

CSCE 274 – Robotics Design and Applications – Fall 2024

Project 1 (10% over the final grade)

Assigned: August 26, 2024

Due: September 09, 2024

Instructions

Submit your files via Blackboard, ensuring your report includes:

1. Header with the code of the class, the semester and year, the project number, and your name.
e.g., CSCE 274 Fall 2024 – Project 1 – Ioannis Rekleitis
2. Your answers, clearly identifying the answered assignments.
3. The name of the file should be in the following format:
csce274_fall2020_<proj#>_<last_name>.pdf
e.g., csce274_fall2020_proj1_rekleitis.pdf
4. Content: Your PDF should include:
 - A screenshot of the dashboard mission control page.
 - A YouTube link (public or unlisted) of your robot moving using keyboard control.
 - A brief commentary on the steps taken and challenges faced.

Project Goal

Familiarize yourself with the Duckiebot (DB19).

Part 1: Laptop Setup

Install Docker, Docker Compose, and DTS as outlined in the [DTS Manual](#).

Part 2: Duckiebot SD Card Setup following the steps from the [DTS Manual](#).

- Use the provided micro-SD card and card reader.
- Flash your Duckiebot (DB19) with care (some steps require sudo commands).
- Once flashing is complete, follow the instructions to start your Duckiebot and confirm internet connectivity.
- Capture a screenshot of the dashboard mission control page for submission.

Part 3: Robot Movement

Use keyboard control to move your robot, following the steps in the [DTS Manual](#).