

EXAM DATA ACCESS 2°DAM

1^a term

2nd December 2019

Alice Wren and Death Watch are delighted with your work on the sales website, with which they are selling weapons all over the galaxy. More and more factions are willing to buy weapons, Crinsom Dawn, the federation of commerce, etc.

At this point Alice is looking for an application to easily manage the weapons and sales contacts. You offer her a very old but efficient tool for this type of work, a Database. She thinks a 3D holographic base would be more appropriate, but trusts your work.

First, you design the data model: In general terms, there are factions, with the name as PK, the contact person, the planet, the number of controlled systems, and the date of the last purchase. The factions have weapons to sell to other factions. The weapons have a price, a name and a unique id as PK. To keep track of the sales, the number of units, and the date of sale will be stored.

To expand the business, Alice wants to control all the battles of the galaxy, so there is a Battle table with the factions involved (the factions have to be registered in the Factions table), the name of the battle and when and where it occurs. To collect this data there is a network of spies, distributed throughout the galaxy. The spies report n battles but a battle is only reported by a spy. The name and the race of the spy have to be registered.

JDBC:

0. (1) Load initial data in the database from XML, a code that was used in the time of the Great Creator, when there was only one Light. You can find the XML file within the exam documents.

1. (0.75) Alice's cousin damaged his brain in a battle. To keep him busy, he is in charge of recording weapons of the rebels; to avoid mistakes, the program will delete the insertion immediately.

2. (0.75) Insert a new battle, inserting faction if it does not exist.

3. (0.75) Update the price of a weapon

4. (0.5) Select all factions, and all weapons

5. (0.5) Select the name and the price of all the weapons of a faction.

6. (0.75) Delete the data of a spy and his/her battles, so that if something happens to them, they can deny their existence.

Spring template:

7 (0.75) Select the data of all weapons purchased by a faction from a given date.

8 (0.75) Select all battles reported by a spy, returning battle name and spy name

9 (1) Update the name of a faction, a frequent task when the boss is killed and another takes control.

10 (0.75) Delete all weapons that are not sold

11 (0.75) Delete all data of a faction.