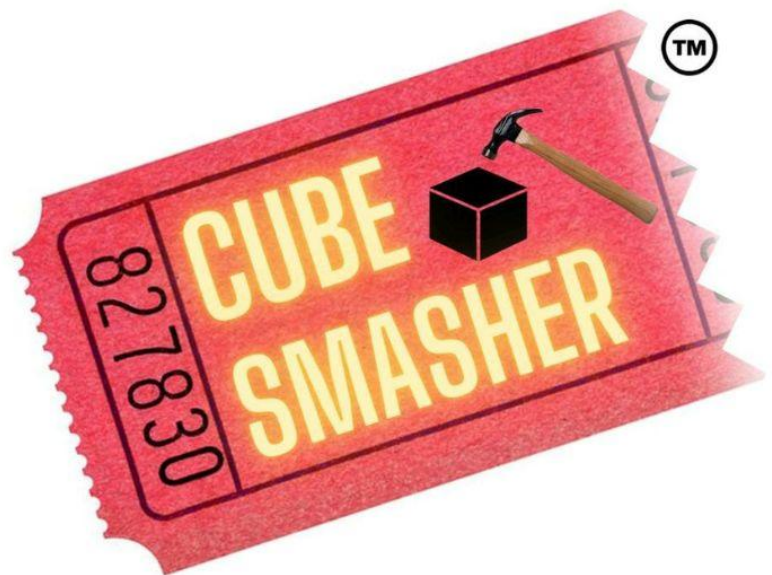


STORING AND RETRIEVING DATA

FINAL PROJECT



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Business Process Description

Old school is cool! Proof of this is “*CubeSmasher*”, a DVD rental company that counts with 15 physical stores across the USA.

CubeSmasher has a big variety of movies for all ages. Each movie is characterized by a unique ID, given that different movies may have the same name, a director, release date, length, the total number of copies owned by the company, genre or genres, seeing that a film can fit into more than one category, and its content rating. The copies of each motion are the physical products that are rented and are also characterized by a unique ID and are assigned to a specific store. Moreover, each copy also has its condition registered by an employee each time it is returned to the same store or inserted into stock. For stock management purposes, a flag regarding the copy availability is registered on the system and the number of copies of each movie on each store is also tracked.

A rental, that is identified by a unique ID, has to be made by an employee to a client on a registered date. The client can be an employee, which means that he can rent himself movies. A rental can be composed of several copies that can be returned on different dates. However, each copy has a maximum of 30 days after the rental date to be returned, otherwise, the client must pay a fine. This value is equivalent to \$5 per delayed week where the first seven days already count as a full week. The pricing model of *CubeSmasher* is dynamic, seeing that each rented copy's price is determined by the release date of its respective movie. Films that were released in the current year cost \$15, if they were released in the last 5 years \$10, and \$5 if they are older than that. To the total amount of the rental it's added an VAT of 23%. Due to its competitive pricing among the niche sector of rental videos, *CubeSmasher* does not carry any discounts or price reduction campaigns.

When registering as a customer, the client must provide his last name, phone number for the eventual need of contacting the buyer, an address and also the date of birth. This last information is collected to verify if the client, depending on the selected movie content rating category, is allowed to rent the product. Optionally, to complete the customer form, they can supply their first name as well as their email.

All this information is also collected for all employees. In regards to the latter, each worker is assigned to a specific store and may have a specified manager, as for the exception of the managers themselves. All salaries are based on position within the company and do not depend on the store's location.

The rental of a product is registered by inserting a record on the rental product table. When returning the product (which is represented by an update in the rental product table), the client can provide a rating regarding their enjoyment of the movie and overall experience. It is recorded by the employee together with the return date and returned condition, which is automatically updated in the copy's specific record.

