WMCS16001.2018-2019.1B Information Systems

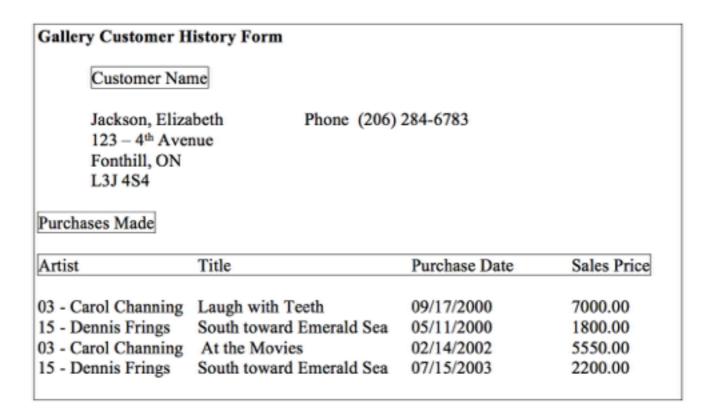
Relational Databases Management Systems Normalisation, Triggers, Stored Procedures and Functions

Dr. George Azzopardi



Case Scenario

The Gill Art Gallery wishes to maintain data on their customers, artists and paintings. They may have several paintings by each artist in the gallery at one time. Paintings may be bought and sold several times. In other words, the gallery may sell a painting, then buy it back at a later date and sell it to another customer.



Considering the unnnormalized schema

customer

[custno, cust_name, cust_addr, cust_phone, (artist_id, artist_name, art_code, art_title, pur_date, price)]

The above relation allows multiple values of the attributes within the brackets for each set of (<u>custno</u>, cust_name, cust_addr, cust_phone)

Tasks

- 1. Normalize the schema up to the third normal form and create it in postgresql. For each table, indicate the primary and foreign keys. Provide the scripts to generate the schema.
- Create triggers (and procedures/functions if necessary) in the appropriate tables to set to uppercase the customer and the artists' names with every insert or update.
- Create a trigger that checks that the selling price is greater than 0.