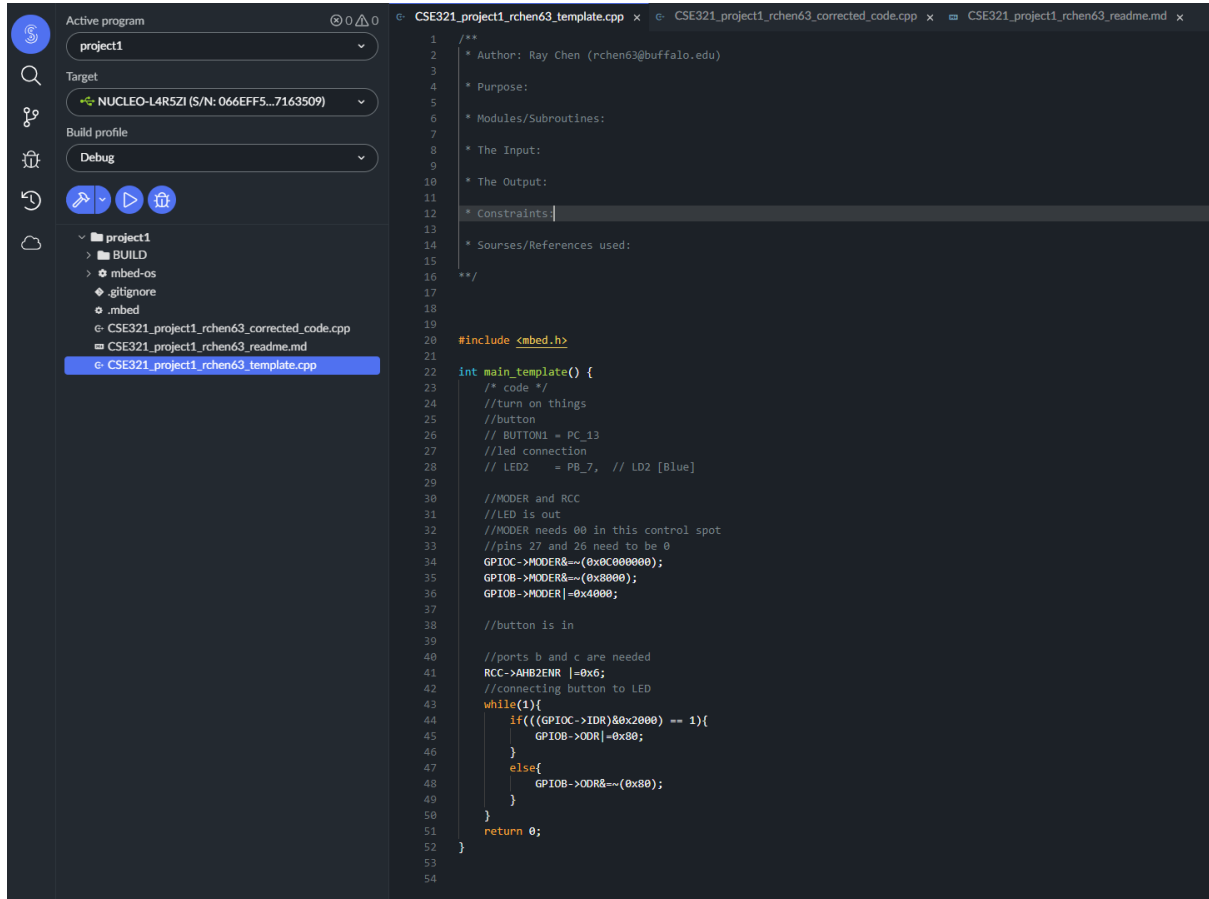


Part 3:

Screenshot of template:



Part 4:

Github username: rchen63

Part 5:

Ask:

- How far can the sensors detect the geese?
- How far can the sensors detect the traffic?
- What kinds of sensors are used?
- When the geese approach the traffic, how close to the traffic should they be to cause the traffic to stop?
- When the geese move away the traffic, how far away to the traffic should they be to make the traffic to flow again?
- What kind of geese?
- What are the traffic conditions?

Research:

- The geese around campus are Canadian Geese. ([Geese Management - University at Buffalo](#))
- Canadian geese's size ranges from 30 to 43 inches, and their wingspan size ranges from 4.2 to 5.6 feet. (<https://www.nationalgeographic.com/animals/birds/facts/canada-goose>)

Imaging:

- The traffic should stop when the geese approach 5 meters from the road no matter what.
- The traffic should stop when the geese approach 10 meters from the road because they are big and can run fast.
- The traffic should stop based on the geese's speed of approaching the road, for example, if the geese are running, the traffic should stop when they are 10 meters away, or if the geese are walking slowly, the traffic should stop when they are 3 meters away.

Plan:

- Traffic signs that notify the vehicles that there may be geese ahead should be set up.
- A sensor that detects the speed and movement of geese may be expensive, but it may be the best way to arrange the traffic, because it does not stop the traffic too early if the geese are approaching slowly or stop the traffic too late if the geese are approaching fast.