

DESIGN EXPERIENCE WITH DEVICES (DEWD)

EE - 2800, Sec. 01, FALL 2018, FINAL Raspberry Pi Project, Total Points: 75

Stages 3 (Points: 25): Due on 12/18/2018 by 4:00 PM

Stage. 3

The following task has to be implemented on the Mobile platform (Tank).

- Add wiring for two Infrared sensors to the Stage 2 circuit. Examine the given template code – `MobilePlatform.py` to determine which GPIO pins should be used to (Points: 5)
- Setup a track using black tape on the floor.
- Using the Object-oriented programming code (**`MobilePlatform.py`**, **`Bridge.py`**, **`RotationDevices.py`**, **`SonicSensors.py`**, and **`InfraredSensors.py`**), implement the following tasks (Points: 20):
 - Complete the code for the Tank to follow the track.

Stage 3 Submissions:

- A video depicting the implemented functions satisfying the requirements below:
 - The video should have an introduction (team members announce their full names)
 - The video should show the Tank operating on the floor.
 - Every operation should be demonstrated with an audio announcement of each operation to be performed.
- Commented Python code: If new code implemented in the template files are not commented, a penalty of 5 points will be assessed.