

# Ticket System

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# Description

In order to track support requests from some freelance customers, Jason has chosen to create a help desk type ticket system that, when fully implemented, will allow the end user to: create support requests, to track the status of those requests, and to be notified throughout the process by email of any updates.



# Features

- The app requires each user to login.
- The app allows a company to have multiple sites, each with their own office structure and assets.
- The customers have their own portal to check that statuses of issues.
- The techs have their own portal to access companies and open tickets in order to respond to support requests.



# Planning - User Stories

As a freelance tech support person I want a way to document and triage support requests in a manner that allow me more information than a text that says, "it's broke."

As a customer of the free lance tech support tech I want a way to know what's happening with my issues, since he has keys and can come and go as needed.



# Planning - Database

The database for the ticket system is very robust. A concise list overview:

- COMPANY is the base table for everything. Everything is directly or indirectly owned by the company.
  - USER contain the information about the app's users
  - SITE contains the information about the various sites/physical locations of the company
  - ADDRESS contains the actual addresses, including the billing address and the site addresses
  - TICKET contains the base ticket information and then links to TICKET\_UPDATE
  - ASSET contains the names of assets and then links to ASSET\_SPEC

There are more tables but this is an overview. It was attempted to fully normalize the database from inception.



# Technology Stack

- Java
- Spring Boot
- Thymeleaf
- MySQL 5
- Hibernate / JPA



# Demo



# What I Learned

- I've had previous experience with ASP's MVC with C#, using Spring Boot I learned a lot more about MVC and what Microsoft did for me.
- In MVC I liked creating my database first, and letting the Entity framework create my POCOs; but I took time to learn Hibernate's annotations in order to make sure my database looked like I expected.
- I also had not played with handling authentication in MVC yet, but my project needed it so I learned the basics of managing users and roles.





# What's Next

- Finishing the Tech Portal, specifically the Ticket
- Creating the Admin Portal which will allow editing the Tech Company
- Create the Customer Portal to allow customers to see their information.
- Improve the UI look and feel
- Add email notifications

