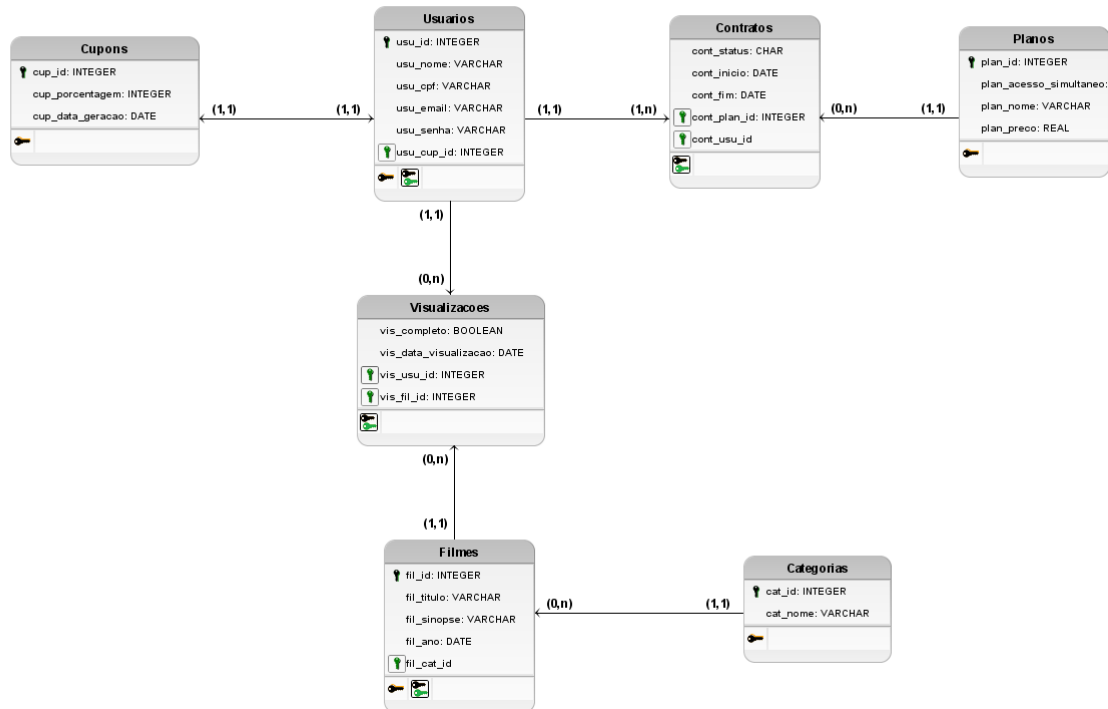


FACULDADE: Senai  
 DATA: 14/10/20  
 NOME: Marcos Paulo Pereira da Paixão  
 DISCIPLINA: Modelagem de Banco de Dados

1.a



1.b

```

CREATE TABLE cupons (
    cup_id SERIAL NOT NULL,
    cup_porcentagem FLOAT
    CONSTRAINT porcentagem_menor CHECK (cup_porcentagem > 0) NOT NULL,
    cup_data_geracao DATE NOT NULL,
    PRIMARY KEY(cup_id)
);
  
```

```

CREATE TABLE usuarios (
    usu_id SERIAL NOT NULL,
    usu_nome VARCHAR(50) NOT NULL,
    usu_cpf VARCHAR(15) NOT NULL,
    usu_email VARCHAR(50) NOT NULL,
    usu_senha VARCHAR(20) NOT NULL,
    usu_cup_id INTEGER NOT NULL,
    PRIMARY KEY(usu_id),
    FOREIGN KEY(usu_cup_id) REFERENCES cupons (cup_id)
);
  
```

```

CREATE TABLE planos (
    plan_id SERIAL NOT NULL,
    plan_acesso_simultaneo INTEGER
    CONSTRAINT acesso_simultaneo_invalido CHECK(plan_acesso_simultaneo IN(1,2,3,4)),
    plan_nome VARCHAR(50) NOT NULL,
    plan_preco REAL CONSTRAINT preco_maior CHECK(plan_preco > 0),
    PRIMARY KEY(plan_id)
);

CREATE TABLE contratos (
    cont_status CHAR(1) NOT NULL
    CONSTRAINT status_invalido CHECK(cont_status IN('A','I','S')), --ATIVO, INATIVO, SUSPENSO
    cont_inicio DATE NOT NULL,
    cont_fim DATE NOT NULL,
    cont_plan_id INTEGER NOT NULL,
    cont_usu_id INTEGER NOT NULL,
    FOREIGN KEY (cont_plan_id) REFERENCES planos(plan_id),
    FOREIGN KEY (cont_usu_id) REFERENCES usuarios(usu_id)
);

CREATE TABLE categorias (
    cat_id SERIAL NOT NULL,
    cat_nome VARCHAR(50),
    PRIMARY KEY(cat_id)
);

CREATE TABLE filmes (
    fil_id SERIAL NOT NULL,
    fil_titulo VARCHAR(50) NOT NULL,
    fil_sinopse VARCHAR(250) NOT NULL,
    fil_ano NUMERIC(4) NOT NULL,
    fil_cat_id INTEGER NOT NULL,
    PRIMARY KEY(fil_id),
    FOREIGN KEY(fil_cat_id) REFERENCES categorias(cat_id)
);

```

## 2.a

```

SELECT u.usu_nome, cp.cup_porcentagem, p.plan_preco ,
to_char(((p.plan_preco/100) * (100 - cp.cup_porcentagem)), '09D99') AS valor_desconto
FROM usuarios u
JOIN contratos ct ON ct.cont_usu_id = u.usu_id
JOIN planos p ON p.plan_id = ct.cont_plan_id
JOIN cupons cp ON cp.cup_id = u.usu_cup_id

```

## 2.b

```

SELECT * FROM filmes f
JOIN visualizacoes v ON v.vis_fil_id = f.fil_id
JOIN usuarios u ON v.vis_usu_id = u.usu_id
WHERE v.vis_completo = 'true' AND u.usu_cpf = '004.054.555-77'

```

2.c

```
SELECT * FROM filmes f
JOIN categorias c ON c.cat_id = f.fil_cat_id
WHERE f.fil_titulo LIKE 'A%' AND f.fil_ano = 2020;
```

2.d

```
SELECT u.usu_nome,p.plan_nome from usuarios u
JOIN contratos c ON c.cont_usu_id = u.usu_id
JOIN planos p ON c.cont_plan_id = p.plan_id
JOIN visualizacoes v ON v.vis_usu_id = u.usu_id
JOIN filmes f on f.fil_id = v.vis_fil_id
WHERE f.fil_titulo = 'Avengers – Endgame'
```

- 1 = A
- 2 = B
- 3 = C
- 4 = A
- 5 = E
- 6 = D
- 7 = C
- 8 = CERTO
- 9 = ERRADO
- 10 = ERRADO
- 11 = B
- 12 = A
- 13 = D
- 14 = B
- 15 = D
- 16 = A