FINAL REPORT

TEAM BLUE

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1-Our code link

React-Native Mobil APP

Mobile App link: https://github.com/ucarrr/CSE 310 PlantMobilProject

"api4v" file latest version Our project code in Project link

Api Project link: https://github.com/ucarrr/CSE310 Project/tree/main/apiv4

2-Products in our circuit

- Raspberry pi 3B
- DHT11 temperature and humidity sensor
- YL 69 soil moisture sensor
- blue, green and red led
- mini submersible water pump
- 5v electrical relay
- 2x1k ohm %5 resistors
- 2x10k ohm %5 resistors
- female male cable
- male to male cable
- 1 buzzer

3-Problems we faced and solved

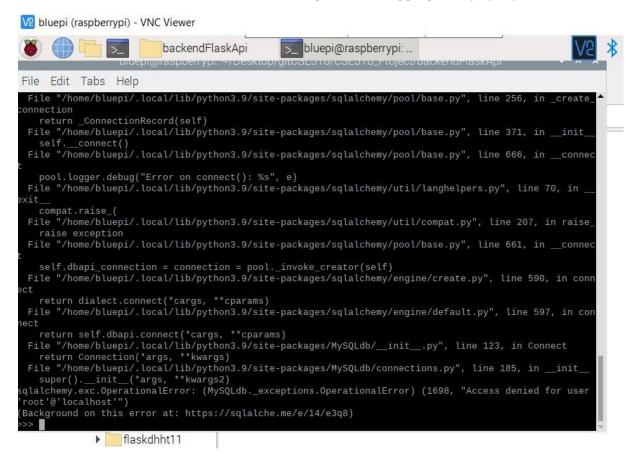
3.1- Water motor not working

We realized that the water engine was not working because it could not get enough energy. We added a electrical relay to the circuit.

3.2-Internal server error.

Error due to trying to use both mysql and sqlalchemy. We solved it using SqlAlchemy.

3.3- "Access denied for user" error we get when logging into phpmyadmin.



3.4- "No Module Name MySQLdb" error

It happened because of the mistakes we made while importing.

We solved it by running the following codes

"pip install mysglclient"

"import MySQLdb"

"import mysql.connector"

"pip install mysql-connector-python"

```
apiproject bluepi@raspberrypi: ~/Desktop/gitCSE310/CSE310_Project/backendFlaskApi

File Edit Tabs Help

File "/home/bluepi/.local/lib/python3.9/site-packages/flask_sqlalchemy/_init_.py", line 1886 in execute for all tables op(bind=self.get engine(app. bind), "extra)
File "/home/bluepi/.local/lib/python3.9/site-packages/flask_sqlalchemy/_init_.py", line 1917
File "/home/bluepi/.local/lib/python3.9/site-packages/flask_sqlalchemy/_init_.py", line 594, in get_engine
self_engine = rv = self_.sa.create_engine(sa.url, options)
File "/home/bluepi/.local/lib/python3.9/site-packages/flask_sqlalchemy/_init_.py", line 1927
File "/home/bluepi/.local/lib/python3.9/site-packages/flask_sqlalchemy/_init_.py", line 1927
in create_engine
file "/home/bluepi/.local/lib/python3.9/site-packages/sqlalchemy/util/deprecations.py", line 3
69, in warned
file "/home/bluepi/.local/lib/python3.9/site-packages/sqlalchemy/engine/create.py", line 560, line create_engine
file "/home/bluepi/.local/lib/python3.9/site-packages/sqlalchemy/dialects/mysql/mysqldb.py", line 163, in dbali
return _inport_("MySQldb")
ModuleNotFoundError: No module named 'MySQldb'
>>> S

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4-The status of deliverables

Currently, our circuit works as we want and we can transfer the data we receive from the sensors to the database. And we can pull this data from the api and show it on the mobile device via react-native.

5-Software tools you have used

We used Flask to build API and React-Native for Mobile app. We used MySQL, SQLAlchemy, marshmallow while creating the database.

We used the Adafruit library for the dht11 sensor.

6-The other technologies you learned in addition to software development

Creating Raspberry pi circuit, using sensors, GPIO.