DIAS: Data-Intensive Applications and Systems Laboratory
School of Computer and Communication Sciences
Ecole Polytechnique Fédérale de Lausanne
Building BC, Station 14
CH-1015 Lausanne
URL: http://dias.epfl.ch/

Databases Project – Spring 2022

Team No:

Members:

Contents

DIAS: Data-Intensive Applications and Systems Laboratory
School of Computer and Communication Sciences
Ecole Polytechnique Fédérale de Lausanne
Building BC, Station 14
CH-1015 Lausanne
URL: http://dias.epfl.ch/

Part 1

Deliverable 1

Assumptions

<In this section write down the assumptions you made about the data, if any. Write a sentence for each assumption you made>

Entity Relationship Schema

<In this section you should have a figure of the ER schema as well as descriptions about entities and relations>

Schema

<Add the figure of the ER schema>

Description

<Describe all the choices you made for Entities and Relationships>

Relational Schema

ER schema to Relational schema

<Describe the translation from ER schema to Relational schema>

Data Cleaning and Transformation Discussion

<In this section write comments on how you would transform the data, which files, which, columns, and why. Is the solution possible or viable, and why is it necessary or important for your schema?>

General Comments

<In this section write general comments about your deliverable (comments and work allocation between team members>

DIAS: Data-Intensive Applications and Systems Laboratory
School of Computer and Communication Sciences
Ecole Polytechnique Fédérale de Lausanne
Building BC, Station 14
CH-1015 Lausanne
URL: http://dias.epfl.ch/

Part 2

Deliverable 2

Assumptions

<In this section write down the assumptions you made about the data, if any. Write a sentence for each assumption you made>

DDL

<In this section write down the DDL you wrote for implementing the provided ER model>

Query Implementation

<For each query>
Query a:
Description of logic:
<What does the query do and how do I decide to solve it>
SQL statement
<The SQL statement>
Query result (if the result is big, just a snippet)
<The SQL statement result>

General Comments

<In this section write general comments about your deliverable (comments and work allocation between team members>

DIAS: Data-Intensive Applications and Systems Laboratory
School of Computer and Communication Sciences
Ecole Polytechnique Fédérale de Lausanne
Building BC, Station 14
CH-1015 Lausanne
URL: http://dias.epfl.ch/

Deliverable 3

Assumptions

<In this section write down the assumptions you made about the data, if any. Write a sentence for each assumption you made>

Query Implementation

<For each query>
Query a:
Description of logic:
<What does the query do and how do I decide to solve it>
SQL statement
<The SQL statement>
Query result (if the result is big, just a snippet)
<The SQL statement result>

Query Performance Analysis – Indexing

<In this section, for 3 selected queries explain in detail why do you see given improvements (or not). For example, why building an index on a certain field changed the plan and IO.>
Query 1
<Initial Running time/IO:
Optimized Running time/IO:
Explain the improvement:
Initial plan
Improved plan>

Query 2
<Initial Running time/IO:
Optimized Running time/IO:
Explain the improvement:
Initial plan
Improved plan>

General Comments

<In this section write general comments about your deliverable (comments and work allocation between team members>