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Database Project - Task 1:

Video Game Store Management



Purpose

To store data about the stock of games in a game store, and keep track of customers, employees, and orders.

Video games and, in our case, video game stores are a fun and special part of many people's lives. Gamestop alone has roughly 4,400 stores across the U.S. However, there

are many small video game stores across the country as well. They provide a place to go and see pieces of history, and to buy a new video game to play in order to form a new experience. Video games as a whole are an industry that makes billions upon billions of dollars. While the world moves on into more digital games, there are still a multitude of people who want to be able to go to the store, and get a physical copy of a game or even something physical that currently isn't being released anymore. The problem is that it can be overwhelming to physically track every single game within a small store, even more so when you take into account the characteristics of each and every game. Furthermore, it is imperative to keep track of any customers, employees, and orders for any of the games within the store.

With this in mind, the purpose this website will have is to keep track of the stock of games, employees, and customers. This data can all be simplified into something that is more digital and is clearly a problem that SQL can help to solve. Taking all of this data needed to manage this establishment, and putting it into a database will further help the managers to continue to run the store, and easily modify attributes within their stock or in an employee's pay. So overall, our aim is to simplify the management of data within our store from a multitude of factors, thus making it easier to run and allow customers and employees to be informed of the issues that concern them (such as stock or an employee's salary).

Data Requirements

- Video_Games
 - Name
 - GameID
 - Genre
 - Console
 - ESRB_rating
 - PublisherID
 - Game_Price

- In_Stock (should be set to 0/false if stock amount is equal to 0)
 - Stock_amount (should be decremented with every purchase)
- Employees
 - EmployeeID
 - Employee_Name
 - Role (Can be changed if promoted)
 - Salary (Room to be incremented or decremented)
- Publisher
 - PublisherID
 - Publisher_Name
- Customers
 - Name
 - CustomerID
 - Discount (Should be able to be changed)
- Orders
 - OrderID
 - Customer_ID
 - EmployeeID (Employee completing purchase)
 - Order_Price
 - Discount
 - Status

Functional Requirements

- Front end - Website
 - Hosted through GitHub or local machine

- Convenient Graphical User Interface
- Visual store of games in stock
- Implement order recording
 - Customer must create account to make orders
 - Store customer data for future reference
 - Store the order's data to help update stock
 - Record info of Employee completing purchase
- Implement interaction with Backend
 - Creating new records
 - Updating recorded orders/information
 - Pulling reports
- Back end - Database

The ongoing plan is to host our system on either a website through Github or on a local machine. It will have a convenient and easy-to-use GUI and allow employees to view a specific game and determine if it is in-stock and if so the quantity of the game as well as being able to record any orders on a separate page of the site that were taken inside of the store. This will be useful to view as a historical record and to continue to help maintain stock, as it will serve to help employees determine what of their stock they must decrement. Additionally we will implement a page that showcases all of the employees within the store as to keep track of the staff as well as the games. In doing so, the site will have one page that showcases the games within the store's inventory and the amount for said game, as well as an additional page which will have the history of all orders that had been placed, and one final page will be implemented that showcases all the employees and their roles. Within the game page there will be a way to better help find different types of games by separating them with different filters. These filter options are a combination of genre, console, and ESRB rating. Doing this will help employees know the exact games that are in the store, along with additional information about the games in the store, and will prove to be a faster option than shuffling through the entire game list.