

**UNIVERSIDAD AUTÓNOMA DE CHIHUAHUA**

**FACULTAD DE INGENIERÍA**

**BASES DE DATOS AVANZADAS**



## **2.44 PROYECTO 1A. EVALUACIÓN**

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**CHIHUAHUA, CHIHUAHUA A 30 DE SEPTIEMBRE DEL 2025.**

## --Obtener todas las categorías

```
CREATE OR REPLACE FUNCTION get_all_categories
RETURN SYS_REFCURSOR
IS
    v_cursor SYS_REFCURSOR;
BEGIN
    OPEN v_cursor FOR
        SELECT cat_name
        FROM Categories
        ORDER BY cat_name;
    RETURN v_cursor;
END;
```



## --Tags de un articulo

```
CREATE OR REPLACE FUNCTION get_tags_by_article(p_article_id IN INTEGER)
RETURN SYS_REFCURSOR
```

IS

```
v_cursor SYS_REFCURSOR;  
  
BEGIN  
  
    OPEN v_cursor FOR  
  
        SELECT tag_name  
  
        FROM Article_tag  
  
        WHERE article_id = p_article_id  
  
        ORDER BY tag_name;  
  
  
    RETURN v_cursor;  
  
END;
```

The screenshot shows a web browser window displaying a blog post. The title of the post is "F1: The Movie". The author is listed as "Autor: Fer". Below the title, there is a section titled "Contenido:" containing a short summary of the story. Under "Categorías:", there are two buttons: "Accion" and "Ficcion", with "Accion" being highlighted. Under "Tags:", there are three buttons: "Crecimiento Personal", "Formula 1", and "Trabajo en Equipo". A note below the summary states "No hay comentarios aún." (There are no comments yet.) There is a text input field for adding a comment, labeled "Agregar comentario:", and a green "Comentar" button.

--users

--*Verificar contraseña y usuario*

```
CREATE OR REPLACE FUNCTION get_user_name(p_email IN VARCHAR2, p_pass IN VARCHAR2)
```

```
RETURN VARCHAR2
```

IS

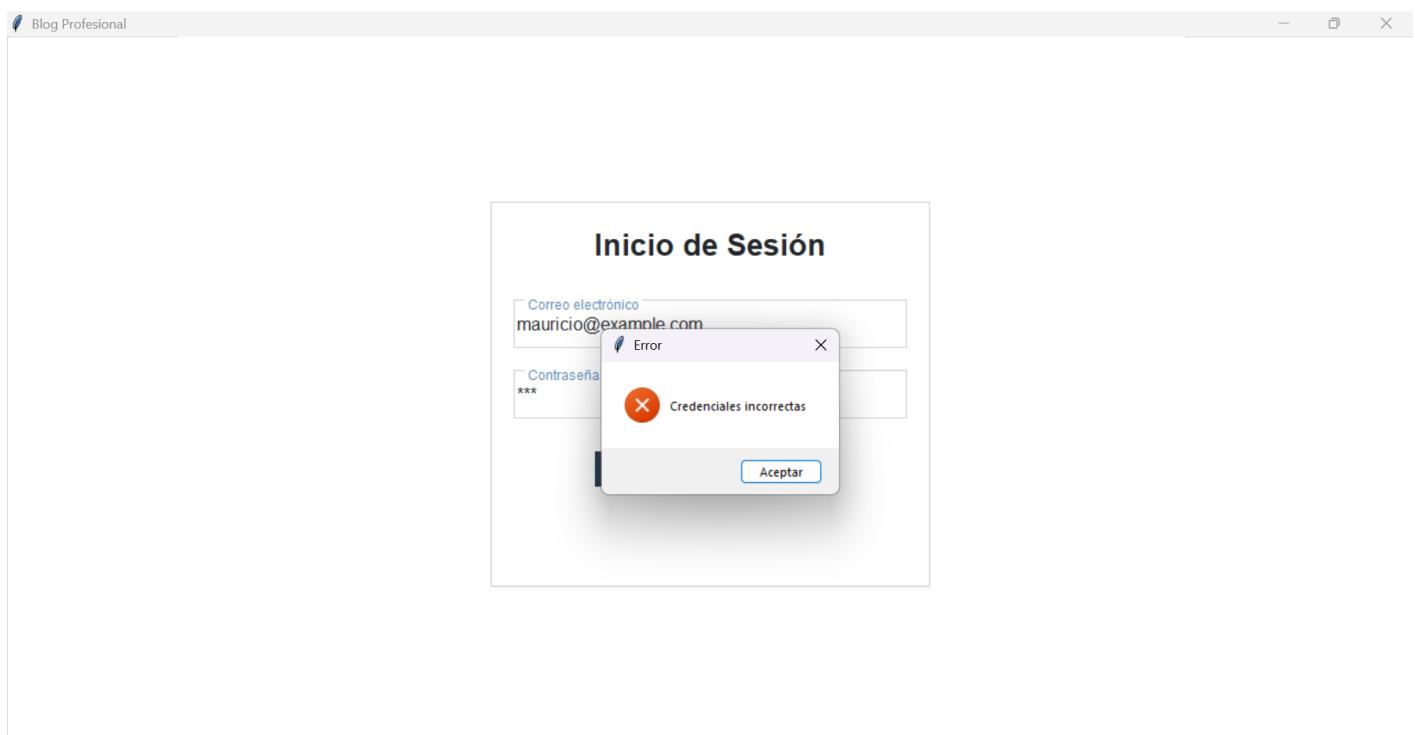
```

v_name_user VARCHAR2(30);

BEGIN
    SELECT NAME_USER
    INTO v_name_user
    FROM T_USERS
    WHERE EMAIL = p_email AND PASS = p_pass;

    RETURN v_name_user;
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        RETURN NULL;
    WHEN OTHERS THEN
        RETURN NULL;
END;

```



--*Función de apoyo para cambiar contraseña*

```
create or replace FUNCTION get_user_name2(p_email IN VARCHAR2)
```

```

RETURN VARCHAR2
IS
  v_name_user VARCHAR2(30);
BEGIN
  SELECT NAME_USER
  INTO v_name_user
  FROM T_USERS
  WHERE EMAIL = p_email;

  RETURN v_name_user;
EXCEPTION
  WHEN NO_DATA_FOUND THEN
    RETURN NULL;
  WHEN OTHERS THEN
    RETURN NULL;
END;

```

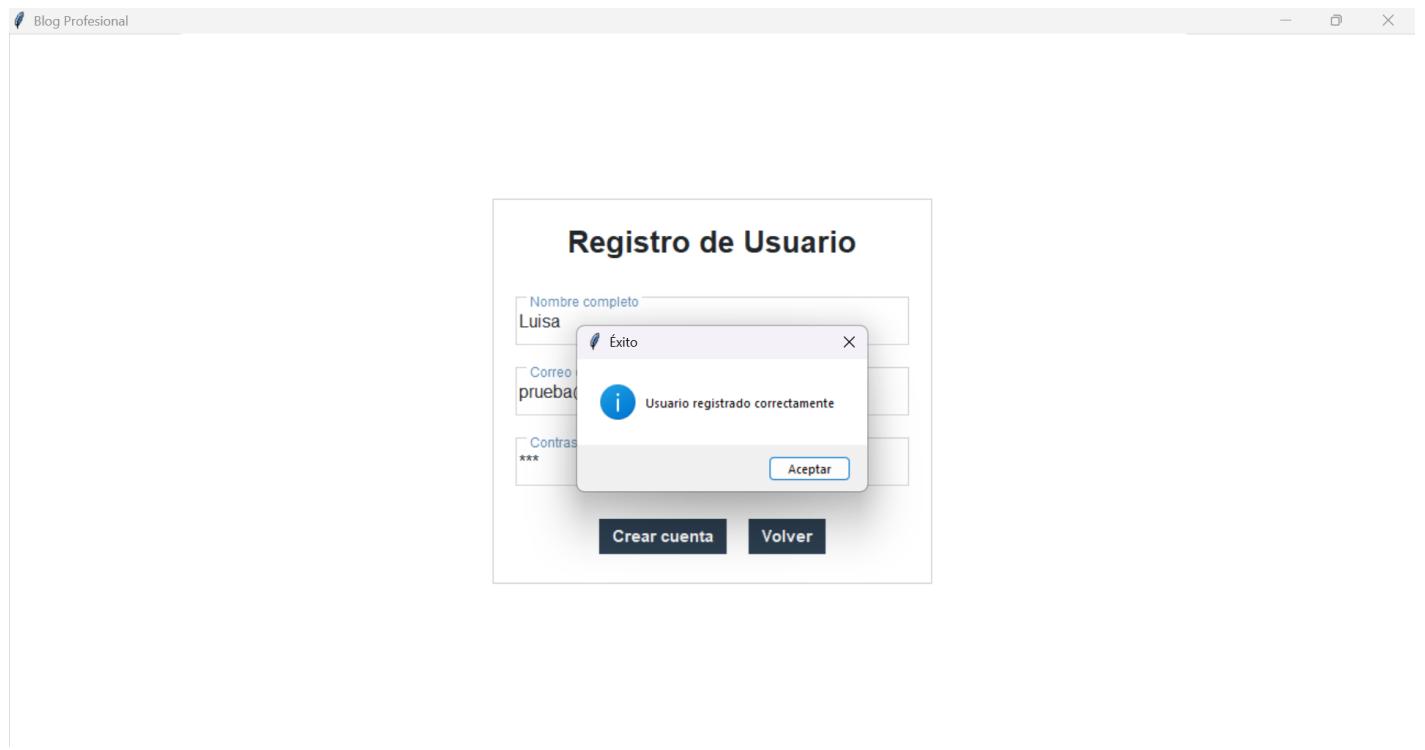
### *--Agregar usuario*

```

CREATE OR REPLACE PROCEDURE add_user (
  p_name_user IN VARCHAR2,
  p_email    IN VARCHAR2,
  p_pass      IN VARCHAR
) AS
BEGIN
  INSERT INTO T_Users (name_user, email, pass )
  VALUES (p_name_user, p_email, p_pass);
EXCEPTION
  WHEN DUP_VAL_ON_INDEX THEN

```

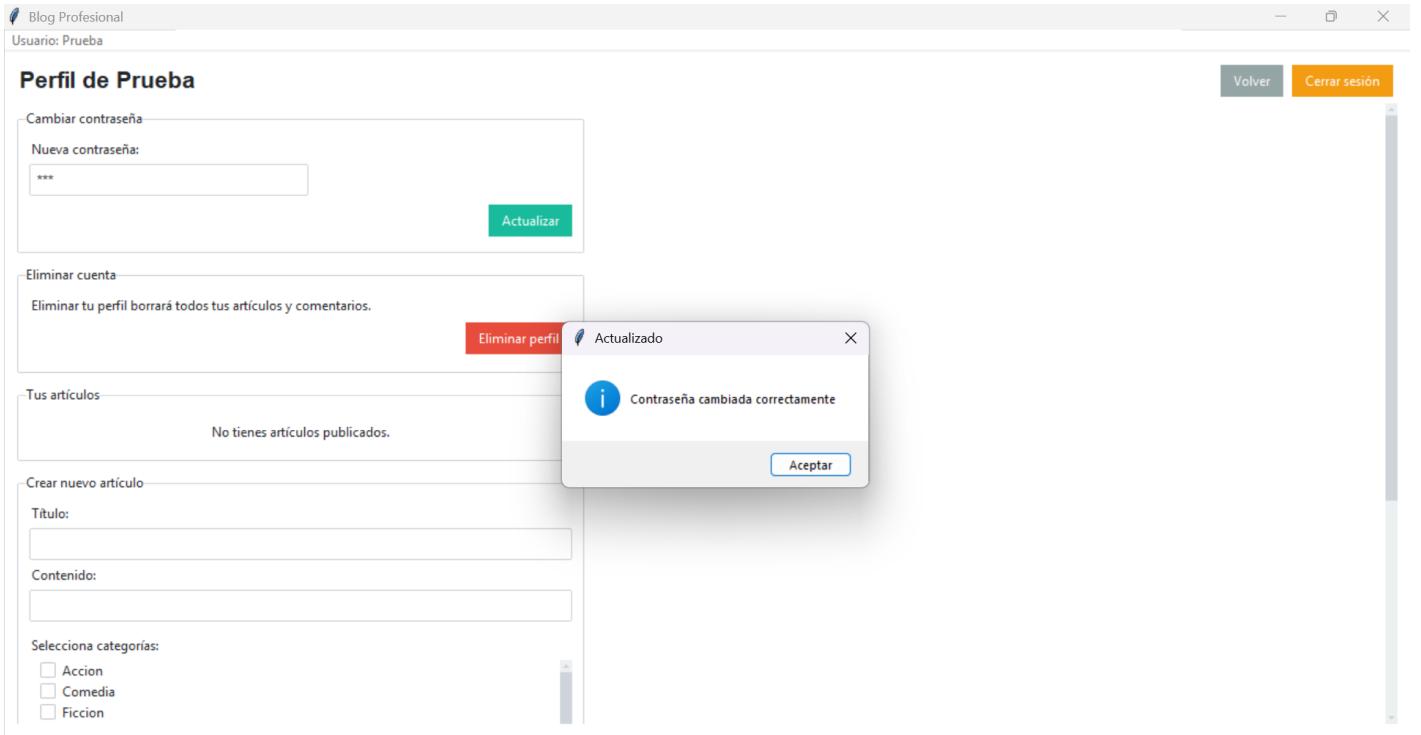
```
RAISE_APPLICATION_ERROR(-20101, 'El usuario ya existe.');?>
END;
```



## --Actualizar contraseña

```
CREATE OR REPLACE PROCEDURE update_user_password (
    p_name_user IN VARCHAR2,
    p_pass IN VARCHAR2
) AS
BEGIN
    UPDATE T_Users
    SET pass = p_pass
    WHERE name_user = p_name_user;

    IF SQL%ROWCOUNT = 0 THEN
        RAISE_APPLICATION_ERROR(-20104, 'Usuario no encontrado.');
    END IF;
END;
```



## -- Obtener email

```
CREATE OR REPLACE FUNCTION get_user_email(p_name_user IN VARCHAR2)
```

```
RETURN VARCHAR2
```

```
IS
```

```
    v_email VARCHAR2(30);
```

```
BEGIN
```

```
    SELECT email
```

```
        INTO v_email
```

```
        FROM T_Users
```

```
        WHERE name_user = p_name_user;
```

```
    RETURN v_email;
```

```
EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
        RETURN NULL;
```

```
    WHEN OTHERS THEN
```

```
    RETURN NULL;
```

```
END;
```

## --*Eliminar usuario*

```
CREATE OR REPLACE PROCEDURE delete_user (
```

```
    p_name_user IN VARCHAR2
```

```
) AS
```

```
    v_user_exists NUMBER;
```

```
BEGIN
```

```
    SELECT COUNT(*) INTO v_user_exists
```

```
    FROM T_Users
```

```
    WHERE name_user = p_name_user;
```

```
    IF v_user_exists = 0 THEN
```

```
        RAISE_APPLICATION_ERROR(-20103, 'Usuario no encontrado.');
```

```
    END IF;
```

```
    DELETE FROM Comments
```

```
    WHERE article_id IN (
```

```
        SELECT article_id FROM Articles WHERE name_user = p_name_user
```

```
    );
```

```
    DELETE FROM Comments
```

```
    WHERE name_user = p_name_user;
```

```
    DELETE FROM Article_tag
```

```
    WHERE article_id IN (
```

```
SELECT article_id FROM Articles WHERE name_user = p_name_user  
);
```

```
DELETE FROM Article_Categorie  
WHERE article_id IN (  
    SELECT article_id FROM Articles WHERE name_user = p_name_user  
);
```

```
DELETE FROM Articles  
WHERE name_user = p_name_user;
```

```
DELETE FROM T_Users  
WHERE name_user = p_name_user;
```

```
COMMIT;
```

```
EXCEPTION  
WHEN OTHERS THEN  
    ROLLBACK;  
    RAISE;  
END;
```

Blog Profesional  
Usuario: Prueba

### Perfil de Prueba

Cambiar contraseña

Nueva contraseña:

\*\*\*

Actualizar

Eliminar cuenta

Eliminar tu perfil borrarás todos tus artículos y comentarios.

Eliminar perfil

Eliminado

Tu perfil y datos se han eliminado

Aceptar

Tus artículos

No tienes artículos publicados.

Crear nuevo artículo

Título:

Contenido:

Selección de categorías:

- Acción
- Comedia
- Ficción

## -- Obtener Artículo

```
CREATE OR REPLACE FUNCTION get_article_by_id(p_article_id IN INTEGER)
```

```
RETURN SYS_REFCURSOR
```

```
IS
```

```
v_cursor SYS_REFCURSOR;
```

```
BEGIN
```

```
OPEN v_cursor FOR
```

```
SELECT article_id, title, name_user, a_text
```

```
FROM Articles
```

```
WHERE article_id = p_article_id;
```

```
RETURN v_cursor;
```

```
END;
```

## -- Artículos por categorías

```
CREATE OR REPLACE FUNCTION get_articles_by_category(p_cat_name IN VARCHAR2)
```

```

RETURN SYS_REFCURSOR
IS
  v_cursor SYS_REFCURSOR;
BEGIN
  OPEN v_cursor FOR
    SELECT a.article_id, a.title, a.name_user, a.a_text
    FROM Articles a
    JOIN Article_Categorie ac ON a.article_id = ac.article_id
    WHERE ac.cat_name = p_cat_name;

  RETURN v_cursor;
END;

```

The screenshot shows a web application interface. At the top, there's a header bar with the text 'Blog Profesional' and 'Usuario: Fer'. Below the header, the main content area has a title 'Artículos sobre Musical'. Underneath the title, there are two article cards. The first card is for 'Hamilton', showing the author as 'Autor: Fer' and a 'Leer' button. The second card is for 'The Greatest Showman', also showing the author as 'Autor: Fer' and a 'Leer' button. A vertical scrollbar is visible on the right side of the content area.

## -- Artículos por tags

```

CREATE OR REPLACE FUNCTION get_articles_by_tag(p_tag_name IN VARCHAR2)
RETURN SYS_REFCURSOR
IS

```

```

v_cursor SYS_REFCURSOR;

BEGIN

OPEN v_cursor FOR

SELECT a.article_id, a.title, a.name_user, a.a_text

FROM Articles a

JOIN Article_tag at ON a.article_id = at.article_id

WHERE at.tag_name = p_tag_name;

```

```
RETURN v_cursor;
```

```
END;
```

**Artículos con tag 'Crecimiento Personal'**

Artículo	Autor	Opción
Cuestión de Tiempo	Mau	Ler
F1: The Movie	Fer	Ler

## --Artículos por autor

```

CREATE OR REPLACE FUNCTION get_articles_by_author(p_name_user IN VARCHAR2)

RETURN SYS_REFCURSOR

IS

v_cursor SYS_REFCURSOR;

BEGIN

```

```
OPEN v_cursor FOR
  SELECT article_id, title, a_date, a_text
  FROM Articles
  WHERE name_user = p_name_user
  ORDER BY a_date DESC;

  RETURN v_cursor;
END;
```

### --Comentarios en artículos

```
CREATE OR REPLACE FUNCTION get_comments_by_article(p_article_id IN INTEGER)
  RETURN SYS_REFCURSOR
IS
  v_cursor SYS_REFCURSOR;
BEGIN
  OPEN v_cursor FOR
    SELECT name_user, c_date, c_text
    FROM Comments
    WHERE article_id = p_article_id
    ORDER BY c_date;

  RETURN v_cursor;
END;
```

## Conjuro 4

Autor: Ingrid

### Contenido:

El Conjuro 4" Será la cuarta entrega de la saga principal y probablemente la última película de la serie central, concluyendo la historia de Ed y Lorraine Warren. Patrick Wilson y Vera Farmiga volverán como los investigadores paranormales.

### Categorías:

Suspense Terror

### Tags:

Conjuro

### Comentarios:

Mau dice:

Comentario 1

Fer dice:

Comentario 2

Agregar comentario:

## --Secuencia para article\_id

```
CREATE SEQUENCE article_seq
```

```
START WITH 1
```

```
INCREMENT BY 1
```

```
NOCACHE
```

```
NOCYCLE;
```

## --Agregar artículos

```
CREATE OR REPLACE FUNCTION add_article(
```

```
    p_title IN VARCHAR2,
```

```
    p_name_user IN VARCHAR2,
```

```
    p_a_text IN VARCHAR2
```

```
) RETURN NUMBER
```

```
IS
```

```
    v_article_id NUMBER;
```

```
BEGIN
```

```
    v_article_id := article_seq.NEXTVAL;
```

```
INSERT INTO Articles (article_id, title, name_user, a_text, a_date)
VALUES (v_article_id, p_title, p_name_user, p_a_text, SYSDATE);
```

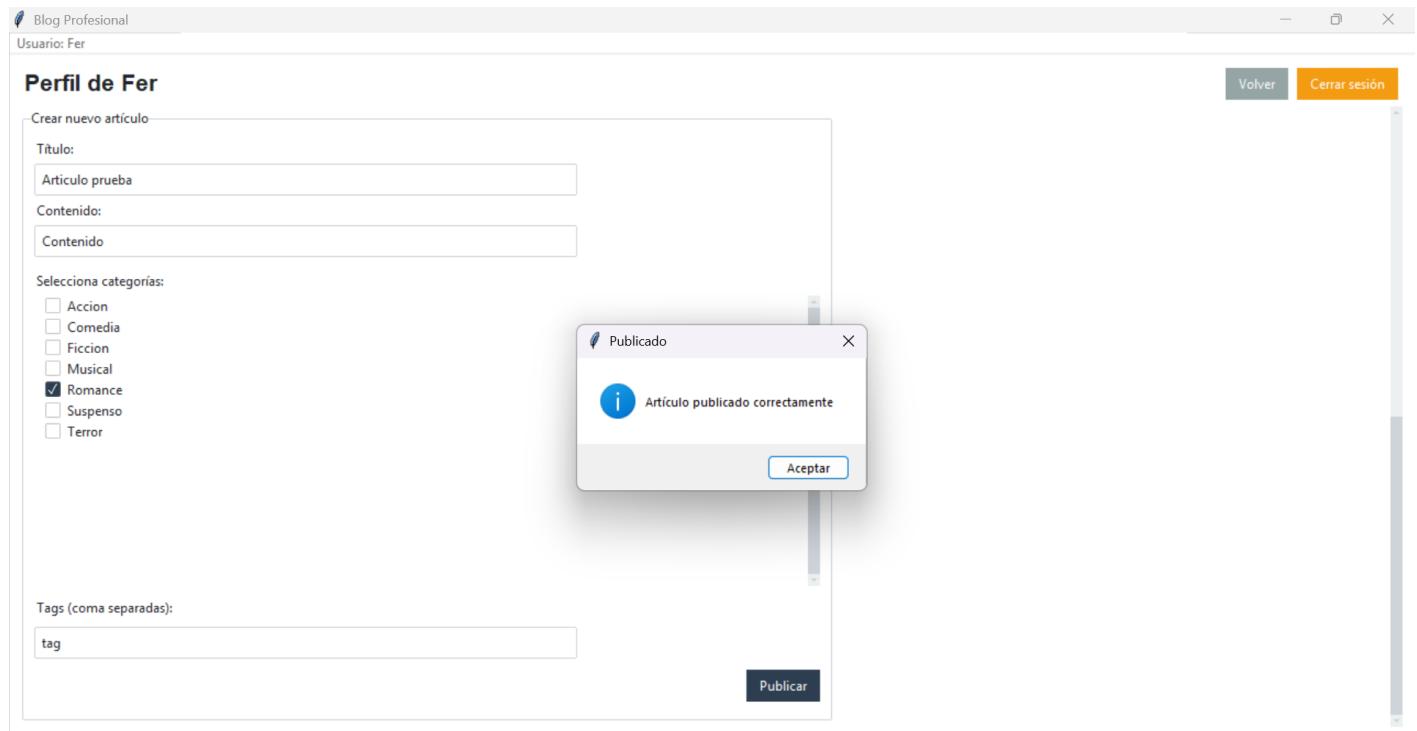
```
RETURN v_article_id;
```

```
EXCEPTION
```

```
WHEN OTHERS THEN
```

```
    RETURN NULL;
```

```
END;
```



--*Agregar un article-tag*

```
CREATE OR REPLACE FUNCTION add_article_tag()
```

```
    p_article_id IN INTEGER,
```

```
    p_tag_name IN VARCHAR2
```

```
) RETURN VARCHAR2
```

```
IS
```

```
BEGIN
```

```
INSERT INTO Article_tag (article_id, tag_name)
VALUES (p_article_id, p_tag_name);
```

```
RETURN 'Relación tag agregada';
```

```
EXCEPTION
```

```
WHEN OTHERS THEN
```

```
    RETURN 'Error al agregar tag: ' || SQLERRM;
```

```
END;
```

### --*Agregar article\_category*

```
create or replace FUNCTION add_article_category(
```

```
    p_article_id IN INTEGER,
```

```
    p_cat_name  IN VARCHAR2
```

```
) RETURN VARCHAR2
```

```
IS
```

```
BEGIN
```

```
    INSERT INTO Article_Categorie (article_id, cat_name)
```

```
    VALUES (p_article_id, p_cat_name);
```

```
RETURN 'Relación categoría agregada';
```

```
EXCEPTION
```

```
WHEN OTHERS THEN
```

```
    RETURN 'Error al agregar categoría: ' || SQLERRM;
```

```
END;
```

### --*Eliminar artículos*

```
CREATE OR REPLACE PROCEDURE delete_article (
```

```
p_article_id IN NUMBER  
 ) AS  
BEGIN  
    DELETE FROM Comments  
    WHERE article_id = p_article_id;  
  
    DELETE FROM Article_Categorie  
    WHERE article_id = p_article_id;  
  
    DELETE FROM Article_tag  
    WHERE article_id = p_article_id;  
  
    DELETE FROM Articles  
    WHERE article_id = p_article_id;  
  
    IF SQL%ROWCOUNT = 0 THEN  
        RAISE_APPLICATION_ERROR(-20203, 'Artículo no encontrado.');
```

END IF;

END;

Blog Profesional

Usuario: Fer

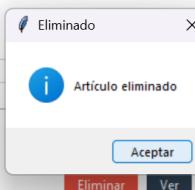
## Perfil de Fer

Cambiar contraseña

Nueva contraseña:

Eliminar cuenta

Eliminar tu perfil borrarás todos tus artículos y comentarios.



Tus artículos

**Artículo prueba**  
Contenido...

**F1: The Movie**  
Un piloto de Fórmula 1 que sufrió un terrible accidente años atrás, regresa a la pista para darle una última oportunidad...

**The Greatest Showman**  
Un hombre de origen humilde usa su imaginación y determinación para crear un espectáculo revolucionario que celebra la s...

## --Sequencia para id\_comment

```
CREATE SEQUENCE comment_seq
```

```
START WITH 1
```

```
INCREMENT BY 1
```

```
NOCACHE
```

```
NOCYCLE;
```

## --Agregar comentario

```
CREATE OR REPLACE FUNCTION add_comment(
```

```
    p_article_id IN INTEGER,
```

```
    p_name_user IN VARCHAR2,
```

```
    p_c_text IN VARCHAR2
```

```
) RETURN VARCHAR2
```

```
IS
```

```
    v_id_comment NUMBER;
```

```
BEGIN
```

```

v_id_comment := comment_seq.NEXTVAL;

INSERT INTO Comments (id_comment, article_id, name_user, c_date, c_text)
VALUES (v_id_comment, p_article_id, p_name_user, SYSDATE, p_c_text);

RETURN 'Comentario agregado con ID: ' || v_id_comment;

EXCEPTION
WHEN OTHERS THEN
    RETURN 'Error al agregar comentario: ' || SQLERRM;
END;

```

Blog Profesional  
Usuario: prueba

## Crepúsculo

Autor: Ingrid

**Contenido:**

Una joven adolescente se muda a un pequeño y lluvioso pueblo y se enamora de un compañero de clase atractivo y misterioso, quien resulta ser un vampiro de más de 100 años que lucha desesperadamente por controlar su instinto de sangre hacia ella.

**Categorías:**

- Comedia
- Romance

**Tags:**

- Amor Sobrenatural
- Hombre Lobo
- Vampiros

**Comentarios:**

prueba dice:  
Comentario Nuevo

Agregar comentario:

Comentar

--Tags

--Agregar tag

```

CREATE OR REPLACE FUNCTION insert_tag_if_not_exists(p_tag_name IN VARCHAR2)
RETURN VARCHAR2
IS
    v_exists NUMBER := 0;

```

```

v_url  VARCHAR2(4000);

BEGIN

SELECT COUNT(*) INTO v_exists
FROM tags
WHERE LOWER(tag_name) = LOWER(p_tag_name);

IF v_exists = 0 THEN
    v_url := 'https://example.com/tags/' || LOWER(p_tag_name);

    INSERT INTO tags (tag_name, t_url)
    VALUES (p_tag_name, v_url);

    RETURN 'Tag insertado: ' || p_tag_name;
ELSE
    RETURN 'Tag ya existe: ' || p_tag_name;
END IF;

EXCEPTION
WHEN OTHERS THEN
    RETURN 'Error: ' || SQLERRM;
END;

```

## --Categorías por artículo

```

create or replace FUNCTION get_cat_by_article(p_article_id IN INTEGER)
RETURN SYS_REFCURSOR
IS
    v_cursor SYS_REFCURSOR;
BEGIN
    OPEN v_cursor FOR

```

```
SELECT cat_name  
FROM article_categorie  
WHERE article_id = p_article_id  
ORDER BY cat_name;
```

```
RETURN v_cursor;
```

```
END;
```

The screenshot shows a web page from a blog. At the top, there's a header bar with a logo, the text 'Blog Profesional', and a user dropdown 'Usuario: prueba'. Below the header, the main content area has a title 'Crepúsculo' in bold. Underneath the title, it says 'Autor: Ingrid'. A section titled 'Contenido:' contains a short summary of the story. Below the summary, there's a 'Categorías:' section with two buttons: 'Comedia' and 'Romance'. Under 'Tags:', there are three buttons: 'Amor Sobrenatural', 'Hombre Lobo', and 'Vampiros'. A 'Comentarios:' section follows, featuring a comment from 'prueba dice:' which says 'Comentario Nuevo'. There's also a text input field for adding a new comment with a 'Comentar' button.