Finance App

Gerrit Smith

@gerritsmith on GitHub

Description

I made this app to gain insights into my side gig delivery business activities.

I wanted a single place to record all transactions, time commitments, and mileage which could provide up-to-date graphical summaries and computations.



Features

- Users can add records of their shifts, deliveries, and expenses:
 - One at a time via HTML forms
 - o In bulk via CSV file uploads
- Users can view reports and interactive graphs and charts aggregated by day, month, or year:
 - For total quantities (e.g. # of deliveries, revenue, tips)
 - For average quantities (e.g. revenue per hour, tips per delivery)



Planning - User Stories

- Users can create accounts and login
- Users can add shift, delivery, location, and expense records
- Users can view and edit records
- Users can view reports for specify day, month, or year
- Users can view report of everything by day, month, or year
- Users can upload records in bulk



Planning - Database

- User
- UserRole (belong to User)
- Shift (belong to User)
- Delivery (belong to User and Shift)
- DeliveryLeg (belong to Delivery)
- Location (belong to DeliveryLeg)
- Expense (belong to User)



Technology Stack

- Java
- Spring Boot
- Thymeleaf
- MySQL (current deployment uses PostgreSQL)
- JavaScript
- D3.js
- Bootstrap



Demo

https://serene-peak-98762.herokuapp.com

(demo accounts only have read access to the database)



What I Learned

- Spring Security
- File Uploads and CSV processing
- D3.js and SVG
- Spring Session Attributes
- Model Binding Dynamic Forms
- Additional Thymeleaf features
- How to Deploy with Heroku



What's Next

- Give users ability to delete data
- Add reports aggregated by days of the week and by time of day
- Try to speed up CSV upload process or else limit number of rows
- Give users the ability to export their data as a CSV
- Add more visualization options to graphical reports
- Improve reports UI/UX

