ROBOT MOVER APPLICATION



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Hi There. I hear you want me to make some MOVES. (Yes Robots have a sense of humour too).

This document will guide you on how you can achieve this.

There are also sample data and test results to show I can moon walk like Michael Jackson.



**PROJECT ZIP FILE**

The project Zip file contains the following

1. RobotMover.java
2. RobotMoverBean.java
3. RobotMoverConstants.java
4. RobotMoverUtil.java
5. RobotMover.properties
6. RobotMoverInputCommands.properties

Zip file enclosed herewith

**HOW TO STEPS**

1. Extract Zip file to a folder of your liking
2. Locate the property file **RobotMover.properties** inside the package com\robot\mover\propertyfiles
3. Change the following 2 entries in the property file to map to your local folder structure where the zip file has been extracted

LOG\_FILE\_NAME

COMMAND\_INPUT\_FILE

This is important for the log files to hold debug data and for the application to work.

1. Open the Java file **RobotMoverConstants.java** inside the package \com\robot\mover\constants and modify the following entry

FAIL\_SAFE\_COMMAND\_INPUT\_FILE\_NAME

This entry will be hardcoded with the path and name of the COMMAND INPUT file where the commands that the Robot needs to executed will be loaded

1. Open the property file **RobotMoverInputCommands.properties** located inside the package com\robot\mover\propertyfiles

Load / type all commands here that the Robot needs to execute

1. Run the file **RobotMover.java** inside package com\robot\mover\
2. Check log file **robertmover.log** for debug statements indicating the outcome of the Robot’s movement

**TESTING**

Based on the assertion that (0,0) is the starting position and will be the SOUTH WEST Corner of the table – the below given layout has been framed

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | NORTH | | | | |  |
| NORTH WEST | (4,0) | (4,1) | (4,2) | (4,3) | (4,4) | NORTH EAST |
| WEST | (3,0) | (3,1) | (3,2) | (3,3) | (3,4) | EAST |
| (2,0) | (2,1) | (2,2) | (2,3) | (2,4) |
| (1,0) | (1,1) | (1,2) | (1,3) | (1,4) |
| SOUTH WEST | (0,0) | (0,1) | (0,2) | (0,3) | (0,4) | SOUTH EAST |
|  | SOUTH | | | | |  |
|  |  | | | | |  |

**SCENARIO 1**

All moves are valid and hence coordinates reported match the location of the Robot

**INPUT COMMANDS**

PLACE 0,0,NORTH

MOVE

LEFT

RIGHT

REPORT

**OUTPUT FROM LOG**

INFO: Command Requested - PLACE 0,0,NORTH

INFO: Robot placed successfully - PLACE 0,0,NORTH

INFO: Command Requested – MOVE

INFO: After executing command - MOVE - (1,0,NORTH)

INFO: Command Requested – LEFT

INFO: After executing command - LEFT - (1,0,WEST)

INFO: Command Requested – RIGHT

INFO: After executing command - RIGHT - (1,0,NORTH)

INFO: RobotMover - REPORT Command requested

INFO: (1,0,NORTH)

**SCENARIO 2**

This will not report any coordinates as a valid PLACE command has not been executed yet

**INPUT COMMANDS**

PLACE 5,5,NORTH

PLACE

MOVE

LEFT

PLACE 1,2 NORTH

RIGHT

LEFT

REPORT

**OUTPUT FROM LOG**

INFO: Command Requested - PLACE 5,5,NORTH

INFO: PLACE command NOT executed - PLACE 5,5,NORTH

INFO: Command Invalid at this time – PLACE

INFO: Command Invalid at this time – MOVE

INFO: Command Invalid at this time – LEFT

INFO: Command Invalid at this time - PLACE 1,2 NORTH

INFO: Command Invalid at this time – RIGHT

INFO: Command Invalid at this time – LEFT

INFO: Command Invalid at this time – REPORT

**SCENARIO 3**

All commands except the last MOVE will be executed successfully. Last MOVE command will be ignored to avoid the Robot from falling off the table.

**INPUT COMMANDS**

PLACE 1,1,WEST

MOVE

LEFT

MOVE

RIGHT

MOVE

REPORT

**OUTPUT FROM LOG**

INFO: Command Requested - PLACE 1,1,WEST

INFO: Robot placed successfully - PLACE 1,1,WEST

INFO: Command Requested – MOVE

INFO: After executing command - MOVE - (1,0,WEST)

INFO: Command Requested – LEFT

INFO: After executing command - LEFT - (1,0,SOUTH)

INFO: Command Requested – MOVE

INFO: After executing command - MOVE - (0,0,SOUTH)

INFO: Command Requested – RIGHT

INFO: After executing command - RIGHT - (0,0,WEST)

INFO: Command Requested – MOVE

INFO: RobotMover - REPORT Command requested

INFO: (0,0,WEST)

**SCENARIO 4**

All commands except 2 invalid PLACE commands will be executed.

Invalid PLACE commands are

PLACE 5,5,NORTH (Put Robot outside of the table area)

PLACE 2 2 NORTH (Wrong syntax)

**INPUT COMMANDS**

PLACE 5,5,NORTH

PLACE 1,1,SOUTH

PLACE 2,2,NORTH

PLACE 2 2 NORTH

PLACE 3,4,WEST

PLACE 3,3,EAST

MOVE

REPORT

**OUTPUT FROM LOG**

INFO: Command Requested - PLACE 5,5,NORTH

INFO: PLACE command NOT executed - PLACE 5,5,NORTH

INFO: Command Requested - PLACE 1,1,SOUTH

INFO: Robot placed successfully - PLACE 1,1,SOUTH

INFO: Command Requested - PLACE 2,2,NORTH

INFO: Robot placed successfully - PLACE 2,2,NORTH

INFO: Command Invalid at this time - PLACE 2 2 NORTH

INFO: Command Requested - PLACE 3,4,WEST

INFO: Robot placed successfully - PLACE 3,4,WEST

INFO: Command Requested - PLACE 3,3,EAST

INFO: Robot placed successfully - PLACE 3,3,EAST

INFO: Command Requested – MOVE

INFO: After executing command - MOVE - (3,4,EAST)

INFO: RobotMover - REPORT Command requested

INFO: (3,4,EAST)

I hope you liked my moves. Thank you for being a part of my MOVEMENT (Yes – Sense of humour again)

