Marc Kirksey – Relation Data Store using PostgreSQL

Omega Steel Piping Company Inventory Program

Database Technology Explanation

This is a database that is designed for the purpose of moving away from a .pdf document that is shared yearly with customers of Omega Steel that displays their yearly pipe inventory to display a database of current available inventory in real-time for customers.

Not kidding, here is a link to the .pdf that they advertise on their website that they email out once-per-year.

With this being the case, I wanted to use this opportunity with my Capstone Project for a real-life application and not something I would forget about at the end of this class.

Table/Structure Role for Application

Being that this is real inventory for a real company, here is the link to how the table will be designed. Below is the structured relationship for how a user will access the inventory once they've entered the inventory page.

The inventory that is displaying will be based on the *PipeSelection* that is available in the database. The site will have two main purposes.

- To log users into the site for making inquiry forms more easily/automatically filled out
- For users to see inventory on the Inventory page. The inventory will be pushed and updated from the Sql Database.

Explanation for each table/structure

The *user* table is built to identify which customer is logging in to know what information needs to be automatically filled in when an inquiry regarding a certain type of pipe is selected on the Inventory page.

The *PipeSelection* table will be a chart that displays each of the characters the customer would want to know about the pipe that is in stock by Omega Steel on the Inventory page.

The *grade* table is used as a ladder from *PipeSelection* to pipSpecs. If a grade from *PipeSelection* is not in stock, then it will not display on the table or at least will state No Stock Available on the front-end of the application in the *PipeSelection* table.

The *pipSpecs* table is the hub for all of the pipe information that is referenced up to the *PipeSelection* table. The goal is to be able to use this table down the road as a reference tool for calculating logistics cost to getting a certain amount of industrial pipe from the Omega Steel Company warehouse yard, to the customer.

MVP

user (Relational Diagram)
🔑 customerID: INTEGER
🔲 email: CHARACTER(100)
🔲 password: CHARACTER(50)
🔲 date_created: DATE

grade
🔑 id: INTEGER
🔲 name: CHARACTER(100)
🔑 grade_id: INTEGER
🔲 is_active: BOOLEAN
🔲 is_stocked: INTEGER

pipeSpecs
🔑 id: INTEGER
🔲 name: CHARACTER(50)
🔲 grade_id: CHARACTER(50)
🔲 manufacturer: CHARACTER(50)
🔲 source: CHARACTER(10)
🔲 is_active: BOOLEAN
🔲 photo: CHARACTER(50)
🔲 video: CHARACTER(50)
🔲 location: CHARACTER(50)
🔲 feet: INTEGER
🔲 weight: INTEGER
🔲 pieces: INTEGER
🔲 wall: INTEGER

PipeSelection
🔑 id: INTEGER
🔲 grade: CHARACTER(50)
🔑 grade_id: INTEGER
🔲 footage: BOOLEAN
🔲 outerDiameter: BOOLEAN
🔲 wallThickness: BOOLEAN
🔲 manufacturer: CHARACTER(0)
🔲 location: CHARACTER(0)
🔲 is_active: BOOLEAN
🔲 is_stocked: INTEGER

MVP