Add Custom Message

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1 Prepare the package

Idea: create a new package for defining the new messages

1. Create a new package. `catkin_create_pkg custom_msg std_msgs`

2. `roscd custom_msgs`

3. `mkdir msg`

4. `echo "unit16[] data" > msg/Customized_Data.msg`

5. In `custom_msg/package.xml` you should write

```
<build_depend>message_generation</build_depend>
<exec_depend>message_runtime</exec_depend>
```

1. In `custom_msg/CMakeLists.txt` you should write

```
find_package(catkin REQUIRED COMPONENTS roscpp rospy std_msgs message_generation)
...
catkin_package(CATKIN_DEPENDS message_runtime)
...
add_message_files(FILES msg/Customized_Data.msg)
...
generate_messages(DEPENDENCIES std_msgs)
```

1. Rebuild with a `catkin_make`.

2. In order to use the new message

2   Use the new message

1. Add in the `myPackage/CMakeLists.txt` the following line

```
find_package(catkin REQUIRED COMPONENTS ... custom_msgs)

include_directories(include ${catkin_INCLUDE_DIRS})

target_link_libraries(talker ${catkin_LIBRARIES})

add_dependencies(talker custom_msgs_generate_messages_cpp)
```

1. Add in the `myPackage/package.xml` the followind lines:

```
<build_depend>custom_msgs</build_depend>
<exec_depend>custom_msgs</exec_depend>
```

1. In the `talker.cpp` file include <custom_msg/Customized_Data>