Installing the iCreate Robot Simulator toolbox

Download the toolbox zip file {iRobotCreateSimulatorToolbox.zip}, the basic test program {TestProg_1.m} and the test map {ExampleMap_MG.txt}.

Place the test program {TestProg_1.m} and map {ExampleMap_MG.txt} in your Matlab working folder
(e.g. … My Documens/MATLAB …).
Make sure the map file is saved as a plain .txt file (when clicking the link your browser may open it and display it rather than downloading it).

Unzip the toolbox to extract the toolbox folder containing all the functions and documentation.

Place that folder in a permanent location on your computer
(e.g. C:\Program Files\MATLAB\R20XXx\toolbox) or
(.../myuser/Library/MATLAB/ in Mac or Linux)

Start MATLAB.
In the menu toolbar, click File, then select Set Path.
Click Add Folder with Subfolders, navigate to the toolbox folder you just saved, select it, Then press OK.
Click the Save button, then press Close.
(If the path fails to save because MATLAB does not have administrator access to the file pathdef.m, quit MATLAB and reopen it by right-clicking and choosing Run as Administrator, and continue from there as above again. If you are not a system administrator on your computer, that person will need to perform these steps.)

Follow the Lab1 handout to test your setup.

You can study the user manual for the toolbox to familiarise yourself with the functions and also how to create and edit maps (either using the GUI or a plain text editor, the Matlab editor works fine). {iRobotSimulator_UserGuide.pdf}

We have included also the Matlab programming guide for the real robot, which has the basic list of functions (not included in the simulator's guide) to control the robot.
{ProgRef_Toolbox_iRobot_create.pdf}

You can find the original website with the download, documentation and license here:
http://verifiablerobotics.com/CreateMATLABsimulator/createsimulator.html

If you want to download or have a look at the documentation for the iCreate Robot programming toolbox (not needed for this course) you can find it here also:
http://www.usna.edu/Users/weapsys/esposito/roomba.matlab/