NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

NTU Academy for Professional and Continuing Education

(SCTP) Advanced Professional Certificate

Data Science and AI

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

1.4 SQL Basics - DML

Module Overview

1.1 Introduction to Data Science

1.2 Introduction to Database

1.3 SQL Basic - DDL

1.4 SQL Basic - DML

1.5 SQL Advanced

1.6 Introduction to Numpy

1.7 Introduction to Pandas

1.8 Exploratory Data Analysis (EDA) Basic

1.9 EDA Advanced

1.10 Data Visualisation

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Recap, Self-Study and Prework

- What are `environment.yml` files used for?
- What is the command to create a conda environment from a `environment.yml` file?
- Why must you activate an environment before use?
- What is the command to export your current dependencies to `` `environment.yml` `` file?

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Recap, Self-Study and Prework

- Describe the following SQL DDL statements
  - CREATE
  - ALTER
  - DROP
  - UPDATE
  - COPY
- What are indexes useful for?
- What is the difference between a Table and a View?

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Lesson Objectives

- SQL Data Manipulation Language (DML) statements
- Operators and Functions
- Filters and Sorting
- Aggregate functions and `GROUP BY`
- Advanced operators and functions

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SQL Data Manipulation Language

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Lesson Plan

1. Connecting to database
2. Querying data
   - Use operators and functions
   - Add filters and sorting
   - Use aggregate functions
   - Use GROUP BY and HAVING clause
   - Add logic conditions to query

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Connecting to the Database

- Refresh the GH repository with `git pull`
- Directly use the updated db/unit-1-4.db

  - Open DBeaver and create a new connection to the DuckDB database file db/unit-1-4.db

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Active poll

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What did you learn today?

Join at
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#130 014

End of Lesson 1.4 - Exit Ticket

Survey Link https://app.sli.do/event/ohVeo3qGrRXrssJocbvdG6

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