

on start

Initialize AI-Lens

Switch function as Ball recognition ▾

set sensitivitySize ▾ to 100

set sensitivityLeft ▾ to 80

set sensitivityRight ▾ to 144

set robotFwdSpeed ▾ to 25

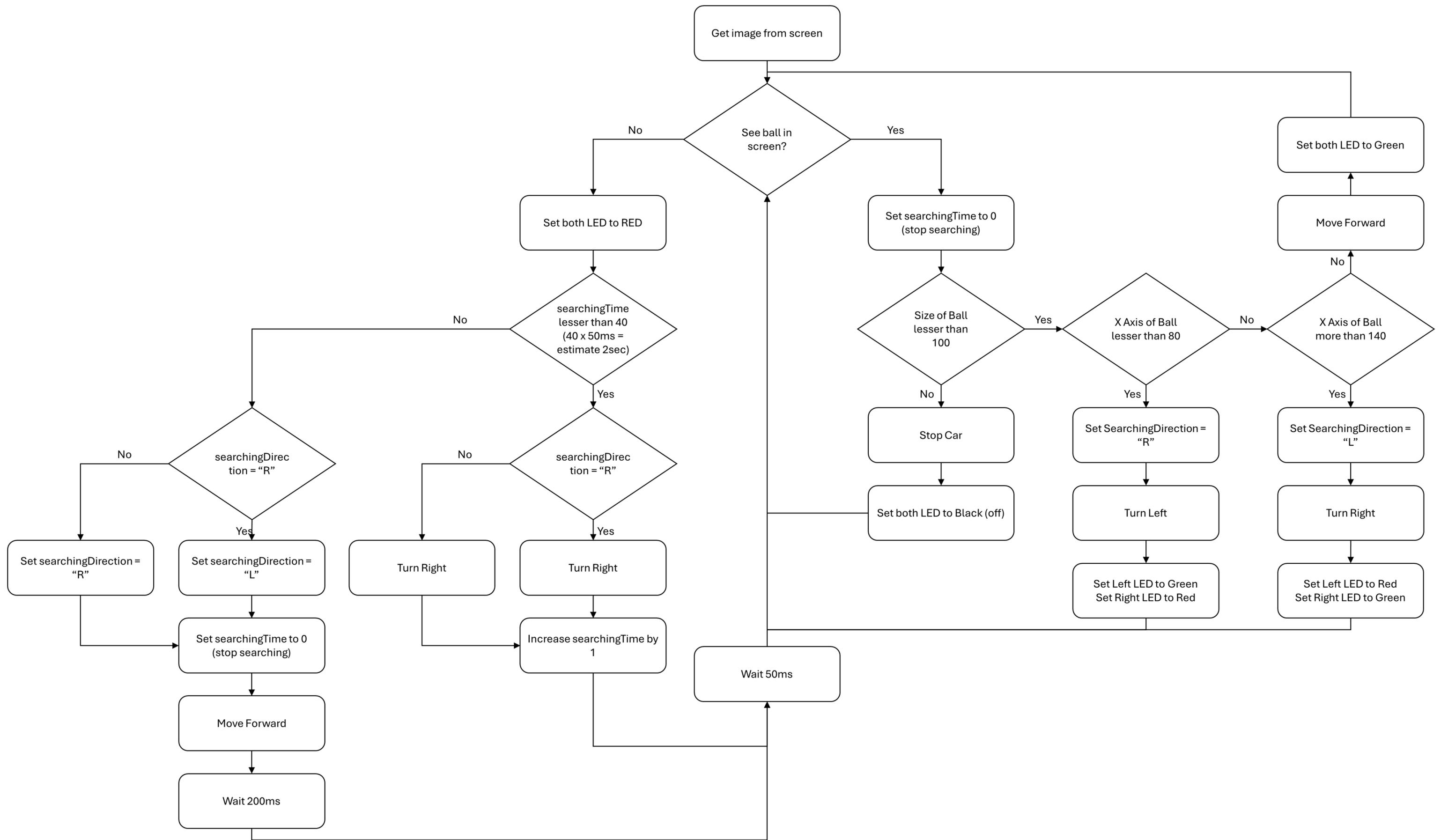
set robotTurnSpeed ▾ to 25

set searchingTime ▾ to 0

set searchingDirection ▾ to "R "

Initialize AI Lens and set to ball recognition

1. sensitivitySize – sets the sensitivity size level
2. sensitivityLeft – sets the sensitivity left x axis level
3. sensitivityRight – sets the sensitivity right x axis level
4. robotFwdSpeed – sets the robot move forward speed
5. robotTurnSpeed – sets the robot turning speed
6. searchingTime – calculate how long the rotation ball search has gone on before moving forward
7. searchingDirection – which direction to turn when searching; will change after every iteration (to ensure searching is done in both left and right turn direction)



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forever
  Get one image from AI-Lens
  if Image contains ball(s) then
    set searchingTime to 0
    if In the image get ball(s)' info: Size < sensitivitySize then
      if In the image get ball(s)' info: X < sensitivityLeft then
        set searchingDirection to "R"
        Set left wheel speed 0 % right wheel speed robotTurnSpeed %
        Set LED headlights Left_RGB color Green
        Set LED headlights Right_RGB color Red
      else if In the image get ball(s)' info: X > sensitivityRight then
        set searchingDirection to "L"
        Set left wheel speed robotTurnSpeed % right wheel speed 0 %
        Set LED headlights Left_RGB color Red
        Set LED headlights Right_RGB color Green
      else
        Set LED headlights ALL color Green
        Set left wheel speed robotFwdSpeed % right wheel speed robotFwdSpeed %
    else
      Stop car immediately
      Set LED headlights ALL color Black
    else
      Set LED headlights ALL color Red
      if searchingTime < 40 then
        if searchingDirection = "R" then
          Set left wheel speed robotTurnSpeed % right wheel speed 0 %
        else
          Set left wheel speed 20 % right wheel speed robotTurnSpeed %
        change searchingTime by 1
      else
        if searchingDirection = "R" then
          set searchingDirection to "L"
        else
          set searchingDirection to "R"
        set searchingTime to 0
        Set left wheel speed robotFwdSpeed % right wheel speed robotFwdSpeed %
        pause (ms) 200
        pause (ms) 50
  
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