Greet the instructor (mention the name of the person you are greeting)

* Good Morning Mr. Shefler.
* My name is \_\_\_\_\_\_\_\_\_\_\_ and this is my Partner \_\_\_\_\_\_\_\_\_\_\_\_
* We are Computer Engineering and Technology students, and will be presenting our final capstone project idea

Introduce your project Idea(s):

* Our project is called “Z Recognition”, which is a license plate recognition system
* We chose this as our capstone project because as computer engineering students, we want to implement:
  + hardware and software aspects
  + machine learning is a fascinating topic and that will most likely play a large part in the future of technology
* Hardware-wise
  + Raspberry PI as primary MCU
  + Relay
  + Servo Motor (including power source)
  + Speaker
  + Webcam
* Software-wise
  + Python script
  + Microsoft Azure API for Cognitive Service
  + JSON Database
  + Trigger relay system
  + Trigger speaker system

Features:

* A Python Script that will run on the PI, it will capture a photo using a webcam
* The Python Script will then send the jpeg to the Azure Cognitive Service
* Azure API will parse the image and return a JSON object with all LP information
* The JSON will then be checked through a Database:
  + IF the LP is found, the PI will trigger the relay and temporarily start the motor
  + IF the LP is NOT found, a sound will be played through the speaker

Major Components:

* Creating the Python Script to run on a timely basis
* Taking Images with the Webcam using the Python script
* Incorporating the Azure API
* Implementing the speaker and relay/motor functionality