

### **Week 9/5 - 9/11 Journal Entry**

- Difficult to find a problem that every team member could contribute to and find a feasible solution.
- Different project ideas were pitched, but some were already on the market.
- This was a problem because of the deadline for the finalization of the project idea.
- Team was able to collect a project idea through Andy Stallard and finalize it which will incorporate OCR to transcribe license plates which will sync with the LoRaWan network
- Planning on doing some research about OCR and the devices that use it and see what can be learned from them for consideration
- Cameras that contain OCR on the market are expensive as far as cost
- Our device will need to be cheap as far as production and mounted on utility boxes
- How the device mounted the utility box for ease of setup will need to be determined a
  - a. Device could be magnetically mounted or attached through an adhesive
- Battery type of the device will need to be determined
- Battery holder will be dependent on battery type
- Rechargeability of batteries could be utilized through mini solar panels during the day
- Battery life will also need to be determined based on battery type
- Lens for device for resolution and focus will need to be determined along with a joystick for the device's mobility for angles when taking photos
- More research to be conducted over automated license plate readers (ALPR), smart cameras with OCR, and the problem associated with them from customer reviews
- Image processor, image sensor, and microprocessor need to be determined for usage
- A camera modules such as OV7670 could be utilized in device