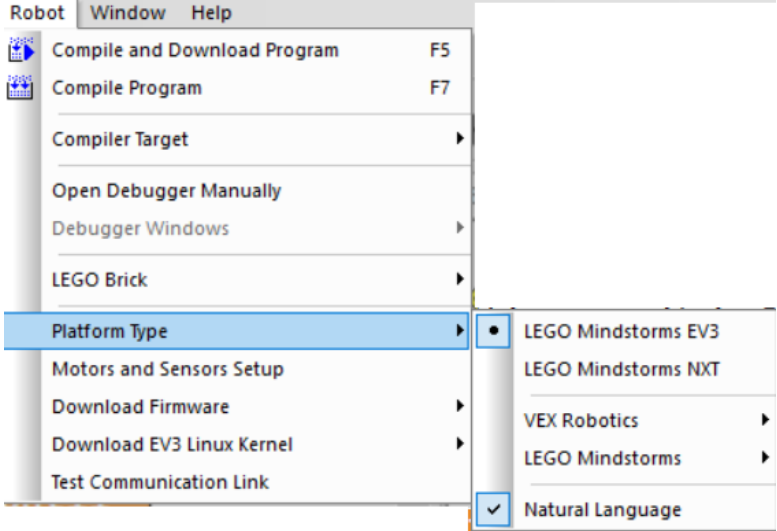
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-last updated in Feb 11th of 2019-

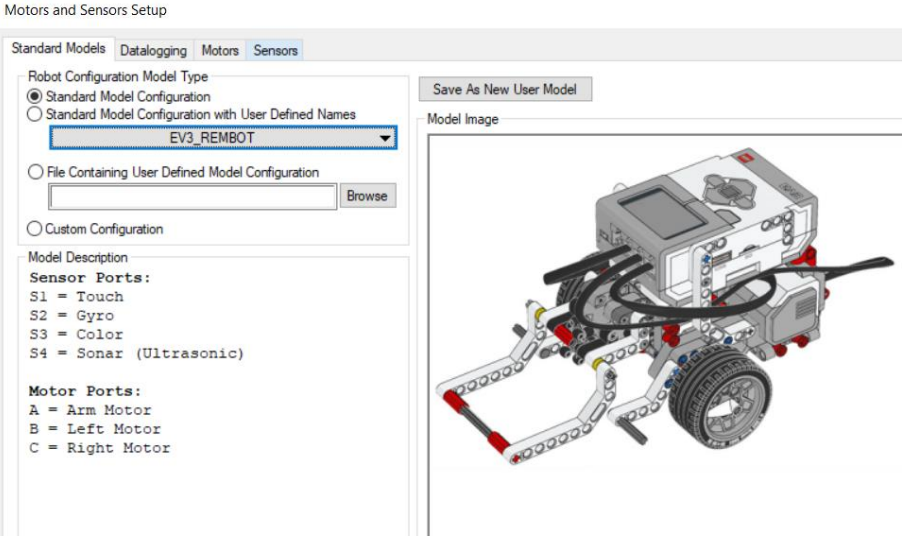
LINE TRACKING

Step 1 : Choose platform and robot model

Platform:



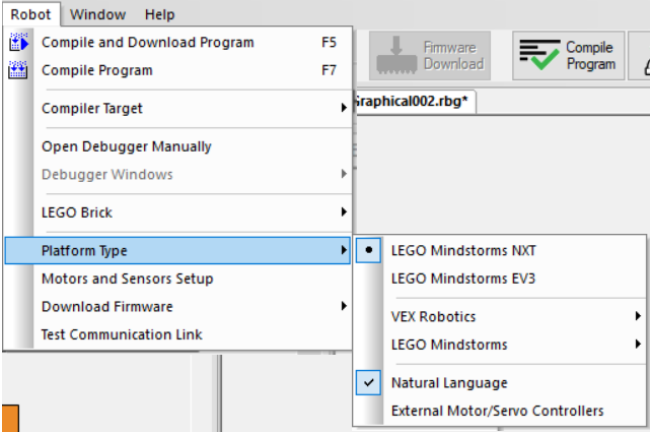
Robot motor and sensors configuration
After you select the model, click "Apply", then "Ok"



Step 2: Design and implement

After you have selected your mode, you should :

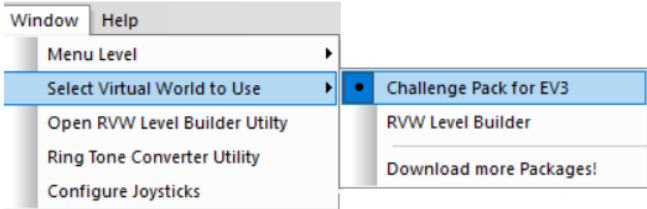
1. pay attention to the sensors setup and motor setup.
2. Select the proper platform



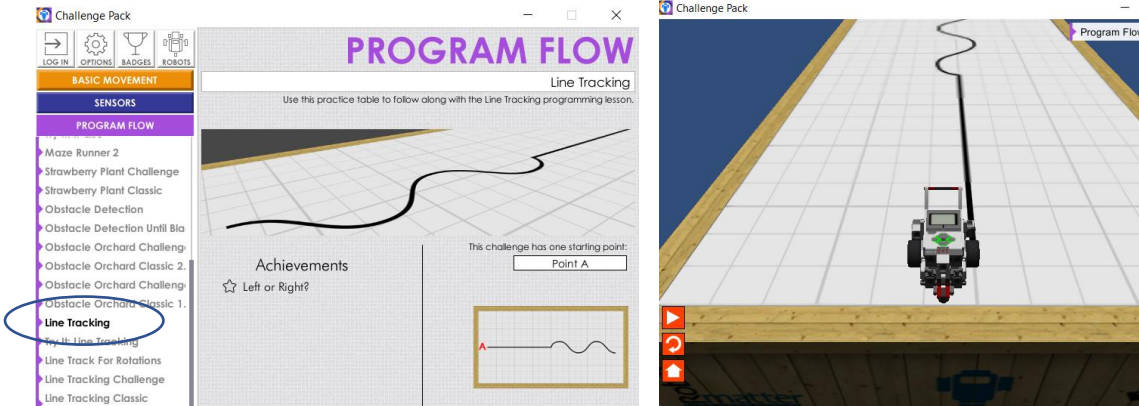
3. Design your program with a flowchart
4. Hand trace your flowchart
5. Write your program (Remember : divide and conquer)

Step 3: After you are done with your program

Select the Challenge Pack



Select the Line Tracking Challenge



LT only - Pseudo- code

Line Trace – Phase I

Robot will line trace forever

```

{
  Calculate your B-W threshold
  While (true)
  {
    if ( L. S. <= B-W threshold)
    {
      Steer right:
    }
    else
    {
      Steer left:
    }
  }
}

```

Line Trace – Phase II

Robot will line trace until see Silver

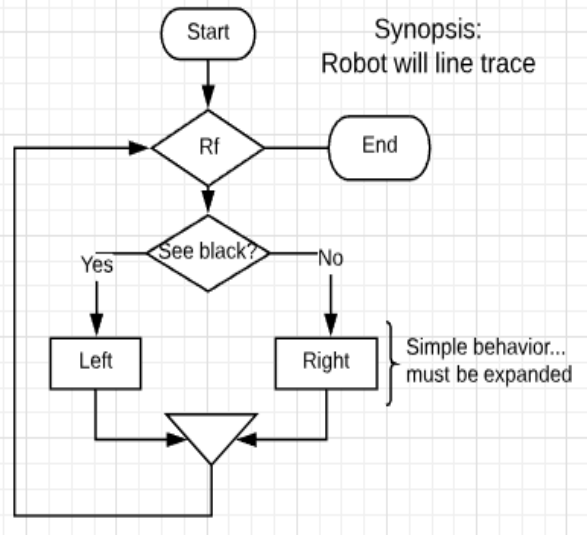
```

{
  Calculate your B-W threshold
  Calculate your Silver-White threshold
  while (L.S. <= Silver-White threshold)
  {
    if ( L. S. <= B-W threshold)
    {
      Steer right:
    }
    else
    {
      Steer left:
    }
  }
}

```

Line Trace - Phase I

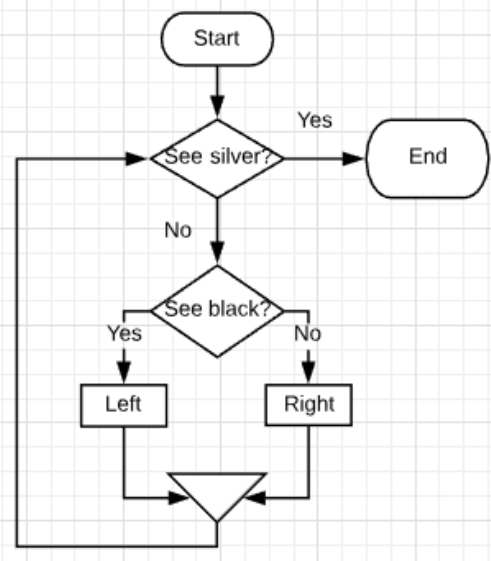
Synopsis:
Robot will line trace



} Simple behavior...
must be expanded

Line Trace - Phase II

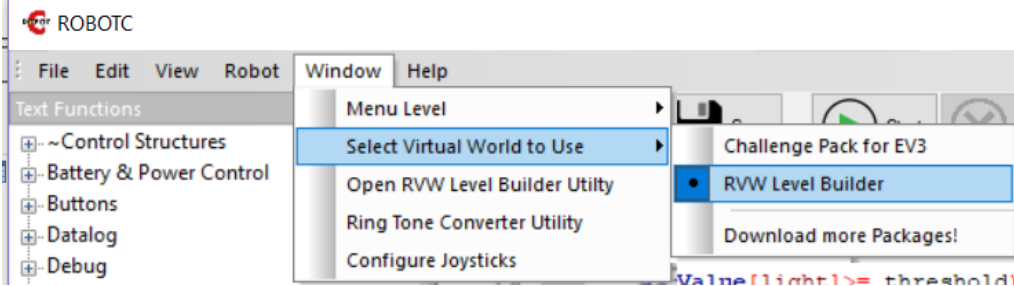
Synopsis:
Line trace until silver



EXTRA FUN...


The following offers options which are available from the RVW for you to play with. We shall not cover this in class.

1) RVW level builder



2) Download more Packages!


Again, these are just some fun field you can download to practice your programming skill. These will not be covered in SR Roboclub.



Ruins of Atlantis
We thought Atlantis was a myth. We were wrong. Explore the Ruins of Atlantis, 6,000 meters below the surface of the ocean, collecting data and treasure as you do.



Palm Island
Visit the beautiful Palm Island and program your robot to drive along its boardwalk path. Collect coconut clusters and set lobster traps for the Luau!



Expedition Atlantis
Explore Expedition Atlantis and be challenged by epic proportions! Choose between 3 underwater robots, and program them to go certain distances or angles.