Laboratory exercise 2

Linux command line

Name: **JMBAG:**

Preparation

- You should have Linux Ubuntu 20.04 LTS on your computer either as clean install, dual boot or a virtual machine.

- Install ROS Noetic Ninjemys distribution (Desktop-Full variant), by following the official instructions from the ROS Wiki.

- If Ubuntu and ROS are already installed on your machine, you do not need to reinstall, simply skip this preparation step.

Assignments

Task 1 : Files and directories

a) Navigate to the `/home/<username>/Desktop` directory. Without changing the current directory, inside the `/home/<username>/Documents` directory create a directory named `rps` that contains directories `lab`, `lectures` and `exams`, where `exams` is a hidden directory. Inside of the `exams` directory create the text file containing the list of contents of your `/home/<username>` directory sorted by file size (ascending). In the first text box enter the command(s) and in the second box paste the sorted list of contents.

b) Determine the sizes of the largest and smallest files located in the same folder as `roscore`. In the first text box enter the command(s) and in the second box report the sizes in human-readable format (K, MB etc.).

Task 2 : Searching for files and directories

a) What is the location of the program that gets executed with the `roscore` command?

b) Use both `locate` and `find` to locate the path of file named `roscreate-pkg`. In the first text box enter the commands and in the second box enter the obtained path.

c) Find all files inside `/opt/ros/noetic` which are executable and whose name begins with `rqt_`. Store the output in a file named `3.txt`. In the first text box enter the command(s) and in the second box paste the contents of the `3.txt` file.

🖥 Task 3 : Searching inside files

a) List all files within the `/home/<username>` directory and its subdirectories that were last modified in October. In the first text box enter the command(s) and in the second box paste the output.

b) In order to determine which Python programs depend on the tf coordinate transform library, find all files inside `/opt/ros/noetic` that contain the string `import tf` and count them. Store the number of counted files in a file named `4.txt`. In the first text box enter the command(s) and in the second box paste the contents of the `4.txt` file.

Exercise submission

Upload this pdf file filled with your answers to Moodle.