**RoboLocode**

***Robot Factory  
Quality Control Inspection Sheet***

**IDENTIFICATION**

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| ENGINEER IN CHARGE | |
| NAME |  |
| DATE OF INSPECTION |  |

**PROCEDURE**

All robots that leave the RoboLocode robot factory must complete the following verifications to ensure the highest quality possible. Please read thoroughly every step, then go through each one, one at the time, filling the required information.

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| 1. Basic Movement code verification |
| Ensure that the robot can move properly, please check the following code for any issues, if found they should be corrected until the robot can properly move forward. |

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| def moveForward(currentRobot, nTurns):  x = 0  while(y < nTurns):  x = x-1  if (currentRobot.energy > 0) then:  currentRobot.move()  currentRobot.setEnergy(currentRobot.energy - 1)  else:  return “Not enough energy”  return “Movement completed successfully” |
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| 1. Movement test cases |
| Using the fixed code from the previous step, please test the movement function with the following values and for each one please provide the returned messages. |

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| *# lizCrusher.energy = 3*  moveForward(lizCrusher, 4) |
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| *# dragonKnight.energy = 0*  moveForward(dragonKnight, 1) |
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| *# alwaysTired.energy = 7*  moveForward(alwaysTired, 3) |
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| 1. Upgraded Movement code |
| The basic movement code needs to be upgraded so that the robot can move forward as well as backward. Using your fixed code as a basis please program the upgraded function defined bellow, with the behaviour indicated in the comment. |

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| *# moves the currentRobot the specified number of turns of the wheels by nturns*  *# if direction is positive it should move forward, if negative it moves backwards,  # zero it does not move or consume energy*  *# the robot should only move if there’s enough energy for all of the turns requested,  # if there’s enough energy then after each turn the equivalent amount of energy  # should be subtracted*  def move(currentRobot, nturns, direction): |
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**ASSESSMENT**

Please provide your feedback and evaluation of this activity.

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