

# Project 1: Expense Reimbursement Application

BY BRANDON ZAMORA, HARLEY BURCH

# Project Overview

- ▶ Employee Reimbursement System's main objective is to manage the process of reimbursing employees for expenses incurred while on company time.
- ▶ Employees can login and view previous reports or submit new reports.
- ▶ Finance managers can login and view all reports or Approve/Reject Pending reports for any employee.

# Scrum

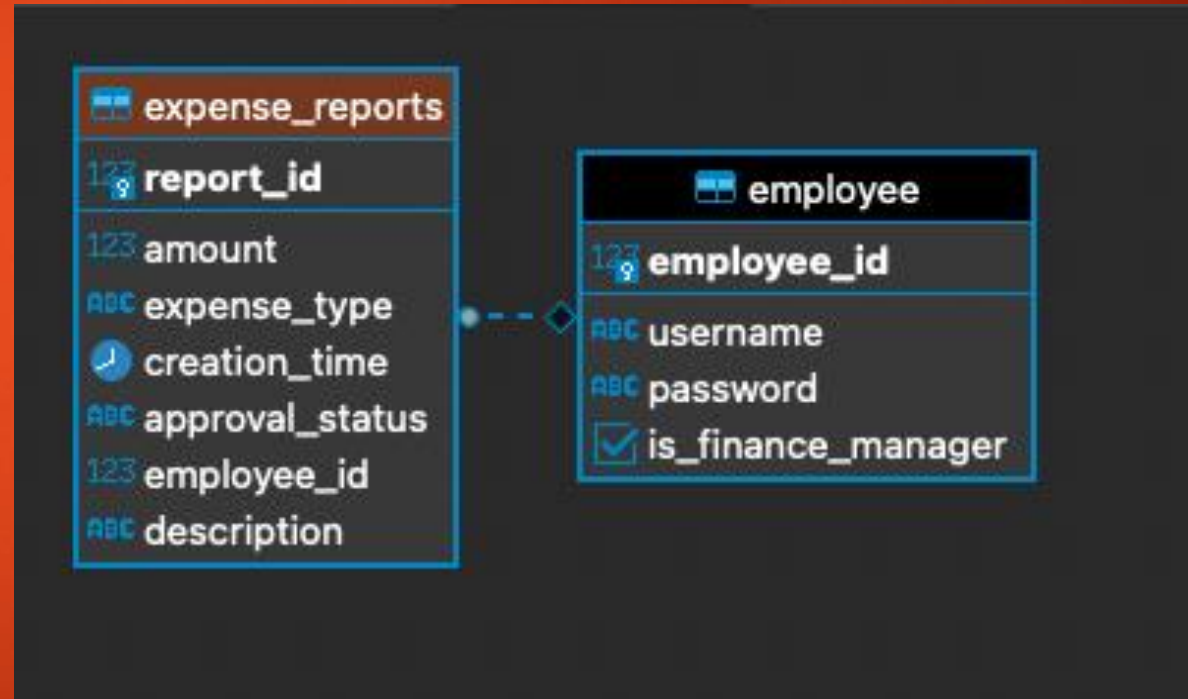
- ▶ At the beginning of each week, we both decided on the features that need to be done by the end of the week.
- ▶ If any issues arose, we talked to each other first to see if the other had a solution.
  - ▶ If not, then we talked to the rest of the team to find their solutions to any similar problem.

# DevOps

- ▶ Agile methodology
- ▶ Continuous Integration
  - ▶ Git hub – central repository
- ▶ Continuous Deployment
  - ▶ Jenkins – build & deploy project on EC2 instance
- ▶ Maven Dependencies
  - ▶ Log4j, J-unit, Mockito, Javalin, Postgres, & Jackson

# Back End

- ▶ Database:
  - ▶ Postgres SQL using RDS
  - ▶ Tables in 3rd normal form
  - ▶ One-Many Relationship
- ▶ Java DAO classes:
  - ▶ Report DAO
  - ▶ Employee DAO
  - ▶ Connected Via JDBC



# Mid-Tier

- ▶ Java Service Layer handling core logic.
  - ▶ Connects with DAO layers and
  - ▶ Connects with Front Controllers.
- ▶ Models – Employee Class and Report Class
- ▶ Logging - Log4j
- ▶ Testing – Junit w/ Mockito

# Front End

- ▶ HTML is how we designed our webpages
- ▶ JavaScript is how we developed our tables and button actions
- ▶ Javalin is how we communicated with our java back and forth to the JavaScript/ HTML
- ▶ CSS
  - ▶ Bootstrap was used to further design our webpage
- ▶ 1 Request Handler, 2 Controller layers
  - ▶ Authenticate Controller
  - ▶ User Controller

# Demo

▶ <http://ec2-52-15-202-41.us-east-2.compute.amazonaws.com:8000/>



# Questions?

