

1) **Run the Simple 2-Dimensional Robot Simulator, *STDR*:**

```
roslaunch stdr_launchers server_with_map_and_gui_plus_robot.launch
```

2) **Test the simulator: run the example velocity commander:**

```
roslaunch stdr_control stdr_open_loop_commander
```

You should see the robot move forward, then make a left turn and move forward some more.

3) **Create your own package, (e.g. *my\_stdr\_control*). Copy over and edit the file ".../stdr\_control/src/stdr\_open\_loop\_commander.cpp"**

(see section 1.3 in text)

With your edits, have the robot run (open loop) from its start pose to the upper left corner of the maze.

Your new package should include a README file (start making this a good habit now).

4) **Submit your solution:**

Make a movie of your result (using Kazaam; see, e.g. <http://www.makeuseof.com/tag/easily-create-screencast-videos-kazam-screencaster-linux/>) Kazaam is already installed on the Jennings and lab computers. Upload this movie to Canvas as part of your PS1 solution. (alternatively, provide a YouTube link).

Also, zip up your package (with your edited commander) and upload this as well.

ALSO, push your code to a repository on github (and provide this link in your write-up)

## **Deliverables**

- Your code, in package form, with CMakeLists.txt, package.xml, and source in a **ROS package** form (**Do NOT just submit the CPP file!**)
- A *short* writeup in PDF format; **INCLUDE** a link to your github repository for your source code. Include discussion of anything you found unusual, or useful observations.
- Your video of the robot driving successfully around the maze in MP4 format (or YouTube link)

**Please ZIP all of these things up in a folder titled "ps1\_caseID.zip" (ex. ps1\_abc123.zip)**