How to run the code

Important files: mads.ini, visualizer.py, run_all.sh, odometry_filter.cpp, replay.cpp

Important note: to allow us to work properly on a shared file (github) I found a way to use a local mads.ini, instead of the one contained in the root folder. When one of us modifies the local file and commits, it updates the mads.ini of all the other.

Useful commands are found in the UserGuide document.

HOW TO CLONE REPO AND RUN ON LOCAL MACHINE

You can clone in whichever folder you like, the repo contains a folder with all the data and the mads.ini file starts from inside the SIMULATION folder.

To work with the current setup, we need to tell mads to use the mads.ini inside our local folder. To do so:

navigate in the terminal inside the simulation folder, example:

cd home/lorenzo/Documents/github/Robotic..action/SIMULATION/

locate where it is by simply writing in terminal:

mads ini -i

This will give you an error like:

Cannot write or overwrite "/usr/local/etc/mads.ini"

What we are going to do in the next step is removing the mads.ini inside the core of our pc and directing our local file in its place, like a pointer.

To make MADS use your local mads.ini file:
sudo rm /usr/local/etc/mads.ini

sudo ln -sf $(pwd)/mads.ini /usr/local/etc/mads.ini

il comodo di questo è che ora si può modificare direttamente il mads.ini in locale, senza dover entrare in cartelle protette, quindi facendo una modifica su git, il mads.ini di tutti viene aggioranto.

Nel caso in cui si volesse per utilizzare il mads.ini originale, bisogna modificarlo, correggendo I percorsi ai file.

Similarly, we need to link the plugins (odometry and replay) to our local build folders: (example)

sudo ln -sf
/home/lorenzo/Documents/RoboticPerception/odometry_filter/buildd/odometry_filter.plugin
/usr/local/lib/odometry_filter.plugin

To test it:
ls -l /usr/local/lib/odometry_filter.plugin

After you linked all the plugins (replay, odometry) you are ready to run everything!
Inside the SIMULATION folder in the terminal:
./run_all.sh

if it does not work it means you either did not link your plugins or mads file. Or you need to manually build again the plugin (the setup only checks if you have the build folder). That single line runs a file that acts as if your were typing all the commands in the terminal.