

## **Details of Varad's Work:**

### **Saturday, 16 September 2023: @Varad Chaskar**

- Started a discussion regarding power supply and presented the good and bad sides of power supply.
- Started discussion regarding the procurement of L293D.
- Procured and sent the invoice to Sahaj to create an expense report.
- Presented points to decide on whether to use ESP 32 or ATmega328.
- Sent a rough schematic diagram for Sahaj's reference on his request.
- Sent block diagram description to the group.

### **Sunday, 17 September 2023: @Varad Chaskar**

- Updated the Bill of Materials a little bit.
- Suggested that we should look for ways to reduce the cost of UV light.
- Also, suggested that we should look for cheaper alternatives for the actuators like the air pump, water pump, fan, etc. To make the project more affordable or document the cheaper alternatives.

### **Monday, 18 September 2023: @Varad Chaskar**

- Started the discussion and stated my problem with bringing the whole setup of 2 stacks of hydroponics systems into the college.
- Looked at what a scaled model looks like and stated the problem of a costlier system.

### **Wednesday, 20 September 2023: @Varad Chaskar**

- Read the guidelines of the Aviskar project competition and suggested taking guidelines regarding it from the project guide.
- Learned M2M using ESP 01, stated its advantages and how can it be done and asked to procure ESP 01.
- Requested the expense report, simulation, work done on research paper till today, and documentation of work we have done from the 16 September to Sahaj.

### **Thursday, 21 September 2023: @Varad Chaskar**

- Requested Sahaj to ask the structure of PPT and Report to guide.
- Requested Sahaj to ask some questions to clarify my doubts regarding the Poster and PPT.
- Sent previous year's documents to Sahaj on his request.
- Documented all the innovativeness in the project proposal.
- Updated some objectives and added UPS, M2M, and web design points.

### **Friday, 22 September 2023: @Varad Chaskar**

- Created PPT for Aviskar competition. and added some points to it
- Written "features added due to automation" in a slide.

### **Saturday, 23 September 2023: @Varad Chaskar**

- Took 1 minute of a presentation video for the Aviskar Competition.

**Sunday, 24 September 2023: @Varad Chaskar**

- Started a discussion on whether we had shown the simulation to the guide and what was causing so much delay.
- Reminded Sahaj to send me the simulation done on the Tinkercad.
- Presented and discussed the Cheaper online option for neopixel lights. (1m 400 rs)
- Got assurance from Sahaj that he will look for a cheaper alternative to the neopixel light from the shop at cheaper prices.

**Tuesday, 26 September 2023: @Varad Chaskar**

- Checked Tinkercad completed simulation
- Started discussion on the problems of proteus software and our requirements with the simulation.
- Started discussion about the offline prices of neopixel lights.
- Presented the cheaper available option for a peristaltic water pump as per the requirement.
- Requested Sahaj to create an expense report for my purchase. and discussed what's causing so much delay.

**Wednesday, 27 September 2023: @Varad Chaskar**

- Asked whether we really needed to create two two-stack systems and presented the problems on it.
- Proposed my problem of not having neopixel lights, causing a delay in the breadboard testing.
- Explained to Sahaj what our previous grow lights consisted of.
- Illustrated why neopixel lights are better.

**Thursday, 28 September 2023: @Varad Chaskar**

- Started discussion on how to test L293D separately.

**Friday, 29 September 2023: @Varad Chaskar**

- Started discussion for the Status of the Review Paper and What's causing so much delay.

**Saturday, 30 September 2023: @Varad Chaskar**

- Stated that I need the expense report for L293D and the documentation of our work urgently.
- Illustrated how an RGB light requires more GPIO pins than neopixel lights.

Please note that to support all the above, I have evidence of WhatsApp messages, call recordings, voice recordings, etc.

Thanks and Regards,  
Varad Chaskar