

SOFTENG 306 : Group 3 tutorial

By P & A

Just type in the below code line by line and you'll be fine.

```
mkdir simple_example
cd simple_example
mkdir src
cd src
catkin_init_workspace
cd .. //here you should be inside simple_example folder
catkin_make
source devel/setup.bash

**go into the src folder of simple_example

catkin_create_pkg [some name] std_msgs nav_msgs roscpp sensor_msgs geometry_msgs
//e.g: catkin_create_pkg these_bots std_msgs nav_msgs roscpp sensor_msgs
geometry_msgs

**for the below example, these_bots will be used for [some name]

cd these_bots //now you're in these_bots folder.
mkdir world
cd world
gedit my_world.world //here you're making a file inside world folder
//open new file and copy the code from the tutorial
//download and copy swarm_world.pgm from cecil into the same directory as
my_world.world

cd .. //back inside these_bots folder

cd src/ // it's the src folder within [some name] folder (not the src folder in
the simple_example folder.)

// Make file R0.cpp and R1.cpp.

gedit R0.cpp //if you type in this command, a new blank editor window thing will
pop up. Copy code from the tutorial link into it.
(https://svn.ece.auckland.ac.nz/robotics-teaching/wiki/ROS\_for\_SE306\_2013)

gedit R1.cpp //do the same thing as R0 but copy and paste the code from R1.cpp
```

```
cd ..

//now you're in [some_name] folder.

gedit CMakeLists.txt //not the one inside simple_example/src

**inside CMakeLists.txt, add the below code snippets to bottom of file.

add_executable(R0 src/R0.cpp)
target_link_libraries(R0 ${catkin_LIBRARIES})

add_executable(R1 src/R1.cpp)
target_link_libraries(R1 ${catkin_LIBRARIES})

in the terminal, navigate back to the root folder (simple_example folder) and then :

catkin_make
```

Test/Run

****when opening a new terminal, always do this shit:**
Navigate into simple_examples folder and then:
source devel/setup.bash

1. roscore //make sure this is running in a separate terminal window

2. Run stage from /world :
****make sure you navigate to the world folder**

```
roslaunch stage stageros my_world.world
```

3. Open up a new terminal.

```
roslaunch these_bots R0
```

4. Open up a new terminal.

```
roslaunch these_bots R1
```