



Perfumaria Orquídea

Apresentação Final

Base de Dados

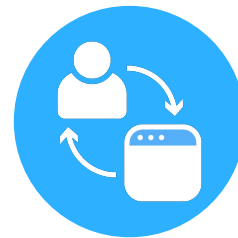
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Introdução



O porquê?

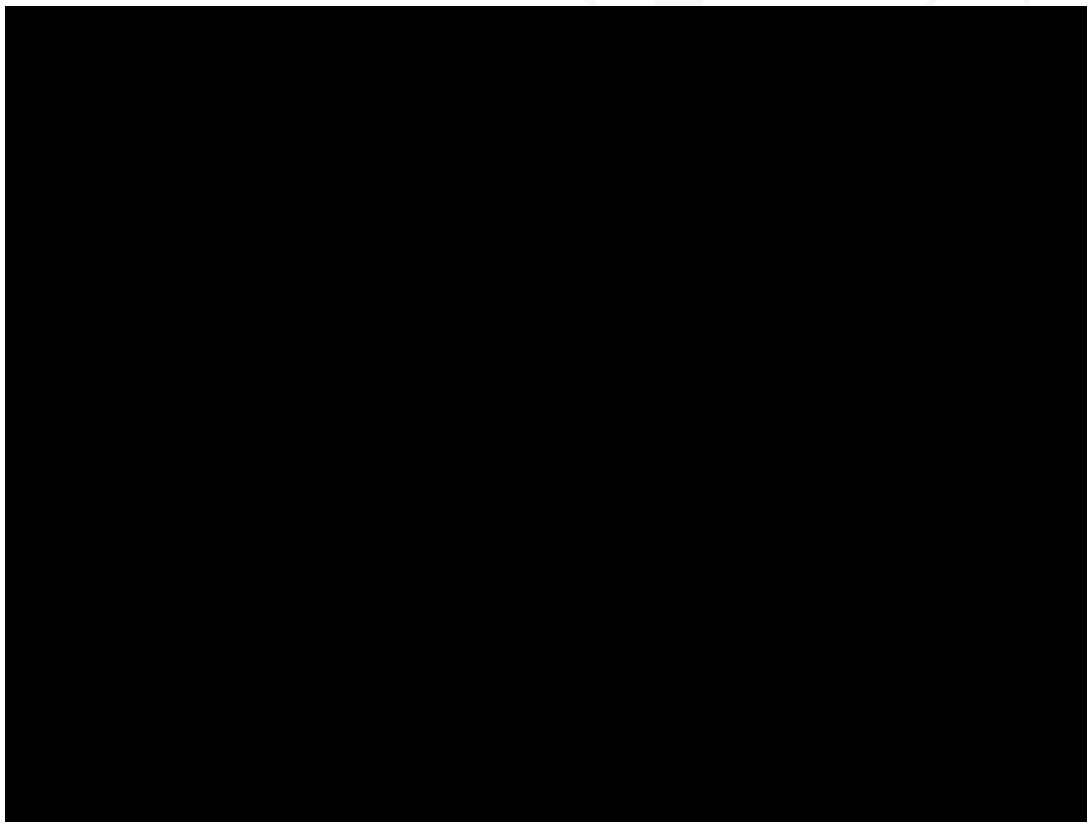


Interesse Pessoal

Funcionalidades



Demo



Stored Procedures

```
1 DROP PROCEDURE perf.getProductFilters;
2 GO
3
4 CREATE PROCEDURE perf.getProductFilters
5     @deleted BIT = NULL,
6     @nome VARCHAR(30) = NULL,
7     @marca VARCHAR(30) = NULL,
8     @categoria VARCHAR(30) = NULL,
9     @destinatario VARCHAR(10) = NULL,
10    @orderby VARCHAR(50) = NULL,
11    @ordem VARCHAR(30) = NULL
12 AS
13 BEGIN
14     SET NOCOUNT ON
15     IF (@ordem = 'Ascendente')
16     BEGIN
17         SELECT id, preco, familiaolfativa, categoria, nome, marca, linha, tamanho, descricao, imagem, stock, destinatario, deleted
18         FROM Perfumaria.perf.produto
19         WHERE stock > 0 AND
20             deleted = 0 AND
21             nome LIKE ('%'+ISNULL(@nome, nome)+'%') AND
22             marca = ISNULL(@marca, marca) AND
23             categoria = ISNULL(@categoria, categoria)
24         ORDER BY CASE WHEN @orderby='Nome' THEN nome END,
25             CASE WHEN @orderby='Marca' THEN marca END,
26             CASE WHEN @orderby='Categoria' THEN categoria END,
27             CASE WHEN @orderby='Preço' THEN preco END
28     END
29
30     ELSE IF (@ordem = 'Descendente')
31     BEGIN
32         SELECT id, preco, familiaolfativa, categoria, nome, marca, linha, tamanho, descricao, imagem, stock, destinatario, deleted
33         FROM Perfumaria.perf.produto
34         WHERE stock > 0 AND
35             deleted = 0 AND
36             nome LIKE ('%'+ISNULL(@nome, nome)+'%') AND
37             marca = ISNULL(@marca, marca) AND
38             categoria = ISNULL(@categoria, categoria)
39         ORDER BY CASE WHEN @orderby='Nome' THEN nome END DESC,
40             CASE WHEN @orderby='Marca' THEN marca END DESC,
41             CASE WHEN @orderby='Categoria' THEN categoria END DESC,
42             CASE WHEN @orderby='Preço' THEN preco END DESC
43     END
44
45 END
46 GO
```

```
1 DROP PROCEDURE perf.Login;
2 GO
3
4 CREATE PROCEDURE perf.Login
5     @email VARCHAR(255),
6     @password VARCHAR(25),
7     @responseMessage VARCHAR(250)='', OUTPUT,
8     @type BIT=0 OUTPUT
9 AS
10 BEGIN
11     SET NOCOUNT ON
12
13     IF EXISTS (SELECT TOP 1 email FROM Perfumaria.perf.utilizador WHERE email = @email)
14     BEGIN
15         SET @email=(SELECT email FROM Perfumaria.perf.utilizador
16             WHERE email=@email AND pw=HASHBYTES('SHA2_512', @password))
17
18         IF (@email IS NULL)
19         BEGIN
20             SET @type=0
21             SET @responseMessage='Incorrect password'
22         END
23     ELSE
24     BEGIN
25         SET @responseMessage='User successfully logged in'
26         IF EXISTS (SELECT TOP 1 email FROM Perfumaria.perf.funcionario WHERE email = @email)
27             SET @type = 1
28         ELSE
29             SET @type = 0
30     END
31 END
32
33 ELSE
34 BEGIN
35     SET @type=0
36     SET @responseMessage='Invalid login'
37 END
38
39 END
40 GO
41
```

Stored Procedures

```
1 DROP PROCEDURE perf.addMarc;
2 GO
3
4
5 CREATE PROCEDURE perf.addMarc
6     @cliente_email VARCHAR(255),
7     @servico_id INT,
8     @funcionario_email VARCHAR(255),
9     @dataMarc SMALLDATETIME,
10    @responseMessage VARCHAR(250) = 'Erro! Tente noutra hora.' OUTPUT
11 AS
12 BEGIN
13     SET NOCOUNT ON
14     BEGIN TRY
15         DECLARE @duracao INT
16         SELECT @duracao = duracao_media FROM Perfumaria.perf.funcionario_faz_servico WHERE funcionario_email=@funcionario_email AND deleted = 0 AND servico_id = @servico_id
17         IF (@duracao IS NOT NULL AND @dataMarc > GETDATE())
18             BEGIN
19                 IF (EXISTS(SELECT 1 FROM Perfumaria.perf.marcacao WHERE (dataMarc BETWEEN @dataMarc AND DATEADD(mi, @duracao, @dataMarc)) AND funcionario_email=@funcionario_email AND deleted=0)
20                     OR EXISTS(SELECT 1 FROM Perfumaria.perf.marcacao WHERE dataMarc BETWEEN @dataMarc AND DATEADD(mi, @duracao, @dataMarc) AND cliente_email=@cliente_email AND deleted=0))
21                     SET @responseMessage = 'Hora não disponível!'
22                 ELSE
23                     BEGIN
24                         INSERT INTO Perfumaria.perf.marcacao
25                         (cliente_email, servico_id, funcionario_email, dataMarc)
26                         VALUES(@cliente_email, @servico_id, @funcionario_email, @dataMarc)
27
28                         SET @responseMessage='Marcação efetuado com sucesso!'
29                     END
30             END
31     END TRY
32     BEGIN CATCH
33         SET @responseMessage='Failure'
34     END CATCH
35
36
37 END
38 GO
```

UDF

```
1 DROP FUNCTION perf.clientFutureMarc;
2 GO
3
4 CREATE FUNCTION perf.clientFutureMarc (@email VARCHAR(255)) RETURNS TABLE
5 AS
6     RETURN (SELECT dataMarc, tipo, preco, fname AS NomeFuncionario
7             FROM ((Perfumaria.perf.marcacao JOIN Perfumaria.perf.servico ON servico_id=servico.id) JOIN Perfumaria.perf.utilizador ON funcionario_email = email)
8             WHERE (cliente_email=@email AND DATEDIFF(mi, GETDATE(), dataMarc) > 0)
9             ORDER BY dataMarc ASC OFFSET 0 ROWS)
10 GO
11
```

```
1 DROP FUNCTION perf.funcSellHistory;
2 GO
3
4 CREATE FUNCTION perf.funcSellHistory (@email VARCHAR(255)) RETURNS TABLE
5 AS
6     RETURN (SELECT datacompra, clienteemail, SUM(unidades * preco) as total, compranumero
7             FROM ((Perfumaria.perf.compra_tem_produto JOIN Perfumaria.perf.compra ON compranumero=numero) JOIN Perfumaria.perf.produto ON produtoid=id)
8             JOIN Perfumaria.perf.compra_presencial ON compra_presencial.numero=compra.numero
9             WHERE (funcemail=@email)
10            GROUP BY datacompra, clienteemail, compranumero
11            ORDER BY datacompra DESC OFFSET 0 ROWS)
12 GO
```

Triggers

```
1 DROP TRIGGER perf.useCuponTrigger;
2 GO
3
4 CREATE TRIGGER perf.useCuponTrigger ON perf.[cliente_usa_cupao]
5 AFTER INSERT
6 AS
7 BEGIN
8     SET NOCOUNT ON;
9     DECLARE @cupao as CHAR(10);
10    DECLARE @email as VARCHAR(255);
11    DECLARE @pontos as INT;
12    SELECT @cupao = cupao_id, @email = cliente_email FROM inserted;
13    SELECT @pontos = pontos_atribuidos FROM Perfumaria.perf.cupao WHERE id = @cupao;
14    BEGIN TRY
15        UPDATE perf.cliente
16        SET pontos += @pontos
17        WHERE email = @email
18    END TRY
19    BEGIN CATCH
20        raiserror ('Não foi possível atribuir os pontos', 16, 1);
21        ROLLBACK TRAN
22    END CATCH
23
24 END
25 GO
```

```
1 DROP TRIGGER perf.changeProductTrigger;
2 GO
3
4 CREATE TRIGGER perf.changeProductTrigger ON perf.[produto]
5 AFTER INSERT, UPDATE
6 AS
7 BEGIN
8     SET NOCOUNT ON;
9     DECLARE @stock as INT;
10    DECLARE @produtoid as INT;
11    SELECT @stock = stock, @produtoid = id FROM inserted;
12    IF (@stock < 0)
13    BEGIN
14        RAISERROR('Stock inválido.', 16, 1);
15        ROLLBACK TRAN;
16    END
17    IF (@stock = 0)
18    BEGIN
19        BEGIN TRY
20            UPDATE Perfumaria.perf.produto
21            SET deleted = 1
22            WHERE id = @produtoid
23        END TRY
24        BEGIN CATCH
25            raiserror ('Não foi possível mudar o produto.', 16, 1);
26            ROLLBACK TRAN
27        END CATCH
28    END
29 END
30 GO
```


Transações

```
1 DROP PROCEDURE perf.addNewFunc;
2 GO
3
4 CREATE PROCEDURE perf.addNewFunc
5     @email VARCHAR(255),
6     @contribuinte CHAR(9),
7     @fname VARCHAR(20),
8     @lname VARCHAR(20),
9     @pw VARCHAR(25),
10    @sexo BIT,
11    @dataNasc DATETIME,
12    @foto VARCHAR(100),
13    @contacto_default_id INT = NULL,
14    @administrator TINYINT,
15    @salario INT,
16    @emailFunc VARCHAR(255),
17    @responseMessage NVARCHAR(250) OUTPUT
18 AS
19 BEGIN
20     BEGIN TRANSACTION
21     SET NOCOUNT ON
22     BEGIN TRY
23         IF EXISTS(SELECT email FROM Perfumaria.perf.funcionario WHERE email=@emailFunc AND administrator=2)
24             BEGIN
25                 INSERT INTO Perfumaria.perf.utilizador
26                     (email, contribuinte, fname, lname, pw, sexo, dataNasc, foto, contacto_default_id)
27                 VALUES(@email, @contribuinte, @fname, @lname, HASHBYTES('SHA2_512', @pw), @sexo, @dataNasc, @foto, @contacto_default_id)
28
29                 INSERT INTO Perfumaria.perf.funcionario
30                     (email, administrator, salario)
31                 VALUES(@email, @administrator, @salario)
32
33                 SET @responseMessage='Success'
34             END
35         ELSE
36             SET @responseMessage='Permission denied'
37         COMMIT TRANSACTION
38     END TRY
39     BEGIN CATCH
40         SET @responseMessage='Failed'
41         ROLLBACK
42     END CATCH
43
44 END
45 GO
```

Índices

```
1 DROP INDEX idx_produto on Perfumaria.perf.produto;  
2 GO  
3  
4 CREATE INDEX idx_produto  
5 ON Perfumaria.perf.produto (preco, marca, nome, categoria);  
6 GO
```