

# Service Layer Architecture

## UserModel.php

```
<?php
```

```
class UserModel {
```

```
    function insertUser($name) {
```

```
        include 'Credentials.php';
```

```
        //Open Connection and select database
```

```
        $conn = new mysqli($host, $user, $passwd, $database) or die($conn->connect_error);
```

```
        $query = "INSERT INTO users (name) VALUES ('$name')";
```

```
        $result = $conn->query($query) or die($conn->error);
```

```
        $conn->close();
```

```
        return $result;    //boolean
```

```
    }
```

```
    function getUserList() {
```

```
        require_once '../Entity/UserEntity.php';
```

```
        include 'Credentials.php';
```

```
        //Open Connection and select database
```

```
        $conn = new mysqli($host, $user, $passwd, $database) or die($conn->connect_error);
```

```
        $query = 'SELECT * FROM users ORDER BY id';
```

```
        $result = $conn->query($query) or die($conn->error);
```

```
        $userArray = array();
```

```

//Get data from database
while ($row = mysqli_fetch_assoc($result)) {
    $id = $row['id'];
    $name = $row['name'];

    $user = new UserEntity($id, $name);
    array_push($userArray, $user);
}

$conn->close();
return $userArray;
}

function getUserById($id) {
    require_once '../Entity/UserEntity.php';
    include 'Credentials.php';

    //Open Connection and select database
    $conn = new mysqli($host, $user, $passwd, $database) or die($conn->connect_error);
    $query = "SELECT * FROM users Where id='$id'";
    $result = $conn->query($query) or die($conn->error);
    $userArray = array();

    //Get data from database
    while ($row = mysqli_fetch_assoc($result)) {
        $id = $row['id'];

```

```
$name = $row['name'];
```

```
$user = new UserEntity($id, $name);
```

```
array_push($userArray, $user);
```

```
}
```

```
$conn->close();
```

```
return $userArray;
```

```
}
```

```
function getUserByName($name) {
```

```
    require_once '../Entity/UserEntity.php';
```

```
    include 'Credentials.php';
```

```
//Open Connection and select database
```

```
$conn = new mysqli($host, $user, $passwd, $database) or die($conn->connect_error);
```

```
$query = "SELECT * FROM users Where name='$name'";
```

```
$result = $conn->query($query) or die($conn->error);
```

```
$userArray = array();
```

```
//Get data from database
```

```
while ($row = mysqli_fetch_assoc($result)) {
```

```
    $id = $row['id'];
```

```
    $name = $row['name'];
```

```
    $user = new UserEntity($id, $name);
```

```
    array_push($userArray, $user);
```

```
}

$conn->close();

return $userArray;

}

}
```

### **UserService.php**

```
<?php

require_once '../Model/UserModel.php';

class UserService {

    public static function getUserById($id) {

        $userModel = new UserModel();

        $user = $userModel->getUserById($id);

        return array_map("json_encode", $user);

    }

    public static function getUserByName($name) {

        $userModel = new UserModel();

        $user = $userModel->getUserByName($name);

        return array_map("json_encode", $user);

    }

    public static function getUserList() {

        $userModel = new UserModel();
```

```
        $users = $userModel->getUserList();  
        return array_map("json_encode", $users);  
    }  
}
```

## **Index.php**

```
<?php  
  
    require_once '../Service/UserService.php';  
  
    if(isset($_GET['id'])){  
        $user = UserService::getUserById($_GET['id']);  
        var_dump($user);  
    } else if(isset($_GET['name'])) {  
        $user = UserService::getUserByName($_GET['name']);  
        var_dump($user);  
    } else {  
        $userArray = UserService::getUserList();  
        var_dump($userArray);  
    }  
}
```