

Homework #2

Activities of real estate agency

A real estate agency wishes to design a database to manage its website.

- The real estate agency has several offices in the main cities. For each office, identified by a numerical code, is characterized by the name of the city in which it is located, the phone number, and an email address.
- The real estate agency publishes ads about homes. Each home is characterized by a code, its size in square meters, the number of bedrooms, the number of bathrooms, and the address (i.e., street and city). In addition, the database stores for each home a list of filenames of pictures, to be displayed on the website. For each house a reference office is known from among those in the real estate agency.
- Each ad, identified by a code that is unique *within* all ads referring to the same home, is characterized by the publication date and a short description. Ads are divided into rental ads and sale ads. For rental ads, the minimum duration of the contract and the monthly fee are known. For sale ads, the database stores the price of the home and the information whether the home is immediately available or not.
- Customers of the real estate agency website are identified by their nickname and characterized by name, surname, date of birth, email address, and possibly a phone number. Customers may create lists to keep track of their ads of interest. For each customer, the database stores a list of each ad selected by the customer, together with the date on which the ad was added to the list by the customer.
- Different real estate agents work for the agency. Each agent, identified by his/her SSN, is characterized by his/her name, email, phone number and the office where the agent is currently working.
- To provide financial aid to its customers, the real estate agency offers a financial counselling service in its offices. The database keeps track of each day of the week on which the financial counselling service is available in each office, together with the opening and closing times. Assume that, on a given day of the week and in a given office, the service is provided in at most a single time frame.