

Junior Engineer Homework Assignment

Overview

This homework assignment is intended to gauge an applicants proficiency in critical skills needed for our Software Engineering team. While this is intended to be difficult for those with minimal work experience, it is entirely appropriate to ask questions throughout the development process. No-one works in a vacuum professionally, and this assignment is intended to evaluate ones performance in a professional environment. Applicants will be evaluated based on the following criteria

- Quality and Structure of Code
- Quality of Communication and Requirements Gathering
- Timeliness and Completeness of the Assignment

All code relating to this assignment should be shared via a source control repository such as Git or Bitbucket. While choice of language is up to the applicant (with a preference toward Python) we do require that all database interactions be done via SQL statements and that the use of scaffolding frameworks such as Entity Framework be avoided.

Pre Requisites

This assignment requires the use of a relational database. We recommend the free and open-source database Postgres. This can either be installed locally, or hosted on AWS. If you choose to host your database on AWS, be sure to turn off the database instance when not in use and terminate the database when the assignment is finished so that you do not risk falling outside the free-tier usage requirements of AWS.

Phase 1

Along with this document, you should have received 3 csv files SalesData.csv, CustomerData.csv, and SalesmanData.csv. Create tables in your database that are able to store this data and write an application that loads these files into their appropriate tables.

Please include your table creation commands in your source control repository.

Phase 2

Once the data has been successfully loaded in the database, write SQL queries to answer the following questions. Please also include these queries, along with the answers to the below questions in your repository.

1. Who was the highest performing salesman in the month of November?
2. What is the lowest selling product?
3. What is the day with the highest sales?



SalesmanData.csv



SalesData.csv



ProductData.csv