Karina Macancela

PROJECTS

Pet Clinic

This project focuses on building a virtual portal for a pet clinic, managing incoming and publishing upcoming appointments and pet owner experience feedback. Pet owners can log in and select which vet they wish to see for a specific pet and the date and time they choose. Using JavaScript and AJAX, the pet owner will be able to view upcoming appointments and have the option to cancel. Pet owners will also be able to rate their experience after an appointment has been marked as completed. Vets will be able to log in and view their upcoming appointments. Using Java, HQL, Spring, and Hibernate as the back end, we use ORM to map our POJO to our relational database.

Environment:
Core Java, Hibernate, Spring, Jenkins, Continuous Integration, AWS, Maven, Cucumber, Selenium, GIT, Unix, jQuery, AJAX, HQL, ORM

Responsibilities:

- Created POJO Java Beans with Hibernate annotations.
- Using ORM framework, mapped beans to tables in our relational database in SQL Developer.
- Combined Spring and Hibernate using Contextual Sessions.
- Worked with AWS and Jenkins.
- Implemented Continuous Integration with project collaborators using Slack and Git.
- Used Tomcat to deploy my web application on the server.

Expense Reimbursement System

This project manages the process of reimbursing employees for expenses incurred while on company time. All employees in the company can login and submit requests for reimbursement and view their past tickets and pending requests. Finance managers can log in and view all reimbursement requests and past history for all employees in the company. Finance managers are authorized to approve and deny requests for expense reimbursement.

Environment:
Core Java, JDBC, Servlet, JSP, Web Logic/Tomcat, JUnit, XML, Git

Responsibilities:

- Implemented user authentication using jBCrypt.
- Extended HTTPServlet to handle GET and POST requests.
- Used WebLogic to publish JSPs and HTML pages to the server.
- Created a Business Delegate to build a bridge between business logic and back end.
- Incorporated POJO Java beans to work with a relational database using SQL.
- Utilized JNDI lookup to connect to the database.
- Used JDBC to allow clients to access the database.

Hospital Management Tool

This project is a tool that manages hospital patients and records, including medicine inventory and prescription. By creating several APIs and utilizing Eureka, several APIs, including APIs for Medicine, Patient, and User Records, are able to be access and modified separately because they are each microservices. Zuul acts as an API gateway and delegates the requests to these microservices.

Environment:

Core Java, Eureka, Netflix Zuul API Gateway, Docker, HTML, CSS, JavaScript, Maven

Responsibilities:

- Created APIs using Core Java and Spring framework. Each API is a microservice with dependencies shared via the POM.
- Used URL mapping to connect API microservices to Zuul.
- Implemented POJO beans to controller and added Jackson dependencies to the POM.
- Added Zuul connection to Eureka REST-based service.