Task 3 – Hardware Testing

Hardware Testing Folder Description

Please find following folders within the folder that contains this Read Me file. The files have been numbered.

1. **Rover Assembly:** This folder contains a document with pictorial representation to assemble the rover. If you find any damaged parts please mention in the **checklist**.

2. **Installing Operating System Images on the Raspberry Pi:** This folder contains a document to install the Operating system in Raspberry pi. This document is not for testing the raspberry pi, its to make it ready for testing.

3. **Remote login using Wi-Fi dongle:** This folder contains a document on remote login and testing of raspberry pi, camera, Wifi dongle, powerbank. Follow the instructions given in the document for getting the correct output. If you got the correct output, it means that your raspberry pi, camera, Wifi dongle, powerbank are working properly. Please mention in the **checklist**, if components are not working.

4. **Understanding GPIO and PWM:** This folder contains a document on understanding the GPIO of raspberry pi and generating the PWM. The motor driver L298 description is also present in the document. Please read the document carefully and connect the motor driver to the motors of Rover. This document does not contain the shematic for the connections between motor driver, raspberrypi and motors. Participants have to figure out the connections by themselves. Please test your motor driver and mention in the **checklist**.

5. **Working with node Node_MCU:** This folder contains a document on working with node Node_MCU and testing it. Please follow the instructions given in the document to test node_MCU, RGB_LED and Servo motors. Please test the RGB_LED,Node_MCU, Servo motors and mention in the **checklist**.

6. **Checklist:** This folder contains a document to mark the condition of the components being provided in the kit. Please open the **checklist.xlsx** and write yes/no according to the working of components in the space provided in the excel sheet.

Instructions for Submissions:

1. **Mark the Checklist according to the working of the component.**
2. **Click a picture/video of the components not working during the testing process. You might be asked to show the picture/video to verify the condition of the components.**

Upload the checklist.xlxs using instructions provided on Task 3 tab of the Portal.