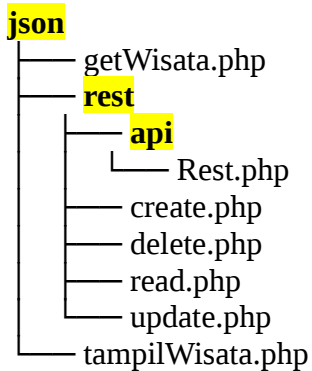# Praktikum 3:
PHP CRUD REST API SEDERHANA
(Membuat API Rest)

Berikut struktur file & direktori project "json"

```
json
├── getWisata.php
├── rest
│   └── api
│       └── Rest.php
│   ├── create.php
│   ├── delete.php
│   ├── read.php
│   └── update.php
└── tampilWisata.php
```

xxx = folder

Simpan file Rest.php di folder "rest/api" pada folder project pertemuan sebelumnya
(c:\xampp\htdocs\json atau /var/www/html/json)

Class Rest.php terdiri dari beberapa fungsi, yaitu:
- __construct() => membuat koneksi ke server database
- getWisata($wstId) => melayani request ambil data (READ)
- insertWisata($wstData) => melayani request tambah data (CREATE)
- updateWisata($wstData) => melayani request perbaiki data (UPDATE)
- deleteWisata($wstId) => melayani request hapus data (DELETE)

Skrip Utama Class:

```php
<?php
class Rest{
    private $host  = 'localhost';
    private $user  = 'root';
    private $password  = "";
    private $database  = "json";
    private $wstTable = 'wisata';
    private $dbConnect = false;

// skrip fungsi-fungsi letakkan/sisipkan disini

}
?>
```

Skrip fungsi __construct():

```
public function __construct(){
        if(!$this->dbConnect){
            $conn = new mysqli($this->host, $this->user, $this->password, $this->database);
            if($conn->connect_error){
                die("Error failed to connect to MySQL: " . $conn->connect_error);
            }else{
                $this->dbConnect = $conn;
            }
        }
    }
```

Skrip fungsi getWisata($wstId):

```
public function getWisata($wstId) {
        $sqlQuery = '';
        if($wstId)
            $sqlQuery = "WHERE id_wisata = '".$wstId."'";
        }
        $wstQuery = "
            SELECT id_wisata, kota, landmark, tarif
            FROM ".$this->wstTable." $sqlQuery
            ORDER BY id_wisata ASC";
        $resultData = mysqli_query($this->dbConnect, $wstQuery);
        $wstData = array();
        while( $wstRecord = mysqli_fetch_assoc($resultData) ) {
            $wstData[] = $wstRecord;
        }
        header('Content-Type: application/json');
        echo json_encode($wstData);
}
```

Skrip fungsi insertWisata($wstData):

```
public function insertWisata($wstData){
        $wstKota=$wstData["kota"];
        $wstLandmark=$wstData["landmark"];
        $wstTarif=$wstData["tarif"];

        $wstQuery="
        INSERT INTO ".$this->wstTable."
        SET kota='".$wstKota."', landmark='".$wstLandmark."', tarif='".$wstTarif."'";

        mysqli_query($this->dbConnect, $wstQuery);
        if(mysqli_affected_rows($this->dbConnect) > 0) {
            $message = "wisata sukses dibuat.";
            $status = 1;
        } else {
            $message = "wisata gagal dibuat.";
            $status = 0;
        }
        $wstResponse = array(
            'status' => $status,
            'status_message' => $message
        );
        header('Content-Type: application/json');
        echo json_encode($wstResponse);
}
```

Skrip fungsi updateWisata($wstData):

```
public function updateWisata($wstData){
    if($wstData["id"]) {
        $wstKota=$wstData["kota"];
        $wstLandmark=$wstData["landmark"];
        $wstTarif=$wstData["tarif"];

        $wstQuery="
            UPDATE ".$this->wstTable."
            SET kota='".$wstKota."', landmark='".$wstLandmark."', tarif='".$wstTarif."'
```

```
                WHERE id_wisata = '".$wstData["id"]."'";

        mysqli_query($this->dbConnect, $wstQuery);
        if(mysqli_affected_rows($this->dbConnect) > 0) {
                        $message = "wisata sukses diperbaiki.";
                        $status = 1;
                } else {
                        $message = "wisata gagal diperbaiki.";
                        $status = 0;
                }
        } else {
                $message = "Invalid request.";
                $status = 0;
        }
        $wstResponse = array(
                'status' => $status,
                'status_message' => $message
        );
        header('Content-Type: application/json');
        echo json_encode($wstResponse);
    }
```

Skrip fungsi deleteWisata($wstId):

```
public function deleteWisata($wstId) {
        if($wstId) {
                $wstQuery = "
                        DELETE FROM ".$this->wstTable."
                        WHERE id_wisata = '".$wstId."'
                        ORDER BY id_wisata DESC";

         mysqli_query($this->dbConnect, $wstQuery);
         if(mysqli_affected_rows($this->dbConnect) > 0) {
                        $message = "wisata sukses dihapus.";
                        $status = 1;
                } else {
                        $message = "wisata gagal dihapus.";
                        $status = 0;
                }
        } else {
                $message = "Invalid request.";
                $status = 0;
        }
        $wstResponse = array(
                'status' => $status,
                'status_message' => $message
        );
        header('Content-Type: application/json');
        echo json_encode($wstResponse);
    }
```

Skrip fungsi diatas disisipkan/diletakkan di dalam class Rest(), Ringkasannya sebagai berikut:

```php
1   <?php
2   class Rest{
3       private $host   = 'localhost';
4       private $user   = 'root';
5       private $password   = "root";
6       private $database   = "json";
7       private $wstTable = 'wisata';
8       private $dbConnect = false;
9
10 >    public function __construct(){▱
20
21 >    public function getWisata($wstId) {▱
38
39 >    public function insertWisata($wstData){▱
63
64 >    public function updateWisata($wstData){▱
94
95 >    public function deleteWisata($wstId) {▱
120  }
121  ?>
```