Related work

The closest solution that exist would be the Axis 214. The Axis 214 was used but then was discontinued because it did not have the necessary software and hardware. One example would be that TrafficNet wanted the camera to have heating capabilities when bad weather was an issue, which the Axis 214 did not have. Another requirement that TrafficNet wanted was the camera to have a pan and tilt, which the Axis 214 also did not have. As stated before, even though the Axis 214 was discontinued it would serve as the closest solution so our team can build upon it.

System overview

When finished, the system will run on very low power, have pan and tilt, have 180 degrees of visibility, have day and night capabilities, heating capabilities, easy to use GUI, and finally 10X zoom. To make the camera run on very low power we will use solar panels and batteries so that the power draw will be under 5W. The pan and tilt will be achieved by using stepper motors as suggested by Dr. McMurrough. The easy to use GUI and 10X zoom will all be controlled by the software, which we plan to use Linux as the operating system.

Roles and responsibilities

The only responsibilities each team member has had so far is to finish the project charter tasks that were assigned to each team member. Since the project is at the early stages of development the team does not have concrete roles for each team member. Although some team members like Peyton and Kyle have taken the time to setup the Raspberry Pi which the team will need to begin testing. Once the team has the necessary materials and has everything setup to begin building the project, the team will begin assigning roles to each team member.

Facilities and equipment

Most of our testing will be done at UTA, where we have access to different type of tools. Some of the equipment that we will use for the project are a Raspberry Pi, Raspberry Pi camera, infrared camera, some type of surface mount which the team is still unsure of, Axis 214, stepper motors, solar panels, and battery. NOTE – some of the equipment might change since the project is in the early stages of development.