CPSC 304

2016 Winter Term 2

Project Final Part

Group Name: Forget the Deadline

Group Members:

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above.

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

What Was Accomplished

Created an application to provide access to the database, and provide a set of queries available through the GUI. The tables were iteratively designed throughout the phases, resulting in our final database.

Changes to Final Schema

After starting to work on the project, we decided that the membership table was really unnecessary in its current state. We were only going to be doing a couple of very simple queries with it, so we removed it from the final design.

There were also some more minor changes: Changing a couple values from integer to char that we forgot, and changing SKU and EID in the stock table to allow null values, in the cases of a fired employee or a discontinued product.

Scripts

The script to create the tables is located at /resources/sql/create_db.sql

Likewise, the script to populate the tables is located at '/resources/sql/populate_db.sql

Queries

See /queries.sql

Alterntively, their implementation can be found in /src/sql/GameStoreDB.java

Functional Dependencies

BID → Phone, Address
The ID of the Branch uniquely identifies the Phone and Address

EID → Name, Address, Phone Number, position
An Employee's ID will uniquely identify his name,address,phone number, and position

DID → Name, Address, Phone Number
A Developer's identifier will uniquely identify their name, address, and phone number

SKU → Name, Price, DID

A Product's SKU will uniquely identify its Name, Price, and Distributor

BID, SKU → Quantity
Given a Branch's ID, and a Product's SKU, you can find the quantity of the product stocked in the Branch

CID → Address, Phone number, Name
A customer's ID will provide their Address, Phone number, and Name
Phone Number, Name → CID, Address
A customer's Phone number and name are unique and will identify their ID and address

snum → payment, SKU, CID, EID, saleDate
A sale's number will uniquely identify the payment method/code, Product SKU, Customer ID, Employee ID, and the date of the sale