

CAK3BAB3 IMPLEMENTASI DAN PENGUJIAN PERANGKAT

LUNAK

Tugas-2

IMPLEMENTASI DESAIN PROCEDURAL



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TUGAS 2 – ANALISIS LAYANAN

1. Buat Kode Implementasi PSPEC dari DPPL dulu sebanyak jumlah member Group ke Bahasa Pascal, C atau PHP
2. Masing-masing member Group membuat code 1 PSPEC.
3. Simpan Dokumen Di Github
4. Share alamat github ke wa/email saya.

Jawab:

Kode 1 : (Dimas Sodiin)

```
<?php
require_once 'config.php';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $pet_name = $_POST['pet_name'];
    $owner_name = $_POST['owner_name'];
    $check_in_date = $_POST['check_in_date'];
    $check_out_date = $_POST['check_out_date'];

    $sql = "INSERT INTO bookings (pet_name, owner_name, check_in_date,
check_out_date) VALUES (?, ?, ?, ?)";
    $stmt = $pdo->prepare($sql);
    $stmt->execute([$pet_name, $owner_name, $check_in_date, $check_out_date]);

    echo "Booking created successfully.";
}
```

Kode 2: (Dimas Aditya R)

```
<?php
require_once 'config.php';

$sql = "SELECT * FROM bookings";
$stmt = $pdo->query($sql);
$bookings = $stmt->fetchAll(PDO::FETCH_ASSOC);

foreach ($bookings as $booking) {
    echo "ID: " . $booking['id'] . ", Pet: " . $booking['pet_name'] . ", Owner: " .
    $booking['owner_name'] .
    ", Check-in: " . $booking['check_in_date'] . ", Check-out: " .
    $booking['check_out_date'] . "<br>";
}
```

Kode 3: (Satria Duta P)

```
<?php
require_once 'config.php';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $id = $_POST['id'];
    $pet_name = $_POST['pet_name'];
    $owner_name = $_POST['owner_name'];
    $check_in_date = $_POST['check_in_date'];
    $check_out_date = $_POST['check_out_date'];

    $sql = "UPDATE bookings SET pet_name = ?, owner_name = ?, check_in_date = ?,
check_out_date = ? WHERE id = ?";
    $stmt = $pdo->prepare($sql);
    $stmt->execute([$pet_name, $owner_name, $check_in_date, $check_out_date, $id]);

    echo "Booking updated successfully.";
}
```

Kode 4: (Nasywan Farid)

```
<?php
require_once 'config.php';

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $id = $_POST['id'];

    $sql = "DELETE FROM bookings WHERE id = ?";
    $stmt = $pdo->prepare($sql);
    $stmt->execute([$id]);

    echo "Booking deleted successfully.";
}
```

Berikut adalah PSPEC (Process Specification) dalam format Structured English dengan pre dan post conditions untuk setiap operasi CRUD:

1. Create

PSPEC: Create Booking

Pre-conditions:

- Database connection is established
- Form data is submitted via POST method
- Required fields (pet_name, owner_name, check_in_date, check_out_date) are not empty

Process:

BEGIN

 Retrieve form data (pet_name, owner_name, check_in_date, check_out_date)

 Prepare SQL INSERT statement

 Execute SQL statement with form data

 IF execution is successful THEN

 Display success message

 ELSE

 Display error message

 ENDIF

END

Post-conditions:

- New booking record is added to the database
- Success or error message is displayed to the user

2. Read**PSPEC: Read Bookings****Pre-conditions:**

- Database connection is established

Process:

BEGIN

 Prepare SQL SELECT statement to retrieve all bookings

 Execute SQL statement

 Fetch all booking records

 FOR EACH booking record

 Display booking details (ID, pet name, owner name, check-in date, check-out date)

 ENDFOR

END

Post-conditions:

- All booking records are retrieved from the database
- Booking details are displayed to the user

3. Update**PSPEC: Update Booking**

Pre-conditions:

- Database connection is established
- Form data is submitted via POST method
- Required fields (id, pet_name, owner_name, check_in_date, check_out_date) are not empty

Process:

BEGIN

 Retrieve form data (id, pet_name, owner_name, check_in_date, check_out_date)

 Prepare SQL UPDATE statement

 Execute SQL statement with form data

 IF execution is successful THEN

 Display success message

 ELSE

 Display error message

 ENDIF

END

Post-conditions:

- Existing booking record is updated in the database
- Success or error message is displayed to the user

4. Delete

PSPEC: Delete Booking**Pre-conditions:**

- Database connection is established
- Form data is submitted via POST method
- Required field (id) is not empty

Process:

BEGIN

 Retrieve booking ID from form data

 Prepare SQL DELETE statement

 Execute SQL statement with booking ID

 IF execution is successful THEN

 Display success message

 ELSE

 Display error message

 ENDIF

END

Post-conditions:

- Booking record is deleted from the database
- Success or error message is displayed to the user