**Proiect la Baze de date in economie**

Inchirieri DVD-uri

**Groza Teodora**

**Informatica Economica, anul 2, grupa 4**

**Anul universitar 2020-2023**

# Scenariu

Diagrama Entitate – Relaţia surprinde activitatea din cadrul unui magazin de filme ce ofera DVD-uri, CD-uri sau jocuri video de inchiriat sau cumparat. Acestea sunt clasificate dupa categorie, limba sau artisti. Acestea sunt receptionate de catre casierii de pe tura, care se afla sub supravegherea managerului de resurse umane. În cadrul magazinului există câteva categorii de produse: DVD-uri, CD-uri si jocuri video, putându-se extinde pe viitor producţia. Produsele sunt inventariate in functie de data inchirierii sau cumpararii, iar apoi sunt clasificate ca produse vandute sau produse inchiriate. Produsele au trei tipuri de clasament: dupa gen, dupa limba sau dupa artist. La procesarea marfii, fiecarui produs ii este calculat un cost in functie de numarul de bucati si de pretul pe bucata. Angajatii de pe tura sunt responsabili de procesarea marfii si de facturarea acesteia, asadar angajatii cu mai multa experienta sunt de asteptat sa lucreze cand se asteapta livrarea marfii. Dupa achizitionarea unui produs, clientul este nevoit sa lase datele de contact, pentru a putea fi contactat in cazul intarzierii returnarii unui produs.

Printre angajatii se afla si managerii, cu departamentele respective, acestia fiind mai putin implicati in procesele zilnice de inchiriere, returnare, cumparare de produse. Programul magazinului este de 14 ore, acesta fiind deschis intre orele 8:00 si 22:00.

**Client**

# ID

\* nume

\* prenume

\* numar de telefon

\* adresa de email

\* strada

\* numar

\* apartament

\* cod postal

**Diagrama ERD**

**Judet**

# indicativ

\* denumire

**Localitate**

# cod

\* denumire

**Categorie**

# cod

\* gen

**Limba**

# cod

\* limba de origine

\* limba subtitrare

\* limba dublare

**Vanzare**

# numar

\* data/ora

\* cod produs

**Inchiriere**

# numar

\* data/ora

\* cod produs

**Artist**

# ID

\* nume

\* prenume

**Jocuri video**

**CD-uri**

\* denumire

# cod

**Produs**

**Inventar**

# data inchiriere/vanzare

° data predare

\* pret

**Productie**

# nr\_factura

\* data

\* nr

\*cost

**Casier**

**Manager**

\* experienta

\* departament

**Angajat**

# marca

\* nume

\* prenume

\* data nasterii

\* data angajarii

\* numar contract

\* salariu

° ore lucrate

**DVD-uri**

**Tabele de mapare**

|  |  |  |  |
| --- | --- | --- | --- |
| **Angajat (AGT)/Director (DRR)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Marca |  |
|  | \* | Nume |  |
|  | \* | Prenume |  |
|  | \* | Data nasterii |  |
|  | ° | Data angajarii |  |
|  | ° | Numar contract | Numarul contractului de munca |
|  | ° | Salariu |  |
|  | ° | Ore lucrate |  |
|  | ° | Experienta | Obligatoriu pentru manageri, necompletat pentru casieri |
|  | ° | Departament | Obligatoriu pentru manageri, necompletat pentru casieri |
|  | \* | Tip\_agt | Pentru specificarea subtipului (casier, manager) |
| CS | ° | Marca\_drr | Relatia cu directorii (DRR) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Produs (PDS)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Cod |  |
|  | \* | Denumire |  |
|  | \* | Tip\_pds | Pentru specificarea subtipului (DVD, CD, joc video) |
| CS1 | \* | Cod\_cte | Relatia cu categorii (CTE), nu se poate actualiza |
| CS2 | \* | Cod\_lba | Relatia cu limbi (LBA), nu se poate actualiza |
| CS3 | \* | ID\_att | Relatia cu artisti (ATT), nu se poate actualiza |

|  |  |  |  |
| --- | --- | --- | --- |
| **Categorie (CTE)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Cod |  |
| CU | \* | Gen |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Limba (LBA)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Cod |  |
|  | \* | Limba de origine |  |
|  | \* | Limba subtitrare |  |
|  | \* | Limba dublare |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Artist (ATT)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | ID |  |
|  | \* | Nume |  |
|  | \* | Prenume |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Productie (PDE)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Nr\_factura | Numarul facturii |
|  | \* | Data |  |
|  | \* | Numar | Bucati/Cantitate |
|  | \* | Cost |  |
| CP, CS1 | \* | Marca\_agt | Relatie barata cu angajati (AGT) |
| CP, CS2 | \* | Cod\_pds | Relatie barata cu produse (PDS) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Inventar (IVR)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Data inchiriere/vanzare |  |
|  | ° | Data predare |  |
|  | \* | Pret |  |
| CP, CS | \* | Cod\_pds |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Inchiriere (ICE)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Numar | Numarul facturii |
|  | \* | Data/ora |  |
| CP, CS1 | \* | Cod\_pds | Relatie barata cu produse (PDS) |
| CS2 | \* | ID\_cet | Relatia cu clientii (CET) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Vanzare (VZE)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Numar | Numarul facturii |
|  | \* | Data/ora |  |
| CP, CS1 | \* | Cod\_pds | Relatie barata cu produse (PDS) |
| CS2 | \* | ID\_cet | Relatia cu clientii (CET) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Client (CET)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | ID |  |
|  | \* | Nume |  |
|  | \* | Prenume |  |
|  | \* | Numar de telefon |  |
|  | \* | Adresa de email |  |
|  | \* | Strada |  |
|  | \* | Numar |  |
|  | \* | Apartament |  |
|  | \* | Cod postal |  |
| CP, CS1 | \* | Cod\_pds | Relatia cu produse (PDS) |
| CS2 | \* | Cod\_lce | Relatia cu localitati (LCE) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Localitate (LCE)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Cod |  |
|  | \* | Denumire |  |
| CS | \* | Indicativ\_jdt | Relatia cu judete (JDT) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Judet (JDT)** | | | |
| **Tip cheie** | **Optionalitate** | **Nume coloana** | **Observatii** |
| CP | \* | Indicativ |  |
| CU | \* | Denumire |  |

**Schema bazei de date normalizata**

Diagram, schematic

Description automatically generated

**Creare tabele**

Creare tabel Angajat

CREATE TABLE "Angajat"

(

"Marca" NUMBER(2) NOT NULL ENABLE,

"Nume" VARCHAR2(20) NOT NULL ENABLE,

"Prenume" VARCHAR2(30) NOT NULL ENABLE,

"Data nasterii" DATE NOT NULL ENABLE,

"Data angajarii" DATE NOT NULL ENABLE,

"Numar contract" NUMBER(5) NOT NULL ENABLE,

"Salariu" NUMBER(5) NOT NULL ENABLE,

"Ore lucrate" NUMBER(3) NOT NULL ENABLE,

"Experienta" NUMBER(2) NOT NULL ENABLE,

"Departament" VARCHAR2(20) NOT NULL ENABLE,

"Tip\_agt" CHAR(1) NOT NULL ENABLE,

CONSTRAINT "Angajat\_PK" PRIMARY KEY ("Marca")

USING INDEX ENABLE

);

Creare tabel Client

CREATE TABLE "Client"

(

"ID" VARCHAR2(10) NOT NULL ENABLE,

"Nume" VARCHAR2(20) NOT NULL ENABLE,

"Prenume" VARCHAR2(30) NOT NULL ENABLE,

"Numar de telefon" NUMBER(10) NOT NULL ENABLE,

"Adresa de email" VARCHAR2(15) NOT NULL ENABLE,

"Strada" VARCHAR2(15) NOT NULL ENABLE,

"Numar" NUMBER(3) NOT NULL ENABLE,

"Apartament" NUMBER(3) NOT NULL ENABLE,

"Cod postal" NUMBER(6) NOT NULL ENABLE,

CONSTRAINT "Client\_PK" PRIMARY KEY ("ID")

USING INDEX ENABLE

);

Creare tabel Vanzare

CREATE TABLE "Vanzare"

(

"numar" NUMBER(5) NOT NULL ENABLE,

"data/ora" DATE NOT NULL ENABLE,

CONSTRAINT "Vanzare\_PK" PRIMARY KEY ("numar")

USING INDEX ENABLE

);

Creare tabel Inchiriere

CREATE TABLE "Inchiriere"

(

"Numar" NUMBER(5) NOT NULL ENABLE,

"Data/ora" DATE NOT NULL ENABLE,

CONSTRAINT "Inchiriere\_PK" PRIMARY KEY ("Numar")

USING INDEX ENABLE

);

Creare tabel Inventar

CREATE TABLE "Inventar"

(

"Data inchiriere/vanzare" DATE NOT NULL ENABLE,

"Data predare" DATE NOT NULL ENABLE,

"Pret" NUMBER(4,2) NOT NULL ENABLE,

CONSTRAINT "Inventar\_PK" PRIMARY KEY ("Data inchiriere/vanzare")

USING INDEX ENABLE

);

Creare tabel Productie

CREATE TABLE "Productie"

(

"Nr\_factura" NUMBER(5) NOT NULL ENABLE,

"Data" DATE NOT NULL ENABLE,

"Numar" NUMBER(4) NOT NULL ENABLE,

"Cost" NUMBER(5,2) NOT NULL ENABLE,

CONSTRAINT "Productie\_PK" PRIMARY KEY ("Nr\_factura")

USING INDEX ENABLE

);

Creare tabel Produs

CREATE TABLE "Produs"

(

"Cod" NUMBER(4) NOT NULL ENABLE,

"Denumire" VARCHAR2(20) NOT NULL ENABLE,

"Tip\_pds" CHAR(3) NOT NULL ENABLE,

CONSTRAINT "Produs\_PK" PRIMARY KEY ("Cod")

USING INDEX ENABLE

);

Creare tabel Categorie

CREATE TABLE "Categorie"

(

"Cod" CHAR(3) NOT NULL ENABLE,

"Gen" VARCHAR2(15) NOT NULL ENABLE,

CONSTRAINT "Categorie\_PK" PRIMARY KEY ("Cod")

USING INDEX ENABLE

);

Creare tabel Limba

CREATE TABLE "Limba"

(

"Cod" CHAR(2) NOT NULL ENABLE,

"Limba de origine" VARCHAR2(15) NOT NULL ENABLE,

"Limba subtitrare" VARCHAR2(15) NOT NULL ENABLE,

"Limba dublare" VARCHAR2(15) NOT NULL ENABLE,

CONSTRAINT "Limba\_PK" PRIMARY KEY ("Cod")

USING INDEX ENABLE

);

Creare tabel Artist

CREATE TABLE "Artist"

(

"ID" VARCHAR2(10) NOT NULL ENABLE,

"Nume" VARCHAR2(20) NOT NULL ENABLE,

"Prenume" VARCHAR2(30) NOT NULL ENABLE,

CONSTRAINT "Artist\_PK" PRIMARY KEY ("ID")

USING INDEX ENABLE

);

Creare tabel Localitate

CREATE TABLE "Localitate"

(

"Cod" CHAR(3) NOT NULL ENABLE,

"Denumire" VARCHAR2(30) NOT NULL ENABLE,

CONSTRAINT "Localitate\_PK" PRIMARY KEY ("Cod")

USING INDEX ENABLE

);

Creare tabel Judet

CREATE TABLE "Judet"

(

"Indicativ" CHAR(2) NOT NULL ENABLE,

"Denumire" VARCHAR2(30) UNIQUE NOT NULL,

CONSTRAINT "Judet\_PK" PRIMARY KEY ("Indicativ")

USING INDEX ENABLE

);

**Populare tabele**

Populare Angajat

INSERT INTO "Angajat" VALUES (1, "Petrescu", "Alin", date '15-Jun-78, date '12-Mar-10, 12031, 2400, 8, 4, "-", "C", 3);

INSERT INTO "Angajat" VALUES (2, "Filip", "Ana-Maria" , date '3-May-98', date '1-Apr-17', 12032, 1800, 6, 2, "-", "C", 3);

INSERT INTO "Angajat" VALUES (3, "Muresan", "Matei", date '17-Nov-84', date '6-Jul-05', 11020, 3000, 8, 7, "Human resources", "M", 3);

INSERT INTO "Angajat" VALUES (4, "Ursu", "Mihaela", date '6-Jul-89', date '19-Aug-19', 12033, 1200, 4, 0, "-", "C", 3);

INSERT INTO "Angajat" VALUES (5, "Marcu", "Ioana", date '24-Mar-75', date '22-Nov-15', 10043, 3200, 8, 5, "Finance", "M", 5);

INSERT INTO "Angajat" VALUES (6, "Susca", "Vlad", date '28-Feb-81', date '10-Oct-13', 12010, 2800, 8, 3, "Quality management", "M", 6);

Populare Client

INSER INTO “Client” VALUES (“12345”, “Popescu”, “Adrian”, 756343521, “[popescu.adrian@yahoo.com](mailto:popescu.adrian@yahoo.com)”, “Plopilor”, 7, 43, 432156, 1131, “CJN”);

INSER INTO “Client” VALUES (“12346”, “Pop”, “Maria”, 756540021, “[pop.maria@yahoo.com](mailto:pop.maria@yahoo.com)”, “Constantin”, 27, 10, 400126, 2131, “CJN”);

INSER INTO “Client” VALUES (“12347”, “Cristea”, “Marcel”, 702393111, “[cristea\_marcel11@yahoo.com](mailto:cristea_marcel11@yahoo.com)”, “Claiurilor”, 13, 67, 409876, 6151, “STM”);

INSER INTO “Client” VALUES (“12348”, “Andrescu”, “Ileana”, 709456721, “[andrescu.ileana@gmail.com](mailto:andrescu.ileana@gmail.com)”, “Lebadei”, 39, 101, 455656, 1071, “ABI”);

INSER INTO “Client” VALUES (“12349”, “Marin”, “Cristina”, 752243000, “[marin.cristina@yahoo.com](mailto:marin.cristina@yahoo.com)”, “Florilor”, 9, 96, 432000, 3531, “BUC”);

INSER INTO “Client” VALUES (“12350”, “Coroian”, “Adreea”, 709763511, “[andreea.coroian@yahoo.com](mailto:andreea.coroian@yahoo.com)”, “Albac”, 1, 1, 452850, 7891, “BM”);

Populare Produs

INSERT INTO “Produs” VALUES (1131, “Jumanji”, “DVD”, “ADV”, “3”, “1310012”);

INSERT INTO “Produs” VALUES (2131, “Toy Story”, “DVD”, “ADV”, “3”, “110013”);

INSERT INTO “Produs” VALUES (6151, “The Witcher”, “VG”, “ADV”, “-“, “-“);

INSERT INTO “Produs” VALUES (1071, “Jubilee”, “CD”, “-“, “-“, “-“);

INSERT INTO “Produs” VALUES (3531, “Kimetsu no Yaiba”, “DVD “, “ADV”, “2”, “-“);

INSERT INTO “Produs” VALUES (7891, “Naruto”, “DVD”, “ADV”, “4”, “-“);

Populare Productie

INSERT INTO “Productie” VALUES (10012, date ‘12-Mar-2019’, 12, 5000, 1, 1131);

INSERT INTO “Productie” VALUES (20315, date ‘17-Sep-2020’, 20, 800, 4, 7891);

INSERT INTO “Productie” VALUES (10785, date ‘22-Nov-2019’, 15, 1020, 2, 3531);

INSERT INTO “Productie” VALUES (10435, date ‘09-Aug-2019’, 10, 400, 1, 1071);

INSERT INTO “Productie” VALUES (23452, date ‘21-Dec-2020’, 32, 4300, 2, 2131);

INSERT INTO “Productie” VALUES (34760, date ‘15-May-2021’, 40, 12000, 1, 6151);

Populare Categorie

INSERT INTO “Categorie” VALUES (“COM”, “Comedy”);

INSERT INTO “Categorie” VALUES (“HRR”, “Horror”);

INSERT INTO “Categorie” VALUES (“ROM”, “Romance”);

INSERT INTO “Categorie” VALUES (“DRM”, “Drama”);

INSERT INTO “Categorie” VALUES (“ADV”, “Adventure”);

INSERT INTO “Categorie” VALUES (“ACT”, “Action”);

Populare Limba

INSERT INTO “Limba” VALUES (“1”, “English”, “Spanish”, “Spanish”);

INSERT INTO “Limba” VALUES (“2”, “Japanese”, “English”, “Japanese”);

INSERT INTO “Limba” VALUES (“3”, “English”, “Romanian”, “Romanian”);

INSERT INTO “Limba” VALUES (“4”, “Japanese”, “English”, “English”);

INSERT INTO “Limba” VALUES (“5”, “English”, “Hungarian”, “English”);

INSERT INTO “Limba” VALUES (“6”, “French”, “English”, “French”);

Populare Artist

INSERT INTO “Artist” VALUES (“110012”, “Pitt”, “Brad”);

INSERT INTO “Artist” VALUES (“110013”, “Hanks”, “Tom”);

INSERT INTO “Artist” VALUES (“110412”, “Depp”, “Johnny”);

INSERT INTO “Artist” VALUES (“1156012”, “Jolie”, “Angelina”);

INSERT INTO “Artist” VALUES (“2110012”, “Johnson”, “Dwayne”);

INSERT INTO “Artist” VALUES (“1310012”, “Hart”, “Kevin”);

Populare Inventar

INSERT INTO “Inventar” VALUES (date ‘20-Sep-2020’, NULL, 40, 7891);

INSERT INTO “Inventar” VALUES (date ‘19-Sep-2019’, date ‘04-Oct-2019’, 40, 1071);

INSERT INTO “Inventar” VALUES (date ‘24-Nov-2019’, date ‘10-Dec-2019’, 80, 3531);

INSERT INTO “Inventar” VALUES (date ‘23-Dec-2020’, NULL, 150 , 2131);

INSERT INTO “Inventar” VALUES (date ‘12-Mar-2019’, date ‘26-Mar-2019’, 200, 1131);

INSERT INTO “Inventar” VALUES (date ‘15-May-2021’, NULL, 300, 6151);

Populare Inchiriere/Vanzare

INSERT INTO "Inchiriere" VALUES (1, timestamp '2019-03-12 12:32:00', '12347', 1131);

INSERT INTO "Vanzare" VALUES (1, timestamp '2020-09-20 10:08:44', '12350', 7891);

INSERT INTO "Inchiriere" VALUES (2, timestamp '2019-11-24 14:56:04', '12348', 3531);

INSERT INTO "Inchiriere" VALUES (3, timestamp '2019-09-19 09:00:34', '12345', 1071);

INSERT INTO "Vanzare" VALUES (2, timestamp '2020-12-23 15:15:32', '12349', 2131);

INSERT INTO "Vanzare" VALUES (3, timestamp '2021-05-15 11:42:19', '12346', 6151);

Populare Localitate

INSERT INTO “Localitate” VALUES (“CJN”, “Cluj-Napoca”, “CJ”);

INSERT INTO “Localitate” VALUES (“ABI”, “Alba Iulia”, “AB”);

INSERT INTO “Localitate” VALUES (“BUC”, “Bucuresti”, “IF”);

INSERT INTO “Localitate” VALUES (“TDA”, “Turda”, “CJ”);

INSERT INTO “Localitate” VALUES (“BM”, “Baia Mare”, “MM”);

INSERT INTO “Localitate” VALUES (“STM “, “Satu Mare”, “SM”);

Populare Judet

INSERT INTO “Judet” VALUES (“AB”, “Alba”);

INSERT INTO “Judet” VALUES (“MM”, “Maramures”);

INSERT INTO “Judet” VALUES (“IF”, “Ilfov”);

INSERT INTO “Judet” VALUES (“CJ”, “Cluj”);

INSERT INTO “Judet” VALUES (“SM”, “Satu Mare”);

Modificari de structura

1. Am modificat denumirea unei coloane din tabelul Inventar

ALTER TABLE "Inventar"

RENAME COLUMN "Cod\_pds" TO CodPds;

A screenshot of a computer

Description automatically generated with medium confidence A screenshot of a computer

Description automatically generated with medium confidence

1. Am modificat coloana CodPds din tabelul Inventar sa nu poata fi NULL

ALTER TABLE "Inventar"

MODIFY CodPds NOT NULL;

A screenshot of a computer

Description automatically generated with medium confidence A screenshot of a computer

Description automatically generated with medium confidence

1. Am modificat precizia coloanei CodPds din tabelul Inventar

ALTER TABLE "Inventar"

MODIFY CodPds number(10);

A screenshot of a computer

Description automatically generated with medium confidence Table

Description automatically generated

1. Am modificat tipul de data din coloanal DataOra din tabelul Vanzare din date in timestamp

ALTER TABLE "Vanzare"

MODIFY DataOra timestamp;

A screenshot of a computer

Description automatically generated with medium confidence A screenshot of a computer

Description automatically generated with medium confidence

1. Am adaugat o coloana noua la tabelul Categorie numita cod

ALTER TABLE "Categorie"

ADD cod number(2);

Graphical user interface

Description automatically generated Graphical user interface

Description automatically generated with medium confidence

1. Am sters noua coloanal cod din tabelul Categorie

ALTER TABLE "Categorie"

DROP COLUMN cod;

Graphical user interface

Description automatically generated with medium confidence Graphical user interface, application

Description automatically generated

Modificari de continut

1. Se modifica pretul produselor cu codul mai mic de 3000 la 300 de lei in tabelul Inventar

UPDATE "Inventar"

SET pret=300

WHERE CodPds < 3000 ;

Table

Description automatically generated Table

Description automatically generated

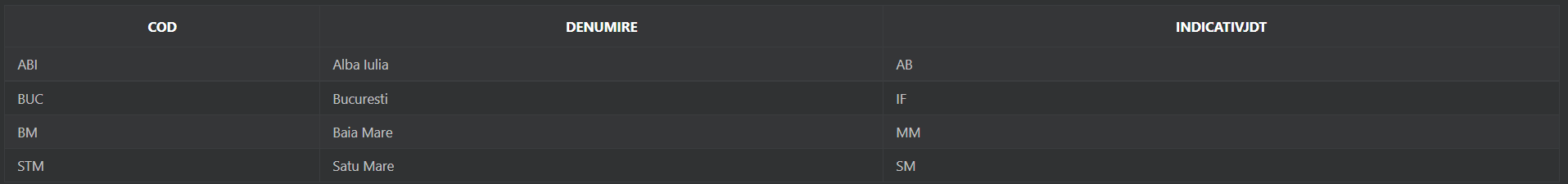
1. Se sterg localitatile din judetul Cluj

DELETE FROM "Localitate"

WHERE IndicativJdt='CJ';

Graphical user interface, application, Teams

Description automatically generated



Creare vederi

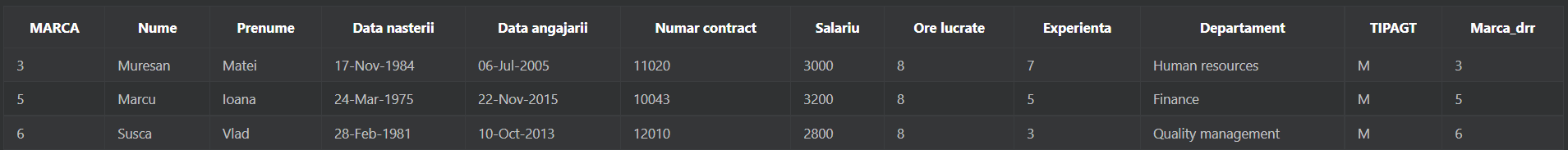
1. Sa se realizeze o vedere cu angajatii care sunt manageri

CREATE VIEW Manageri AS

SELECT \*

FROM "Angajat"

WHERE TipAgt = 'M';



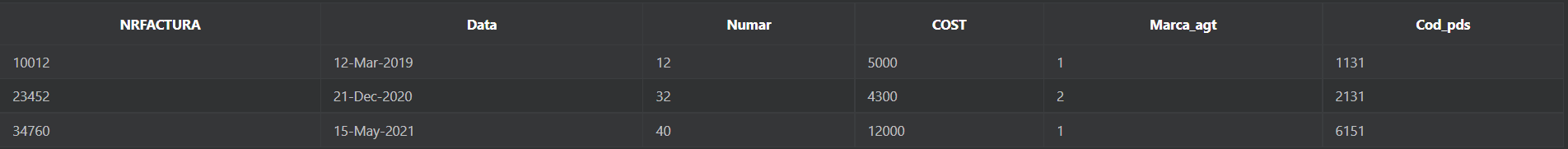
1. Sa se realizeze o vedere cu produsele care au depasit costul de 3000 de lei la productie.

CREATE VIEW CostProductie AS

SELECT \*

FROM "Productie"

WHERE Cost > 3000;



1. Sa se realizeze o vedere cu angajatii care castiga mai mult de 15 lei pe ora

CREATE VIEW SalariuOra AS

SELECT \*

FROM "Angajat"

WHERE Salariu/(OreLucrate\*20) > 15;



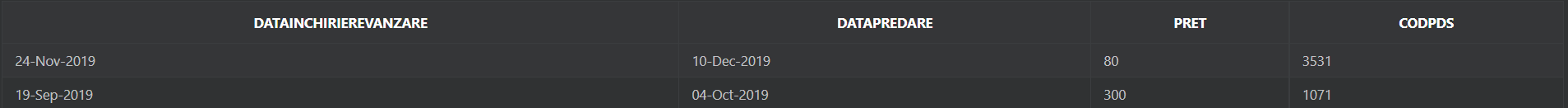
1. Sa se realizeze o vedere cu clientii care au inchiriat un produs pentru mai mult de 14 zile

CREATE VIEW TermenExpirat AS

SELECT \*

FROM "Inventar"

WHERE DataPredare > (DataInchiriereVanzare + 14);



Creare interogari

1. Afisarea angajatilor care lucreaza la 8 ore care au salariul mai mare decat salariul altui angajat

SELECT Nume, Prenume, OreLucrate, MAX(Salariu)

FROM "Angajat"

GROUP BY OreLucrate, Nume, Prenume

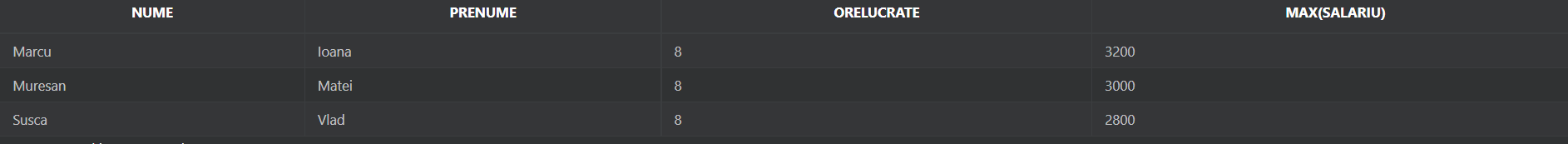
HAVING MAX(Salariu) > ANY

(SELECT Salariu

FROM "Angajat"

WHERE OreLucrate=8)

ORDER BY Nume;



1. Afisarea angajatilor care au salariul mai mic sau egal cu salariul mediu calculat pe fiecare post (casier ‘C’, manager ‘M’)

SELECT ang.nume, ang.prenume, ang.Tip\_agt, ang.salariu

FROM "Angajat" ang

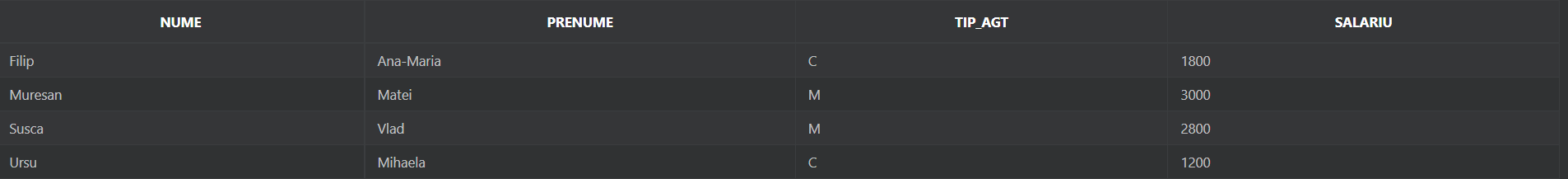
WHERE ang.salariu <=

(SELECT AVG(angt.salariu)

FROM "Angajat" angt

WHERE ang.Tip\_agt=angt.Tip\_agt)

ORDER BY ang.nume;



1. Afisarea produselor cu datele de fabricatie, numarul facturii si pretul de vanzare/inchiriere

SELECT Produs.Denumire, Productie.NrFactura, Productie.Data, Inventar.Pret

FROM ((Produs

INNER JOIN Productie ON Produs.Cod = Productie.Cod\_pds)

INNER JOIN Inventar ON Produs.Cod = Inventar.CodPds)

ORDER BY Data;

Graphical user interface, application

Description automatically generated

1. Afisarea produselor si a artstilor respectivi

SELECT Produs.Denumire, Produs.Tip\_pds, Artist.Nume, Artist.Prenume

FROM Produs

LEFT JOIN Artist

ON Produs.ID\_att = Artist.ID

ORDER BY Denumire;

Graphical user interface, application, Teams

Description automatically generated

1. Afisarea clientilor, a produselor cumparate/inchiriate de fiecare client, a localitatilor de provenienta si a situatiei produselor (vandute/inchiriate)

SELECT Client.Nume, Client.Prenume, Produs.Denumire, Produs.Tip\_pds, Localitate.Denumire,

CASE

WHEN Inventar.DataPredare IS NULL THEN 'Vandut'

ELSE 'Inchiriat'

END AS Situatie

FROM (((Client

INNER JOIN Produs ON Client.Cod\_pds = Produs.Cod)

INNER JOIN Localitate ON Client.CodLce = Localitate.Cod)

INNER JOIN Inventar ON Client.Cod\_pds=Inventar.CodPds)

ORDER BY Nume;

A screenshot of a computer screen

Description automatically generated with medium confidence

1. Afisarea angajatilor care au receptionat marfa livrata, datile in care a fost receptionata si daca a fost receptionata de angajati cu sau fara experienta

SELECT Angajat.Nume, Angajat.Prenume, Productie.Data, Productie.Cost,

CASE

WHEN Angajat.Experienta>0 THEN 'Marfa a fost receptionata de un angajat cu experienta'

ELSE 'Marfa a fost receptionata de un angajat fara experienta'

END AS Situatie

FROM (Angajat

INNER JOIN Productie ON Angajat.Marca = Productie.Marca\_agt)

ORDER BY Data;

Graphical user interface

Description automatically generated

1. Catalog cu toate genurile, limbile de origine si artistii produselor valabile in magazine

SELECT Gen AS Catalog FROM Categorie

UNION ALL

SELECT LimbaOrigine FROM Limba

UNION ALL

SELECT Nume FROM Artist;

Graphical user interface

Description automatically generated with medium confidence

1. Afisarea clientilor si a datelor in care acestia au cumparat/inchiriat un produs

SELECT Client.Nume, Client.Prenume, Inventar.DataInchiriereVanzare AS Data,

CASE

WHEN Inventar.DataPredare IS NULL THEN 'Vandut'

ELSE 'Inchiriat'

END AS Situatie

FROM (Client

INNER JOIN Inventar ON Client.Cod\_pds=Inventar.CodPds)

ORDER BY Data;

Graphical user interface, text, application

Description automatically generated

1. Afisarea clientilor cu angajatii in functie de probabilitatea ca acestia sa fie pe tura

SELECT Client.Nume AS Nume\_Client, Client.Prenume AS Prenume\_Client, Angajat.Nume AS Nume\_Angajat, Angajat.Prenume AS Prenume\_Angajat,

CASE

WHEN Angajat.OreLucrate=8 THEN CONCAT(round((8/14)\*100), '% probabilitate de a vinde produsul')

WHEN Angajat.OreLucrate=6 THEN CONCAT(round((6/14)\*100), '% probabilitate de a vinde produsul')

ELSE CONCAT(round((4/14)\*100), '% probabilitate de a vinde produsul')

END AS Probabilitate

FROM ((Productie

INNER JOIN Angajat ON Angajat.Marca = Productie.Marca\_agt)

INNER JOIN Client ON Client.Cod\_pds = Productie.Cod\_pds)

ORDER BY Probabilitate DESC;

Graphical user interface, application, Teams

Description automatically generated

1. Afisarea produselor cu genul si limba acestora

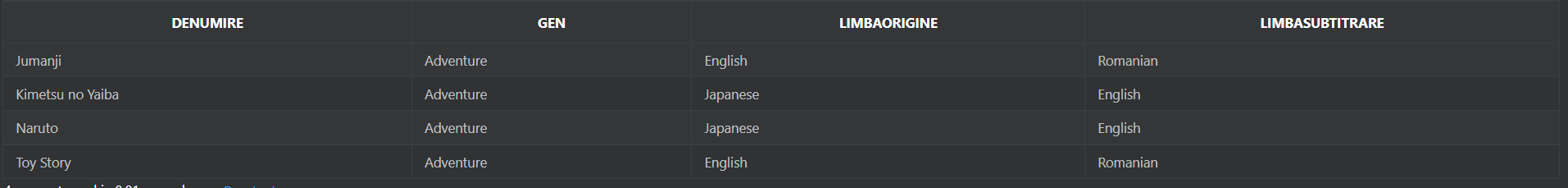
SELECT Produs.Denumire, Categorie.Gen, Limba.LimbaOrigine, Limba.LimbaSubtitrare

FROM ((Produs

INNER JOIN Categorie ON Categorie.Cod = Produs.Cod\_cte)

INNER JOIN Limba ON Limba.Cod = Produs.Cod\_lba)

ORDER BY Denumire;



1. Afisarea clientilor din aceasi localitate

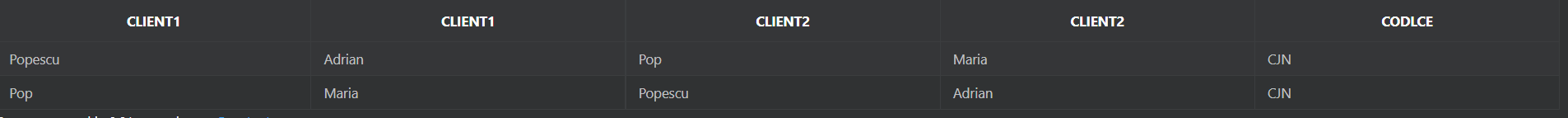
SELECT A.Nume AS Client1, A.Prenume AS Client1, B.Nume AS Client2, B.Prenume AS Client2, A.CodLce

FROM Client A, Client B

WHERE A.ID <> B.ID

AND A.CodLce = B.CodLce

ORDER BY A.CodLce;



1. Afisarea angajatilor cu varsta mai mica decat cel mai in varsta angajat

SELECT a.Nume, a.Prenume, a.DataNasterii

FROM Angajat a

WHERE a.DataNasterii>

(SELECT MIN(i.DataNasterii)

FROM Angajat i);

A picture containing background pattern

Description automatically generated

1. Afisarea managerilor carora le incepe numele cu litera M

SELECT Nume, Prenume, Departament

FROM Angajat

WHERE (Angajat.Tip\_agt = 'M' AND Nume LIKE 'M%');

