ANITA DIJALA
219606417

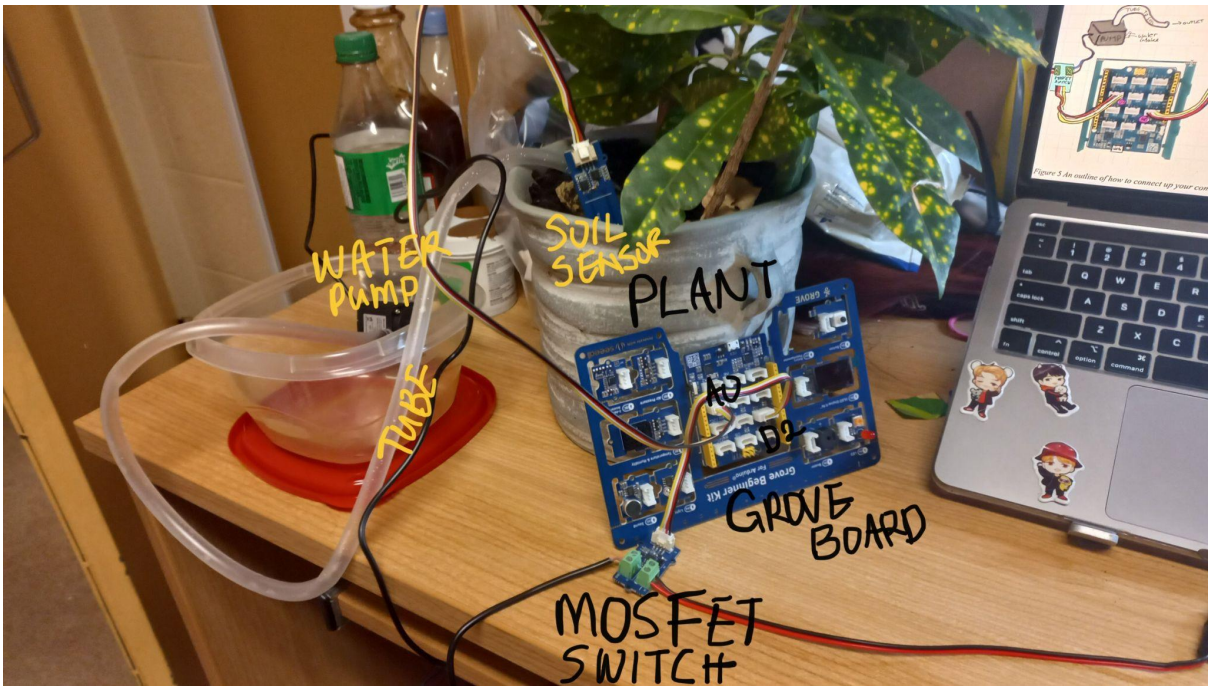
01/12/2022

MINOR PROJECT

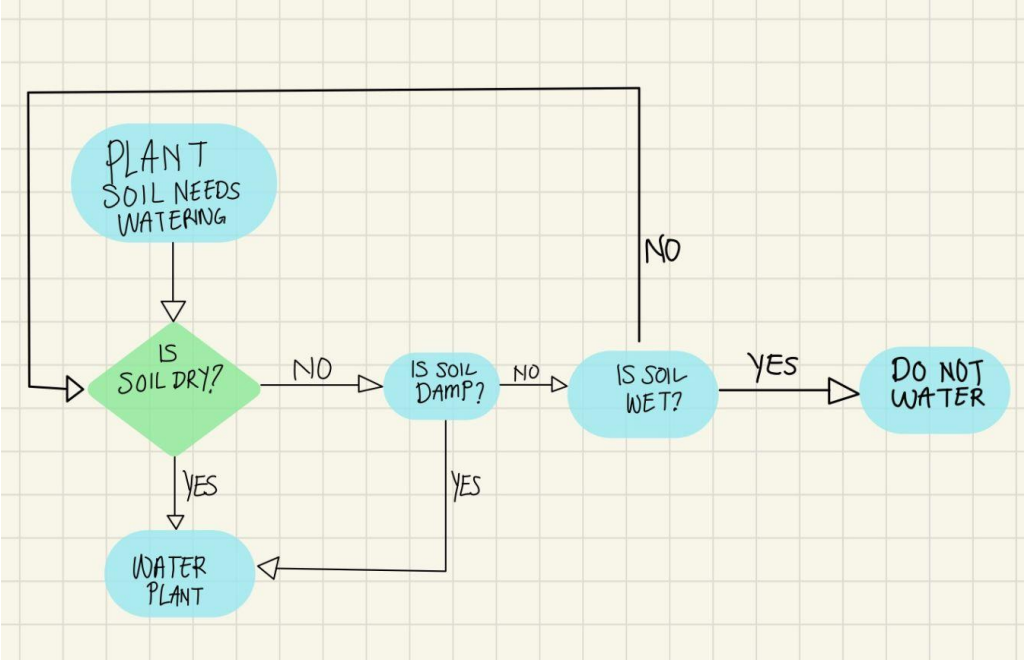
ABSTRACT:

INTRODUCTION: The minor project is created to have a program on Matlab to monitor the plant soil in order for the plant to receive water when needed. **OBJECTIVES:** The objectives of the minor project were to the soil of a plant is measured using a soil moisture sensor and water the plant with a water pump. **PROCEDURE:** Matlab was used to control the water pump based on the information given by the soil moisture sensor. This was performed with the Arduino grove board, MOSFET, and the water pump. **RESULTS:** The dry soil of the plant was measured and processed through Matlab and Arduino which resulted in the water pump delivering water into the plant's pot which would change the soil's state and later stops the watering process. **CONCLUSIONS AND RECOMMENDATIONS:** The control for the water pump started great but the plant was overwatered and the process did not come to a stop after the soil state changed. A better way to find a stop after the plant has been watered.

MY PLANT & HARDWARE SETUP



FLOWCHART



GRAPH