DD2419 prob20 Progress report

Group: 3 Week #: 6 Date: 7/2 2020

Person X: Instructions

Progress/Activities this week

- Use a bullet list to tell what you did this week.
- Be as concrete as possible. Use images if it helps. Quantify when possible, .e.g. can recognize object BlaBla 90% of the time and the rest only occasionally.
- This is the record of what you are doing in the course.
- For most people this list would have one or two bullets, not more. This is not a contest about who can get the longest list. If your list is very long, chances are that you are reporting too small things.

Deviations from planned progress/activities and how to deal with it

- Here you mention if things did not go as planned for some reason and reflect on why and what to do.
- This might be empty, but typically only during the first few weeks

Decisions/plans

- What do you plan to do until the next week. Will be a short list typically.
- Make it concrete and with measurable goals as far as possible.
- Are you working on something that is not needed until many week into the future? You should break it down into smaller pieces that you can test and show others to sharpen the specification for what is actually needed.

Time spent

- How many hours did you spend this week?
- How many hours did you spend in total so far on the project?

Person 1: Andrej Wilczek

Progress/Activities this week

- Implemented the keyboard controls for the drone
- Completed the experiment to move X meter and rotate n*360+180 degrees and return
- Somewhat successfully implemented the object detection for the stop sign.
- Presented and passed the flight camp assignment
- Recorded a rosbag but the pose seems to be jumping between frames

Made the drone fly to a roughly specified position using 2D navgoal

Deviations from planned progress/activities and how to deal with it

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Decisions/plans

Make sure everything works before the presentation of milestone 1

Time spent

• I spent around 24 hours on the project this week

Person 2: Haichuan Wang

Progress/Activities this week

- Implement keyboard control
- Rosbag record
- Make drone land on set point

Deviations from planned progress/activities and how to deal with it

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Decisions/plans

- Make sure everything works
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Time spent

• I spent 20 hours on the project this week

Person 3: Sumod Nandanwar

Progress/Activities this week

- Hover and navigate to point nearby.
- Drone control using Keyboard but on Simulation

Deviations from planned progress/activities and how to deal with it

 Being occupied in the Flight camp assignment a bit gave me a little less time to work on the milestones but I plan to work on it this weekend. But better time management and Planning a buffer for uncertainties should work.

Decisions/plans

Go step by step right from the basics and make sure every step works.

Time spent

• I have spent about 6hrs this week.

Person 4: Robert Berggren

Progress/Activities this week

- Presented and passed the flight camp assignment
- Milestone 1.1: Implemented basic keyboard controls for the drone
- Milestone 1.3: The drone can be given a pose in odom frame and fly there, altho
 mapping between real world and odom frame is like shooting blind. Keyboard controls is
 prefered for this.
- Milestone 1.5: Somewhat successfully implemented the object detection for the stop sign using color segmentation.

Deviations from planned progress/activities and how to deal with it

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Decisions/plans

- Minor cleanups of code before the presentation of milestone 1
- Start on milestone 2
- Look into object detection using tensorflow, data and code can be taken from <u>www.kaggle.com</u> e.g. <u>this one</u>

Time spent

• 14 h

Overall system progress

Our system now does every point in milestone 1 although not perfectly. We will continue and improve until the presentation wednesday.