

# Assignment 1

CST 8215

Due: Feb 18<sup>th</sup> midnight

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## Data:

United Nations Sustainable Development Indicator Database – Design and DDL

Download data for a specific indicator that you prefer.

<https://unstats.un.org/sdgs/indicators/database/>

Choose “By Indicator” Tab. Choose the drop down menu to choose an indicator of your preference. For example if you want to look at fresh water stress data, you would choose 6.4.2 from the drop down menu

Make sure you choose Show -> “All” entries before you downloaded as excel sheet.

## Initial Processing of Data:

Think about the primary key for the downloaded data. It could be composite with multiple attributes. Now to try to normalize the table further to make it more efficient.

Use example SDG file provided (from week 3 lecture) to get some ideas.

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## Assignment Tasks:

1. Draw an ER diagram of the normalized database containing all the entities using TOAD modeler. Make sure you choose appropriate data types for each attribute. Save it as .txp for your own future edits. Make sure you added a stamp with your name and your team mates name in the author attribute. Export the image as .PNG for assignment 1 submission. (2 marks)
2. In pgAdmin III create a new database UN\_SDGoals. Open an SQL editor and write Create table code for “indicator table”, “series table” and “country table” Save that as Assignment1\_SDG.DDL Make sure you write the PK and FK constraints correctly (1.5 marks)
3. Open another SQL editor and write insert lines for indicator table (1 line) and series table (2 lines) and save it as Assignment1\_SDG.DML (1.5 marks)

Zip the PNG file, DDL and DML files together. All members of a team have to upload the zip file to blackboard.