

A Brief Discussion of Project Constraints

Economic Constraints

Since this project is being personally funded, the budget for acquiring equipment and material for this project is rather limited. The current estimate for the project's budget is no more than \$150. As a result, hobbyist electronics will mainly be used for the project's hardware. The project's software will also use free software to help cut costs. Luckily there are plenty of options available for both hardware and software that are affordable and extensible. Lastly, this is a personal project. This implies that no economic development or benefit will result from this project.

Professional Constraints

This project will require that I employ almost everything I have learned in my career thus far. Since this project is rather all encompassing in nature, it will be a great resume builder.

Security Constraints

The data being collected from the embedded devices will be sent via TCP or UDP to the web server. These packets of data should have some form of encryption to ensure that each packet is being sent from an authorized source. If these packets weren't encrypted, then someone could start sending the server false data to process. Lastly, having a sign-in page for the web apps would prevent unauthorized users from accessing the data. However, this is a lower priority vulnerability since these web apps can only view data.