

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

The screenshot shows a web browser at localhost:8080/tech/3. The page has a navigation bar with 'Home | Logout' and a search bar. The main content area is divided into sections: Tickets, Users, Sites, and Assets (Computers). Each section has a table of data and an 'Add' link. On the right, there are 'Admin Links' and 'Tech Links'.

Home | Logout

LaunchCode

Tickets
No tickets found
[Add Ticket](#)

Users

Username	First Name	Last Name	Edit
chris@launchcode.org	Chris	Bay	Edit

[Add User](#)

Sites

Site Name	Street Address 1	City	State	Phone	Contact	Edit
LaunchCode Mentor Center	4811 Delmar Blvd	St. Louis	MO	314-254-0107	Chris Bay	Edit

[Add Site](#)

Assets (Computers)

asset	Office	Site	Edit
Chris's Laptop	Office	LaunchCode Mentor Center	Edit

[Add Asset](#)

Admin Links
[Add Company](#)
[Add/Edit Tech](#)

Tech Links
[Tickets](#)
[Sites](#)
[Users](#)
[Assets](#)

A screen shot of the company view from the tech portal.
A full video demonstration can be found at: <https://youtu.be/BIPoKyIBPzI>



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

- Fix various bugs found to improve functionality
- Improve the UI look and feel
- Add tech photos and allow customers to see tech profiles
- Add mapping API for Techs to get directions
- Add billing functionality
- Add email notifications

