

**PostgreSQL Project UTS
Pemrograman Web**



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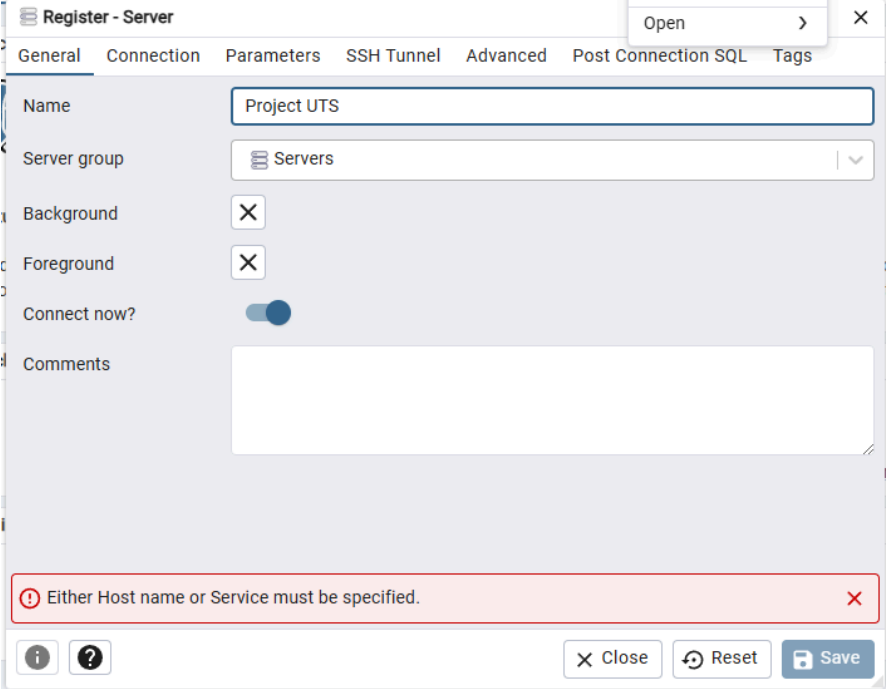
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- **Link Github :**

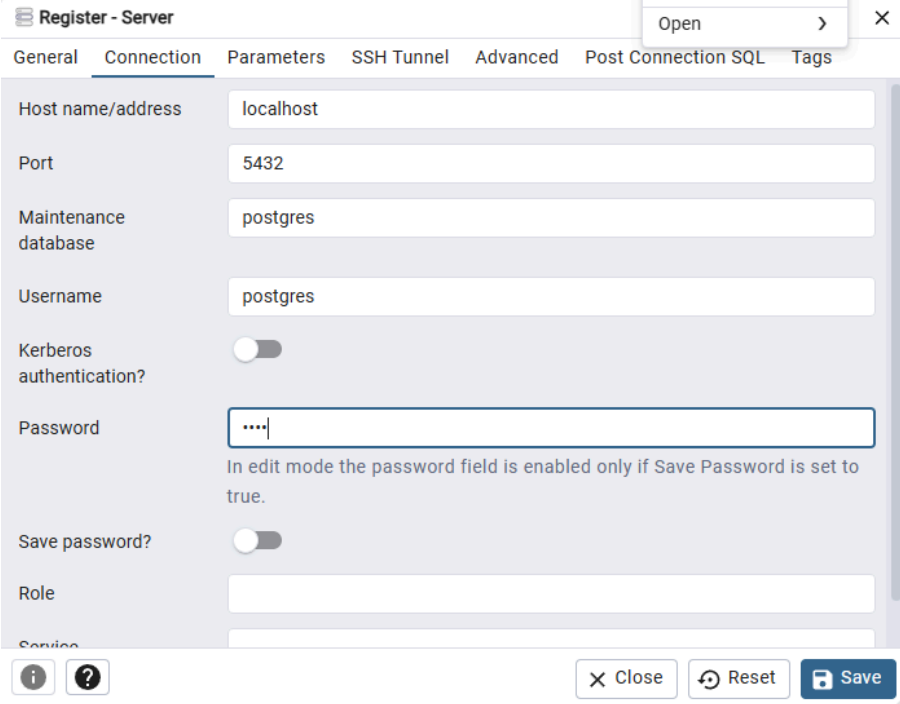
<https://github.com/bungaauulia/Pemrograman-WEB/tree/main/PostgreSQL-ProjectUTS>

- **Link Youtube :** https://youtu.be/pqJ1AV5_tVo

1. Membuat servers 'Project UTS' dan database 'tokobunga' pada PostgreSQL menggunakan pgAdmin



The 'Register - Server' dialog box in pgAdmin is shown with the 'General' tab selected. The 'Name' field contains 'Project UTS'. The 'Server group' dropdown is set to 'Servers'. The 'Background' and 'Foreground' checkboxes are unchecked. The 'Connect now?' toggle is turned on. The 'Comments' field is empty. A red error message at the bottom states: 'Either Host name or Service must be specified.' The 'Save' button is highlighted.



The 'Register - Server' dialog box is shown with the 'Connection' tab selected. The 'Host name/address' field contains 'localhost'. The 'Port' field contains '5432'. The 'Maintenance database' field contains 'postgres'. The 'Username' field contains 'postgres'. The 'Kerberos authentication?' toggle is turned off. The 'Password' field is empty, with a note below it: 'In edit mode the password field is enabled only if Save Password is set to true.' The 'Save password?' toggle is turned off. The 'Role' field is empty. The 'Service' field is empty. The 'Save' button is highlighted.

Create - Database

Open

General Definition Security Parameters Advanced SQL

Database tokobunga

OID

Owner postgres

Comment

Close Reset Save

```

13
14 CREATE TABLE public.produk (
15     id_produk VARCHAR(5) PRIMARY KEY,
16     nama_produk VARCHAR(30),
17     harga INT
18 );
19

```

Data Output Messages Notifications

CREATE TABLE

Query returned successfully in 245 msec.

2. Tambah data pada tabel

Query Query History

```

1 INSERT INTO public.produk(
2     id_produk, nama_produk, harga) VALUES
3     ('BQ001', 'Orchid Bouquet', 299000),
4     ('BQ002', 'Sunflower Bouquet', 99000),
5     ('BQ003', 'Pink Rose Bouquet', 159000),
6     ('BQ004', 'Lily Bouquet', 119000),
7     ('BQ005', 'Tulip Bouquet', 99000),
8     ('BQ006', 'White Rose Bouquet', 159000),
9     ('BQ007', 'Red Rose Bouquet', 159000),
10    ('BQ008', 'Peony Bouquet', 129000);
11
12 DROP TABLE IF EXISTS public.produk;

```

Data Output Messages Notifications

INSERT 0 8

Query returned successfully in 278 msec.

3. Membuat file index.php

- \$host, \$port, \$dbname, \$user, \$pass digunakan untuk konfigurasi koneksi ke database PostgreSQL.
- pg_connect(...) → membuka koneksi ke PostgreSQL.
- if (!\$conn) → cek apakah koneksi gagal, kalau iya, tampilkan pesan error dan hentikan program (die()).
- pg_set_client_encoding(\$conn, 'UTF8') → memastikan karakter UTF-8 supaya teks (misal nama produk) tampil dengan benar, termasuk karakter khusus atau bahasa Indonesia.

```
1  <?php
2  $host = 'localhost';
3  $port = '5432';
4  $dbname = 'tokobunga';
5  $user = 'postgres';
6  $pass = '2005';
7
8  $conn = pg_connect("host=$host port=$port dbname=$dbname user=$user password=$pass");
9  if (!$conn) {
10     die('Koneksi gagal: ' . pg_last_error());
11 }
12
13 pg_set_client_encoding($conn, 'UTF8');
```

- Pada line 15 - 25 digunakan untuk mengambil data dari tabel produk yang terdiri dari id_produk, nama_produk dan harga dan diurutkan berdasarkan id_produk
- \$result = pg_query(\$conn, \$sql) → menjalankan query SQL dan menyimpan hasilnya.
- if (!\$result) → cek apakah query gagal, jika iya tampilkan error.

```
14
15  $sql = 'SELECT
16         "id_produk"    AS "ID",
17         "nama_produk" AS "Nama",
18         "harga"        AS "Harga"
19     FROM "produk"
20     ORDER BY "id_produk";';
21
22  $result = pg_query($conn, $sql);
23  if (!$result) {
24     die('Query gagal: ' . pg_last_error($conn));
25  }
```

- Line 27 - 46 merupakan kode untuk membuat tampilan halaman yang akan dijalankan di web nantinya dalam bentuk tabel. Bagian HTML ini akan diberi style dengan dihubungkan ke file indexStyle.css

```
C: > laragon > www > dasarWeb > PostgreSQL-ProjectUTS > index.php > html > body > table
27 <!DOCTYPE html>
28 <html lang="id">
29 <head>
30 <meta charset="UTF-8">
31 <meta name="viewport" content="width=device-width, initial-scale=1.0">
32 <title>Daftar Produk | By Bun Florist</title>
33 <link rel="stylesheet" href="indexStyle.css">
34 </head>
35 <body>
36
37 <h1>Daftar Produk By Bun Florist</h1>
38
39 <table>
40   <tr>
41     <th>No</th>
42     <th>ID Produk</th>
43     <th>Gambar</th>
44     <th>Nama Produk</th>
45     <th>Harga</th>
46   </tr>
```

- Line 48 - 64 merupakan looping untuk menginputkan data dari database di PostgreSQL ke dalam tabel HTML yang sudah dibuat.

```
Welcome | index.php X | # indexStyle.css | # product.css | < product.html
C: > laragon > www > dasarWeb > PostgreSQL-ProjectUTS > index.php > html > body > table > tr > td
28 <html lang="id">
35 <body>
39 <table>
48   <?php
49     $no = 1;
50     $gambarIndex = 1;
51     while ($row = pg_fetch_assoc($result)):
52       $imagePath = "product/flower" . $gambarIndex . ".png";
53     ?>
54     <tr>
55       <td><?= $no++; ?></td>
56       <td><?= htmlspecialchars($row["ID"]); ?></td>
57       <td>"></td>
58       <td><?= htmlspecialchars($row["Nama"]); ?></td>
59       <td>Rp <?= number_format($row["Harga"], 0, ',', '.'); ?></td>
60     </tr>
61   <?php
62     $gambarIndex++;
63   endwhile;
64   ?>
65
66 </body>
67 </html>
```






4. Membuat file indexStyle.css







```
welcome index.php indexStyle.css product.css
C: > laragon > www > dasarWeb > PostgreSQL-ProjectUTS > # indexStyle.css > h1
1  body {
2      font-family: 'Poppins', sans-serif;
3      margin: 40px;
4      background-color: #fafafa;
5  }
6  h1 {
7      text-align: center;
8      color: #b41658;
9  }
10 table {
11     width: 80%;
12     margin: 20px auto;
13     border-collapse: collapse;
14     background-color: white;
15     box-shadow: 0 2px 8px rgba(100, 26, 57, 0.1);
16 }
17 th, td {
18     border: 1px solid #ddd;
19     padding: 10px;
20     text-align: center;
21 }
```

```
th {
    background-color: #f8d7e5;
    color: #333;
}
tr:hover {
    background-color: #b34c67;
}
img {
    width: 80px;
    height: 80px;
    border-radius: 8px;
}
```

5. Kode program ketika dijalankan di web

Daftar Produk By Bun Florist

No	ID Produk	Gambar	Nama Produk	Harga
1	BQ001		Orchid Bouquet	Rp 299.000
2	BQ002		Sunflower Bouquet	Rp 99.000
3	BQ003		Pink Rose Bouquet	Rp 159.000
4	BQ004		Lily Bouquet	Rp 119.000
5	BQ005		Tulip Bouquet	Rp 99.000

3	BQ003		Pink Rose Bouquet	Rp 159.000
4	BQ004		Lily Bouquet	Rp 119.000
5	BQ005		Tulip Bouquet	Rp 99.000
6	BQ006		White Rose Bouquet	Rp 159.000
7	BQ007		Red Rose Bouquet	Rp 159.000
8	BQ008		Peony Bouquet	Rp 129.000