TECHNICAL REPORT

* Observation of data in the following spreadsheets to establish the modeling scope.
* departments.csv
* titles.csv
* salaries.csv
* dept\_emp.csv
* dept\_man.csv
* employees.csv
* Drawing entities and their properties involved in the modeling scope utilizing the Entity Relationship Diagram (ERD).
* Determining the relationships between all entities and relating them with proper cardinality, i.e., one to one, one to many, one or more, etc.
* Once the visualization is finalized, the structure generated from ERD is to be used in building a PostgreSQL database by running the table schema for each spreadsheet including specifications such as data types, primary keys and other constraints.
* Importing data in each .csv file into the corresponding SQL table to complete the database.
* Writing the appropriate scripts to answer Data Analysis queries:
* Employee details such as employee number, last name, first name, gender and salary;
* Employees who were hired in 1986;
* The manager in each department including information such as department number, department name, the manager's employee number, last name, first name, and start and end employment dates;
* The list of department of each employee with information such as employee number, last name, first name and department name;
* The list of all employees whose first name is "Hercules" and last names begin with "B”;
* The Sales department’s employees including their employee number, last name, first name and department name;
* The Sales and Development departments’ employees including their employee number, last name, first name and department name; and
* In descending order, the list of frequency count of employee last names, i.e., how many employees share each last name.
* After collecting the required information, importing the SQL database into Pandas kicks off.
* Gathering the necessary data related to salary and employee title, merging into one data frame, grouping by the title, cleaning the data by getting rid of the employee number column and resetting the index for setting up the ‘Average Salary by Title’ bar chart.
* Plotting the data in title column as ‘X’ while the data in salary (in $ amount) is ‘Y’.