

Database Systems 10127

Database Project

Due Date:

Presentation – Last week of class

Products – February 7th

The projects will be carried out in groups of 2-3 students

Please submit your groups by December 21st. You may work with students from another class that I teach.

1. Select one of the following topics:
 - a. COVID-19 vaccination delivery to the population of a small town
 - b. A remote conferencing system, such as Zoom
 - c. Polling place (קלפי) in the upcoming election
 - d. Assembly line for a bicycle factory
2. Foundations – prepare the following:
 - a. A general description of the system and the data needed for managing it
 - b. Requirements for the system – what is the database for
 - c. Define two user types for the system
 - d. Describe the entities in the database (at least 6) and the relationships between them
 - e. Create an ERD for your system
3. Creating the database
 - a. Create the database with CREATE commands
 - b. Fill the database with data using either INSERT commands or UPLOAD from a file
4. Querying the database
 - a. Write at least twelve SELECT commands to be performed by the user. Credit will be given for complexity of the queries
 - b. Write at least four INSERT/UPDATE/DELETE commands to be performed by the userBe sure to include commands for both users defined in 2(c).
5. Extras: Items 1-4 can earn you at most a grade of 90. To get to 100 you have to go beyond
 - a. Triggers
 - b. Database security
 - c. Other exciting features that we learned or that you researched
6. What to turn in:
 - a. A 10-15 minute presentation describing your project, given in the last week of class
 - i. Mandatory attendance in the last week
 - b. A folder containing all the components described in sections 1-5
 - i. Turned into moodle