# Jason Houk Project Overview

#### **Overview**

I currently do some free-lance IT Support for a couple friends. I have an issue where I never get enough information when "everything is on fire" and I get a support request. In order to both assess the issue for timeliness of response as well as to be able to more easily verify resolution I am making a ticket system.

In this system, I am creating a way to track issues from reporting to resolution. It includes the ability to track if issues are a specific user, or a specific computer, or the customer's site.

#### **Features**

This ticket system will utilize:

- User logins
  - Tech users (the support company) will see support tickets and be able to log information concerning the user, the computer, or the site.
  - Tech admin users (support company) will be able to create client companies, and administer company level information.
  - Client users will be able to see their company support tickets, their own users information, and support information about their company computers.
  - Client admin users will be able to add users to their company, and to reset their company's users.

#### Setup

- Since there are database entries needed to run the application, there is a setup page that will create the tech company and the first/admin user.
- Setup will also edit the config files to tell which database to connect to.

#### Email Notification

- Upon creation of a ticket, prior to the ticket assigned to a tech, an email will be generated to notify that there is a new ticket.
- Email will be sent to the assigned tech and the user that created the ticket throughout the process.
- Google Maps

 Google maps will be used on the tech side to allow the tech to find directions to the client's site, if needed.

## **Technologies**

At this time the technologies will be:

- Java
- JPA
- Hibernate
- MySQL
- Email Gateway (Unsure which product)
- Google Maps API

### What I'll Have to Learn

For this project, I will be learning how to handle account security via JPA and utilize roles to confine the user's actions. I will be learning how to utilize hibernate to create complex database structure and to bring data back into my models including by making direct SQL calls. I will learn how to incorporate email notifications into my system. I will learn how to edit the files the contain the database connection information from a web page, and how to then subsequently defend or delete that page. And I will learn how to incorporate Google Maps.