ToyRobot Challenge

The challenge was to expose the “ToyRobot” as a REST web service which moves on a pre-specified platform boundaries, adheres to different commands.

# Assumptions

1. The “ToyRobot” application right now assumes a 5X5 grid.

# Prerequisite

1. Java 1.7
2. Eclipse Keppler IDE
3. Maven 1.7 ( Build Tool)
4. Apache Tomcat Web Server ( Version 7.0)

# Usage Guide

Note : replace the << ServerName >> should be replaced with the hostname where the RESTful service is hosted.

|  |  |
| --- | --- |
| REQUEST | Response Codes |
| curl -X POST -i -H "Content-type: text/html" http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron | 200/ 303 |
| curl -X GET -i -H "Content-type: text/html" http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position | 200/204 |
| curl -X POST -i -H "Content-type: application/json" http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position -d '{"angle":"WEST", "x\_pos":2, "y\_pos":2}'  Note: In case of windows7/10 O/S the Post request for curl  curl -X POST -i -H "Content-type: application/json" http://localhost:8080/RestfulToyRobot/webapi/robot/megatron/position -d "{\"angle\":\"WEST\", \"x\_pos\":2, \"y\_pos\":2}" | 200 |
| curl -X PUT -i http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position/left | 200/400 |
| curl -X PUT -i http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position/left | 200/400 |
| curl -X PUT -i http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position/move | 200/400 |
| curl -X PUT -i http://<<ServerName>>/RestfulToyRobot/webapi/robot/megatron/position/move | 200/400 |

# Objectives Achieved

1. “ToyRobot” challenge concrete implementation.
2. Exposing “ToyRobot” as RESTful service.
3. CORS implementation.

# Source Code Repository

https://github.com/neeta190/ToyRobot-Challenge

1. ToyRobot : Concrete implementation ( Core) + Test Cases

2. RestFulToyRobot : implementation exposed as RESTful webservice

3. ToyRobotRestClient : Test Cases for the RESTful webservice implementation.

Note : These are Maven Projects & the dependencies for these needs to be downloaded by building above projects using following command

mvn clean package

# Executables

Download location (https://github.com/neeta190/ToyRobot-Challenge/blob/master/Executables.rar)

1. "ToyRobot-1.0.0.jar" needs to be insatlled in Maven using following command

mvn install:install-file -Dfile=<<Path>>\ToyRobot-1.0.0.jar -DgroupId=com.toy.robot -DartifactId=ToyRobot -Dversion=1.0.0 -Dpackaging=jar

Note : <<Path>> location on file system where Jar is placed.

2. "RestfulToyRobot.war" needs to be deployed in Tomcat web server.

3. "ToyRobotRestClient" needs to be executed using the following commands

java -Dconfig.file=<<Path>>\config.properties -jar ToyRobotRestClient.jar