

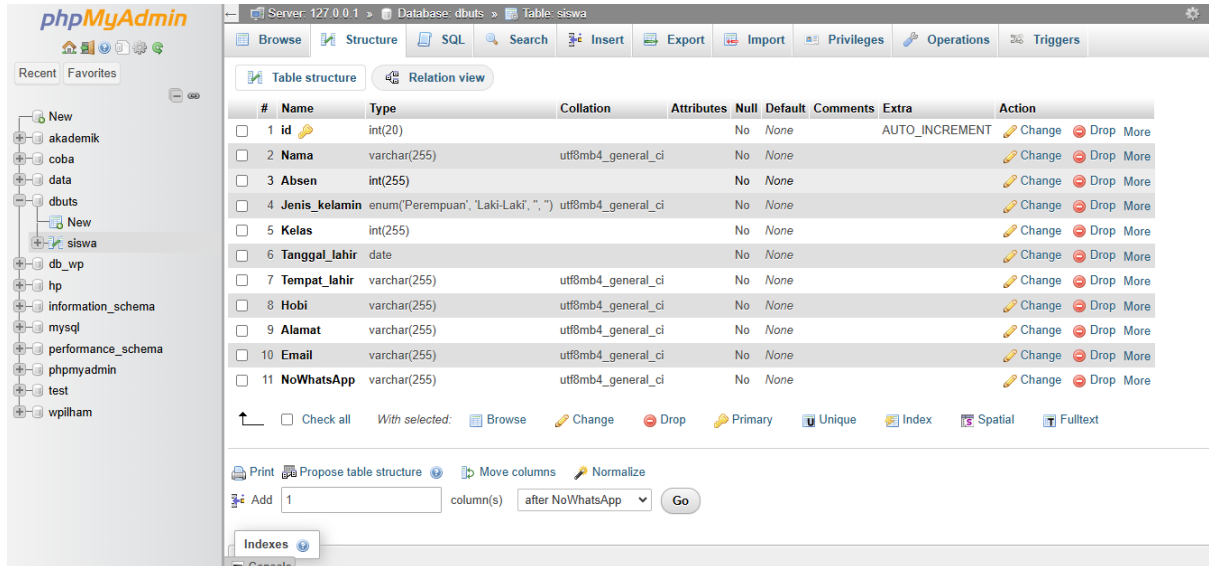
NAMA : Ilham Faishal Seto Aji

NIM : 22.01.53.0041

MATKUL : Web Service

PRODI : Teknik Informatika

1. Membuat database untuk siswa



The screenshot shows the phpMyAdmin interface with the 'siswa' table structure displayed. The table has 11 columns: id, Nama, Absen, Jenis_kelamin, Kelas, Tanggal_lahir, Tempat_lahir, Hobi, Alamat, Email, and NoWhatsApp. The 'id' column is the primary key and is auto-incremented. The 'Jenis_kelamin' column is an enum with values 'Perempuan', 'Laki-Laki', and ''.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(20)			No	None		AUTO_INCREMENT	Change Drop More
2	Nama	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
3	Absen	int(255)			No	None			Change Drop More
4	Jenis_kelamin	enum('Perempuan', 'Laki-Laki', '')	utf8mb4_general_ci		No	None			Change Drop More
5	Kelas	int(255)			No	None			Change Drop More
6	Tanggal_lahir	date			No	None			Change Drop More
7	Tempat_lahir	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
8	Hobi	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
9	Alamat	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
10	Email	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
11	NoWhatsApp	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More

2. Membuat API

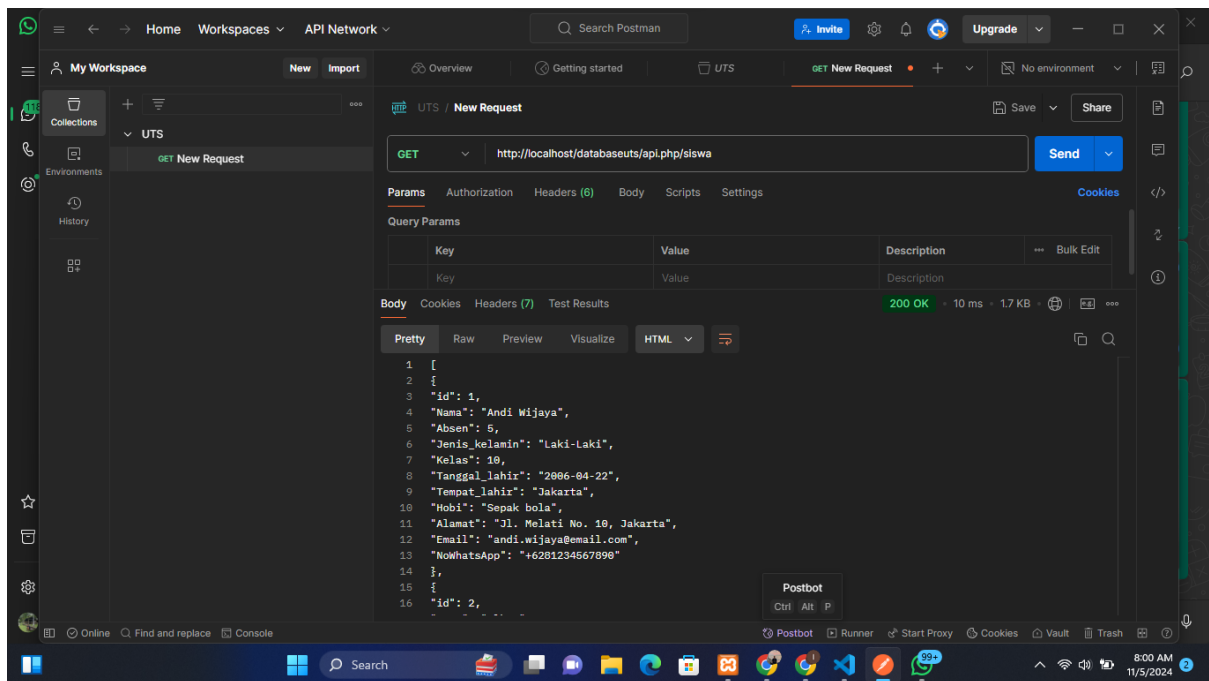
```
1 <?php
2 // Konfigurasi database
3 $host = 'localhost';
4 $dbname = 'dbuts';
5 $username = 'root';
6 $password = '';
7
8 try {
9     // Koneksi ke database
10     $pdo = new PDO(dsn: "mysql:host=$host;dbname=$dbname", username: $username, password: $password);
11     $pdo->setAttribute(attribute: PDO::ATTR_ERRMODE, value: PDO::ERRMODE_EXCEPTION);
12 } catch (PDOException $e) {
13     die("Connection failed: " . $e->getMessage());
14 }
15
16 // Mendapatkan metode HTTP yang digunakan
17 $method = $_SERVER['REQUEST_METHOD'];
18
19 switch ($method) {
20     case 'GET':
21         // Jika ada 'id' di URL, ambil data berdasarkan ID tersebut
22         if (isset($_GET['id'])) {
23             $stmt = $pdo->prepare(query: "SELECT * FROM siswa WHERE id = ?");
24             $stmt->execute(params: [$_GET['id']]);
25             $data = $stmt->fetch(mode: PDO::FETCH_ASSOC);
26         } else {
27             // Jika tidak ada 'id', ambil semua data
28             $stmt = $pdo->query("SELECT * FROM siswa ORDER BY id ASC");
29             $data = $stmt->fetchAll(PDO::FETCH_ASSOC);
30         }
31         echo json_encode(value: $data, flags: JSON_PRETTY_PRINT); // Tambahkan JSON_PRETTY_PRINT
32         break;
```

```

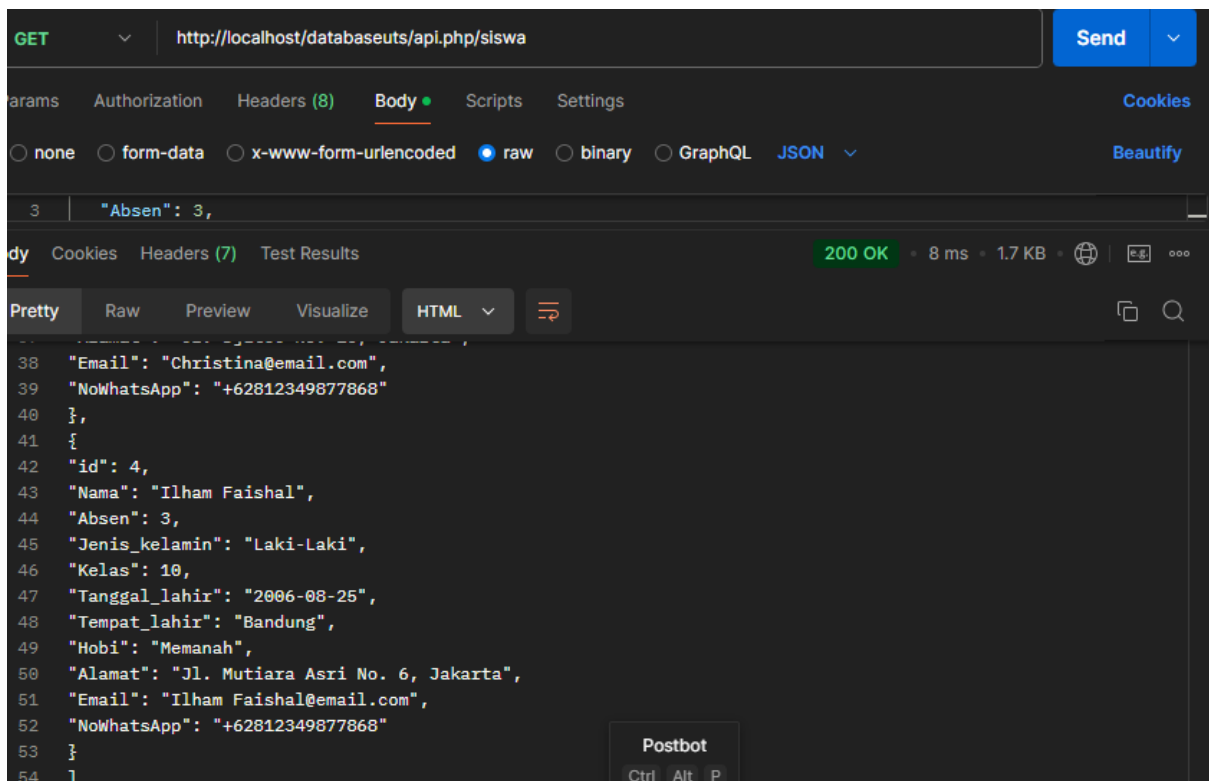
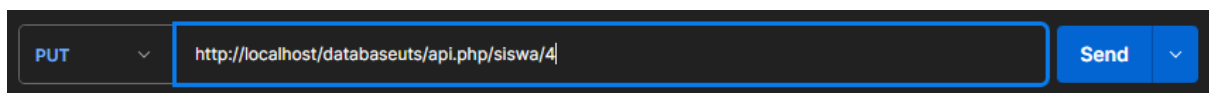
api.php
19  switch ($method) {
34      case 'POST':
35          // Mengambil data JSON dari input
36          $input = json_decode(json: file_get_contents(filename: "php://input"), associative: true);
37
38          // Pastikan semua kunci ada di dalam data JSON yang dikirim
39          if (!isset($input['Nama'], $input['Absen'], $input['Jenis_kelamin'], $input['Kelas'], $input['Tanggal_lahir'], $input['Tempat_lahir'], $input['Hobi'], $input['Alamat'], $input['Email'], $input['NoWhatsApp'])) {
40              echo json_encode(value: ["status" => "Error", "message" => "Incomplete data. All fields are required."], flags: JSON_PRETTY_PRINT);
41              exit;
42          }
43
44          // Menyimpan data baru ke tabel siswa
45          $stmt = $pdo->prepare(query: "INSERT INTO siswa (Nama, Absen, Jenis_kelamin, Kelas, Tanggal_lahir, Tempat_lahir, Hobi, Alamat, Email, NoWhatsApp)");
46          $stmt->execute(params: [
47              $input['Nama'], $input['Absen'], $input['Jenis_kelamin'], $input['Kelas'], $input['Tanggal_lahir'],
48              $input['Tempat_lahir'], $input['Hobi'], $input['Alamat'], $input['Email'], $input['NoWhatsApp']
49          ]);
50
51          // Mendapatkan ID dari data yang baru saja dimasukkan
52          $lastId = $pdo->lastInsertId();
53          echo json_encode(value: ["status" => "Data inserted successfully", "id" => $lastId], flags: JSON_PRETTY_PRINT);
54          break;
55
56      case 'PUT':
57          // Mengambil 'id' dari URL untuk memperbarui data
58          if (isset($_GET['id'])) {
59              $input = json_decode(json: file_get_contents(filename: "php://input"), associative: true);
60
61              // Memperbarui data pada tabel siswa berdasarkan ID
62              $stmt = $pdo->prepare(query: "UPDATE siswa SET Nama = ?, Absen = ?, Jenis_kelamin = ?, Kelas = ?, Tanggal_lahir = ?, Tempat_lahir = ?");
63              $stmt->execute(params: [
64                  $input['Nama'], $input['Absen'], $input['Jenis_kelamin'], $input['Kelas'], $input['Tanggal_lahir'],
65                  $input['Tempat_lahir'], $input['Hobi'], $input['Alamat'], $input['Email'], $input['NoWhatsApp'], $_GET['id']
66              ]);
67              echo json_encode(value: ["status" => "Data updated successfully", "id" => $_GET['id'], flags: JSON_PRETTY_PRINT);
68          } else {
69              echo json_encode(value: ["status" => "ID is required"], flags: JSON_PRETTY_PRINT);
70          }
71          break;
72
73      case 'DELETE':
74          // Mengambil 'id' dari URL untuk menghapus data
75          if (isset($_GET['id'])) {
76              $stmt = $pdo->prepare(query: "DELETE FROM siswa WHERE id = ?");
77              $stmt->execute(params: [$_GET['id']]);
78              echo json_encode(value: ["status" => "Data deleted successfully", "id" => $_GET['id'], flags: JSON_PRETTY_PRINT);
79          } else {
80              echo json_encode(value: ["status" => "ID is required"], flags: JSON_PRETTY_PRINT);
81          }
82          break;
83
84      default:
85          echo json_encode(value: ["status" => "Method not allowed"], flags: JSON_PRETTY_PRINT);
86          break;
87
88  }

```

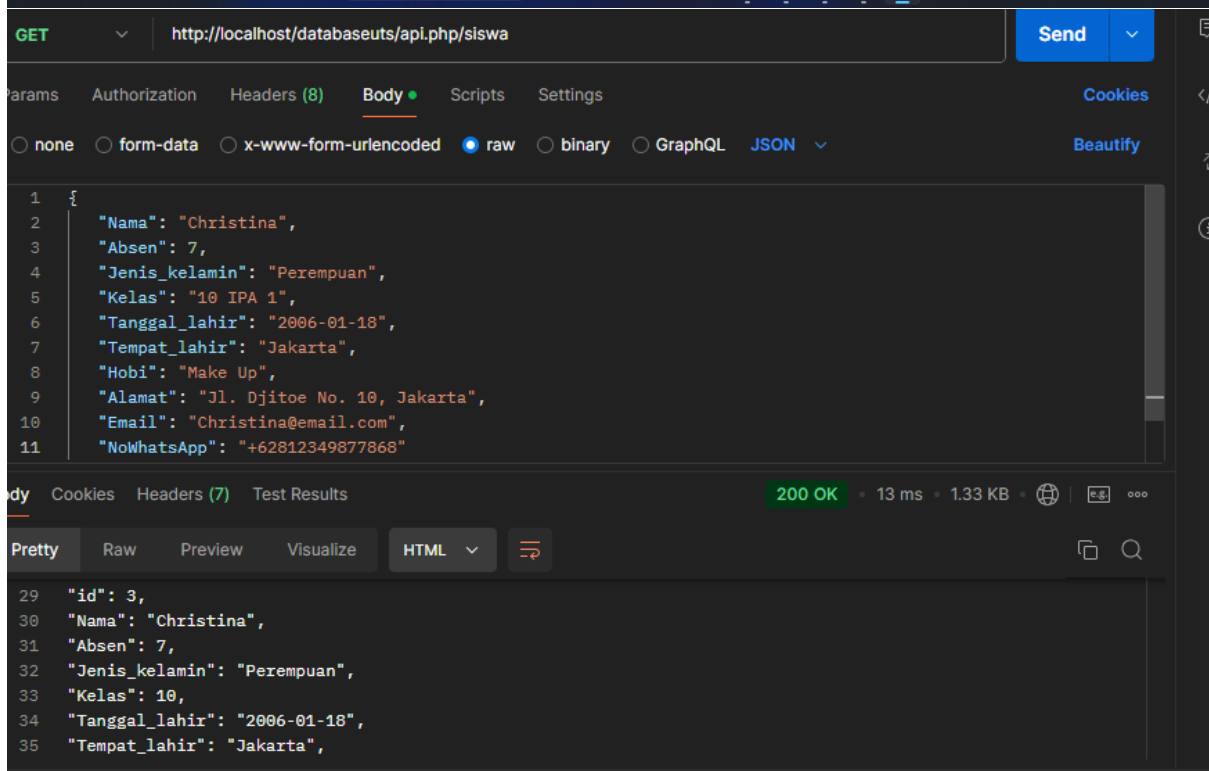
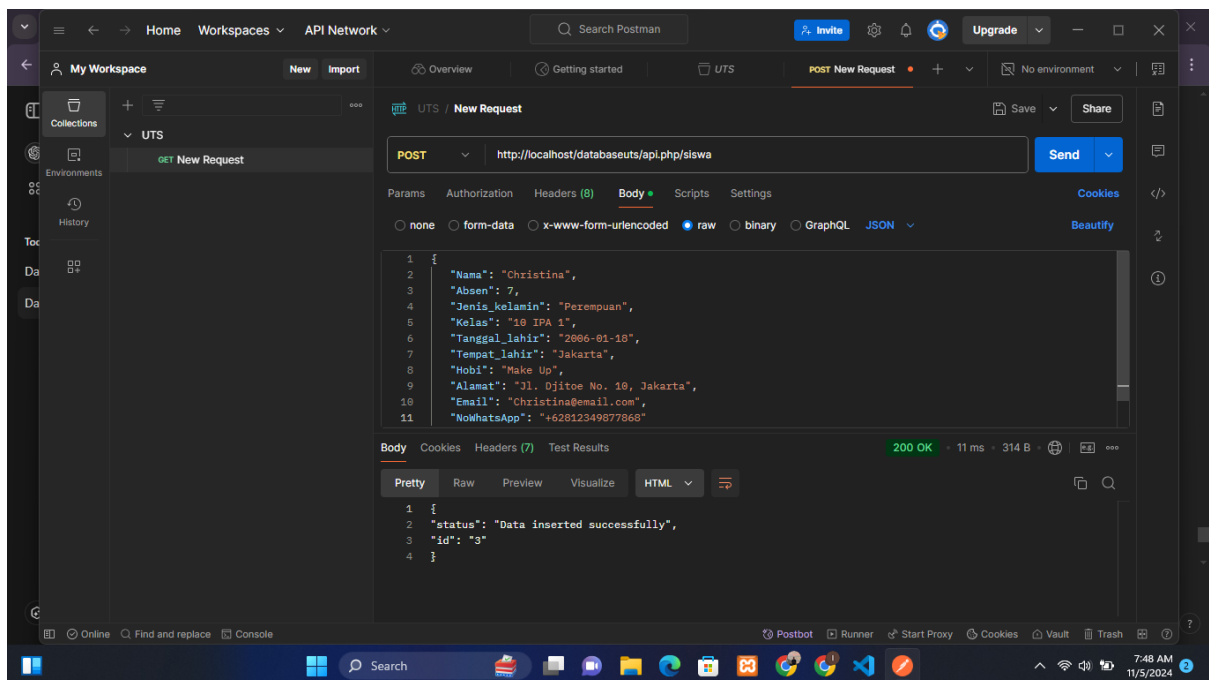
3. Get



4. Put



5. Post



6. Delete

The screenshot shows the Postman interface with a DELETE request to `http://localhost/databaseuts/api.php/siswa/5`. The response is a 200 OK status with a JSON body containing student details.

Request:

- Method: DELETE
- URL: `http://localhost/databaseuts/api.php/siswa/5`

Response:

200 OK • 8 ms • 1.7 KB

Body (Pretty):

```
39  "NoWhatsApp": "+62812349877868"
40  },
41  {
42    "id": 4,
43    "Nama": "Ilham Faishal",
44    "Absen": 3,
45    "Jenis_kelamin": "Laki-Laki",
46    "Kelas": 10,
47    "Tanggal_lahir": "2006-08-25",
48    "Tempat_lahir": "Bandung",
49    "Hobi": "Memanah",
50    "Alamat": "Jl. Mutiara Asri No. 6, Jakarta",
51    "Email": "Ilham Faishal@email.com",
52    "NoWhatsApp": "+62812349877868"
53  }
54  ]
```