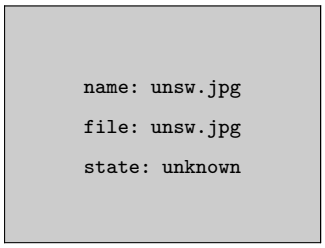
MTRN3100

2023 T2



Lab02 - Introduction to Robot Design

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Learning Outcome

- Revise basic skills.
- Learn debugging skills required to complete labs and the project.

How to Approach the Labs

We provide several options for how students can complete their lab material. We advise you bring with you:

- A laptop.
- Pen and paper.

You must use either the complete physical or digital copy of the lab manual.
Your lab answers must be entered onto a Moodle submission box that will only be open during your allocated lab time.

Mechanical Assembly

You are provided the MTRN3100 robot kit which will be used for both the lab and project assessments.
The robot platform should compose:

- $1\times$ chassis.
- $1\times$ Arduino Mega microcontroller.
- $2\times$ ___ motors.
- $3\times$ HC-SR04 distance sensors.
- $1\times$ ___ camera.
- $1\times$ L298N motor driver.
- $1\times$ ___ lipo battery.

Requirements Analysis

Enter your answer here.

System Diagram

MTRN2500 Revision

ELEC111 Revision

Mark

Pre-Lab Mark (3) Lab Mark (14) Marker 3 13 Dan