

Internship program

This document provides the exercises that are part of the evaluation process for Software Developer internship program. As such, the goal is to provide insights into solutioning process and skills application for solving example tasks related to this position. Thus, please make sure you explain important details and specify any assumptions made. Additionally, please provide the time that it took for completing each exercise. Thank you very much for your time and efforts.

Exercises must be solved using the data model and data from the Excel file call CarSalesDataforReports, which must be provided along with the current evaluation document.

Exercise 1 – Data Modeling

1. Create a data model for CarSalesDataforReports Excel spreadsheet (You can use a tool to design it or draw it and send a picture).

Exercise 2 – Object Oriented Programming

1. Define the required classes, methods and properties based on CarSalesDataforReports Excel file.
2. Based on the point number one, define a class to include another kind of transportation vehicle. Include properties and methods that you consider required.

Exercise 3 – Queries

1. Create a query that returns the top 3 car brands most sold (i.e., having the most car brand sales) during first and third quarter of year 2015.
2. Create a query that shows the top 3 most sold car colors (i.e., having the most car color sales) for each quarter for the years 2012,2013,2014,2015.

Implement the solution above, preferably using Python (with Pandas), Java, C#, or another programming language. You can also use a pseudo-code instead. Please make sure to provide comments where needed to the solution provided.