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CSci126

**Database Schema**

**Diagram

Description automatically generated**

CREATE TABLE game (

rank INTEGER,

title STRING,

ratings INTEGER,

installs DOUBLE,

ar DOUBLE,

ag30 DOUBLE,

ag60 DOUBLE,

price DOUBLE,

category STRING,

[5s] INTEGER,

[4s] INTEGER,

[3s] INTEGER,

[2s] INTEGER,

[1s] INTEGER,

paid BOOLEAN,

column16

);

CREATE TABLE users (

id INT UNIQUE

PRIMARY KEY,

active BOOLEAN

);

CREATE TABLE profile (

id INT UNIQUE

REFERENCES users (id),

name STRING,

currency INT,

age INT PRIMARY KEY,

gender STRING

);

CREATE TABLE restriction (

age INT REFERENCES profile (age),

adult BOOLEAN,

teen BOOLEAN

);

CREATE TABLE played (

id INT REFERENCES users (id),

gameinstalled INT

);

**Normal Forms**

**Table

Description automatically generated**

* The table for game is too large to include
* The ‘active’ column in the table ‘users’ functionally depend on the ‘id’ column
* The ‘adult’ and ‘teen’ column in table ‘restriction’ functionally depend on ‘id’ column
* The ‘name’, ‘currency’, ‘age’, ‘gender’ in table ‘profile‘ functionally depend on ‘id’
* The ‘gamedownloaded’ in table ‘played’ functionally depend on ‘id’
* 3rd, BCNF, 4th normal form are not in violation

**Queries**

* Subqueries used are select, from, and where
* An aggregate function used was sum

**Test Queries**

* select name, title, rank from profile

inner join played on played.id == profile.id

inner join game on game.rank == played.gameinstalled

order by name

* select sum(gameinstalled) from played
* select name from profile where profile.age > 13
* update users set active == 0 where id == 0

**Application & Uses**

* The data ran on the database will contain information of the persons in-game account. This will not be a real-life representation of the user’s in-game data from the game. Just an example of the user’s account.
* To analyze data, the query function count() can help find the total games installed from a single user. Ex) select count(id) from played where id==0

**Links**

* Android-games.csv used from website (<https://www.kaggle.com/dhruvildave/top-play-store-games>)
* Link to Github (https://github.com/kaxiok/CSci126/tree/main/archive)