ETSA02-ADM-LAB1

Lab 1
Getting started with Robocode

Version 0.1 approved

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Revision History

Name	Date	Reason For Changes	Version
Markus Borg	2017-12-08	Initial draft.	0.1
Markus Borg	2017-12-09	Lab scope completed and tested.	0.2

1 Introduction

Learn to install and configure a non-trivial software framework by following instructions. Learn the basics of Robocode. Use Eclipse to build a basic robot. Configure Robocode to import new robot. Understand the basics of teams in Robocode.

2 Before the lab

Read up on the basics of Robocode. Have a look at the API.

3 At the lab

3.1 Install Robocode

Download latest Robocode: https://sourceforge.net/projects/robocode/files/
Install on local drive
Start a few battles. Experiment.
Develop a quick robot using the internal editor: http://robowiki.net/wiki/Robocode/My_-First_Robot
Compile it and try it in battles.

3.2 Develop a Robot in Eclipse

Create a project in Eclipse http://robowiki.net/wiki/Robocode/Eclipse/Create_a_Project
Download the Basic Leader Bot to the project. Make sure it builds.

3.3 Try the robot in Robocode

Add the Robot project in Robocode: http://robowiki.net/wiki/Robocode/Add_a_Robot_-Project
Note: Add the path to the Eclipse project (with /src and /bin as sub-folders), not the workspace.

3.4 Configure Eclipse to run and debug the robot

Run from Eclipse: http://robowiki.net/wiki/Robocode/Eclipse/Running_from_Eclipse
Set up debugging from Eclipse: http://robowiki.net/wiki/Robocode/Eclipse/Debugging_-Robot

3.5 Expand the team

Repeat the instructions in Sections 3.2-3.5 for the Basic Bot and the Basic Drone.
Create a team from within Robocode (Robot->Create a robot team)
Try a few team battles against various opposition.

4 After the lab

Reflect on what is important for successful team battles. Consider your two perspectives. First, think about what type of team you want to build to be run a successful LU rumble.

Second, discuss what type of Robot you want to release on the market. What types will be in high demand? What is the competition going to offer? What could be your niche? Think about commodity, differentiation, and innovation.

Successful development of software products for an open market requires making critical decisions under time pressure – decisions of both technical nature as well as business nature. Your team needs to decide soon!