CS 306

Recitation 2
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Today's Plan

- Notes about MySQL installation
- Revising Entity Relationship Model
- Learning basic SQL commands
- Creating a small database

Github Repository for Recitations

We are planning to use a github repository for this semester to share the datasets and example queries that will be used in recitations for demonstrating the practices for creating and using a database.

It is highly recommended to follow the course material in the recitations for accelerating your learning process and reducing your workload for projects.

The repository will contain the materials for recitations.

The repository link:

https://github.com/hasan-ert/cs306-202302-recit

Installation Links

You need to install MySQL Server & Workbench into your computer

Check out MySQL website or these videos regarding to your operating system

- https://dev.mysql.com/downloads/

For Windows:

- https://www.youtube.com/watch?v=u96rVINbAUI&t=9s

For Mac:

- https://www.youtube.com/watch?v=YaquZR7126M

SQL Create Table Commands

Create Table continents(

  continent_code Varchar(5) Not Null,

  continent_name Varchar(50),

  primary key (continent_code)

);

Create Table countries(

    iso_code Varchar(5) Not Null,

  countries_name Varchar(50),

  population INT,

  primary key (iso_code)

);

Create table continents_countries(

  continent_code Varchar(5) NOT NULL,

  iso_code Varchar(5),

  Primary key (iso_code),

  Foreign key (continent_code) References continent(continent_code) On Delete Cascade,

  Foreign key (iso_code) References countries(iso_code) On Delete Cascade

);

Manually Inserting Data

Some example insertion queries are as follows:

- **Insert Into countries Values ("TUR", "Turkey", 84780000)**
  - Inserts an instance for "Turkey" in "countries" table
- **Insert Into continent Values ("EU", "Europe")**
  - Inserts "Europe" into continent table
- **Insert Into continent_countries Values ("EU", "TUR")**
  - Inserts an instance with "EU" as continent_code and "TUR" as iso_code into countries_countries table

Delete Statements

Delete From countries Where iso_code = "TUR"

- Deletes the instances from countries table where iso_code is equal to "TUR"

Delete From countries_countries Where continent_code = "EU" AND iso_code = "TUR"

- Deletes the instances from countries_countries table where continent_code is equal to "EU" AND iso_code is equal to "TUR"

DROP and ALTER Statements

DROP TABLE countries

- Deletes the countries table from database

ALTER TABLE countries

Rename Column country_name to name

Add Column population_density DECIMAL

- Alters the countries table by
    - Renaming countries_name column to name
    - Adding a new column named population_density with type Decimal

Questions

You may ask any question regarding to today's recitation or any subject related to projects

Thank You for Your Attendance!

See you all next week