Cours de MICROINFORMATIQUE

Section de Microtechnique Printemps 2017

Practical Exercises



Eclipse_Mobots Installation	
Title:	Installation of an Eclipse distribution to work with the e-puck2
Duration:	5-20 min

1 Introduction

Eclipse_Mobots is a distribution of Eclipse IDE for C/C++ Developers specially modified to edit and compile e-puck2's projects out of the box. It doens't require to be installed and everything needed is located in the package given.

The only dependency needed to be able to run Eclipse is Java.

2 Installation for Windows

2.1 Java 32bits

This section can be ignored if Java 32bits is already installed on your computer.

- 1. Go to https://www.java.com/en/download/manual.jsp and download "Windows offline" This is the 32bits version of Java
- 2. Run the downloaded installer and follow its intructions to proceed with the installation of Java 32bits

2.2 Eclipse Mobots

- 1. Go to the moodle of the course (Microinformatique) and download the Eclipse_Mobots package for windows.
- 2. Unzip the downloaded file to the location you want (can take time).
- 3. You can now run the Eclipse Mobots.exe to launch Eclipse.
- 4. You can create a shortcut to Eclipse Mobots.exe and place it anywhere if you want.

Important things to avoid:

1. The path to the Eclipse Mobots folder must contain zero space.

Example:

C:\epfl stuff\Eclipse Mobots OK

C:\epfl stuff\Eclipse Mobots NOT OK

2. The file's structure in the Eclipse_Mobots folder must remains the same. It means no file inside this folder must be moved to another place.

3 Installation for Linux

3.1 Java

This section can be ignored if Java is already installed on your computer.

1. Type the following commands in a terminal session to install Java SDK

```
$ sudo add-apt-repository ppa:openjdk-r/ppa
$ sudo apt-get update
$ sudo apt-get install openjdk-8-jre
```

3.2 Eclipse Mobots

- 1. Go to the moodle of the course (Microinformatique) and download the Eclipse_Mobots package for Linux. Pay attention to the 32bits or 64bits version.
- 2. Extract the downloaded file to the location you want (can take time).
- 3. You can now run the Eclipse Mobots executable to launch Eclipse.

Important things to avoid:

- 1. You can not create a Link to the Eclipse_Mobots executable because otherwise the program will think its location is where the Link is and it will not find the ressources located in the Eclipse_Mobots folder.
- 2. The path to the Eclipse Mobots folder must contain zero space.

Example:

```
/home/student/epfl_stuff/Eclipse_mobots OK OK /home/student/epfl stuff/Eclipse mobots NOT OK
```

3. The file's structure in the Eclipse_Mobots folder must remains the same. It means no file inside this folder must be moved to another place.

3.3 Serial Port

In order to let Eclipse, or any program ran by you to access the serial ports, a little configuration is needed.

Type the following command in a terminal session. Once done, you need to log off to let the change take effect.

```
$ sudo adduser $USER dialout
```

4 Installation for Mac

4.1 Java

This section can be ignored if Java is already installed on your computer.

- 1. Go to http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html and download the Mac OS X Java 8 SE Development Kit. It is the .dgm file **without** the Demos and Samples. For example: jdk-8uXXX-macosx-x64.dmg
- 2. Open the .dmg file downloaded, run the installer and follow the instructions to proceed with the installation of Java SDK.

4.2 Eclipse Mobots

- 1. Go to the moodle of the course (Microinformatique) and download the Eclipse_Mobots package for Mac.
- 2. Open the .dmg file downloaded and DragAndDrop the Eclipse_Mobots.app into the Applications folder

Note: You can place the Eclipse_Mobots.app anywhere, as long a the full path to it doesn't contain any space, if you don't want it to be in Applications.

3. You can create an Alias to Eclipse_Mobots.app and place it anywhere if you want.

4.3 First launch and Gatekeeper

It's very likely that Gatekeeper (one of the protectons of Mac OS) will prevent you to launch Eclipse_Mobots.app because it isn't signed from a known developper.

If « Unable to open "Eclipse_Mobots.app" because this app comes from an unidentified developer. » or if « "Eclipse.app" is corrupted and can not be opened. You should place this item in the Trash. » appears after executing the app the first time, it is needed disable temporarily Gatekeeper.

To do so:

1. Go to System Preferences->security and privacy->General and authorize downloaded application from anywhere.

If you are on Mac OS Sierra or greater (> Mac OS 10.12), you must type the following command on the terminal to make the option above appear.

```
$ sudo spctl --master-disable
```

- 2. Now you can try to run the application and it should work.
- 3. If Eclipse opened successfully, it is time to reactivate Gatekeeper. Simply set back the setting of gatekeeper.

For the ones who needed to type a command to disable Gatekeeper, her is the command to reactivate it.

```
sudo spctl --master-enable
```

This procedure is only needed the first time. After that Gatekeeper will remember your choice to let run this application and will not bother you anymore, as long as you use this application. If you re-download it, you will have to redo the procedure for Gatekeeper.

Important things to avoid:

1. The path to the <code>Eclipse_Mobots.app</code> must contain zero space.

Example:

/home/student/epfl_stuff/Eclipse_mobots OK OK /home/student/epfl stuff/Eclipse_mobots NOT OK

2. The file's structure in the Eclipse_Mobots.app must remains the same. It means no file inside this app must be moved to another place.