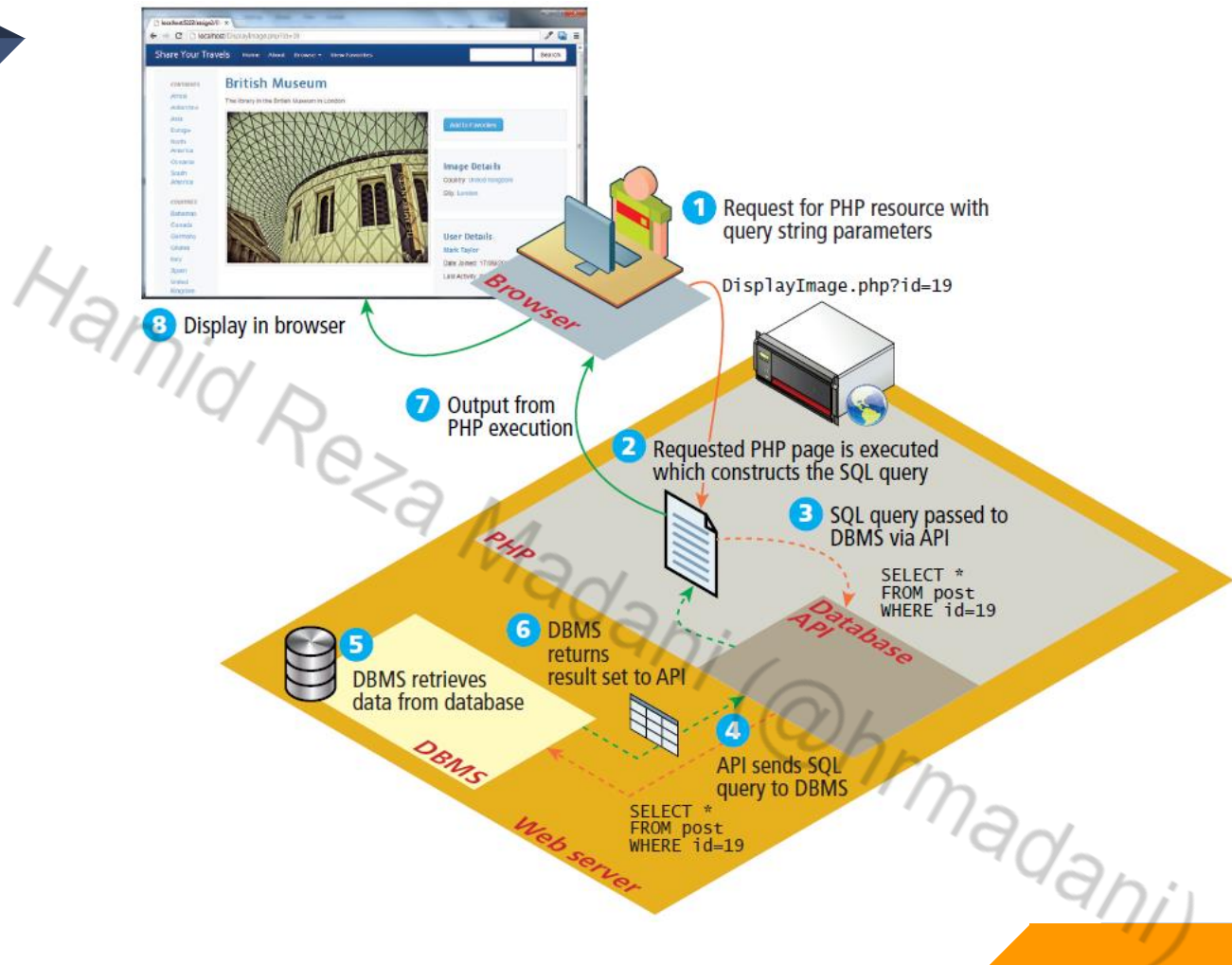


به نام حضرت دوست که هر چه داریم از اوست

PHP - DATABASE

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PHP MySQL APIs

MySQL extension

افزونه ی اصلی PHP برای ارتباط با MySQL بوده است که توسط ورژن جدید MySQLi جایگزین شد.

mysqli extension

این extension می تواند از جدید ترین ویژگی های MySQL بهره برد و به دو صورت Procedural و Object-Oriented قابل استفاده است.

PHP data objects (PDOs)

یک لایه ی فرضی ایجاد میکند تا بسیاری از پیچیدگی های عملکردی را از دید برنامه نویس مخفی کند. این API برای ارتباط با انواع دیتابیس ها مناسب است و فقط برای MySQL نمی باشد.

Accessing MySQL in PHP

- 1. Connect to the database.
- 2. Handle connection errors.
- 3. Execute the SQL query.
- 4. Process the results.
- 5. Free resources and close connection.

1 Connect to the database

MySQLi

- `$host = "localhost";`
- `$database = "bookcrm";`
- `$user = "testuser";`
- `$pass = "mypassword";`
- `$connection = mysqli_connect($host, $user, $pass, $database);`

1 Connect to the database

To be PERFECT

یک فایل configuration بسازید و داخل آن اطلاعات مربوط به دیتابیس را به صورت ثابت هایی وارد کنید.

dbConnection.config.php

```
<?php
define('DBHOST', 'localhost');
define('DBNAME', 'bookcrm');
define('DBUSER', 'testuser');
define('DBPASS', 'mypassword');
?>
```

```
require_once('protected/dbConnection.config.php');
$connection = mysqli_connect(DBHOST, DBUSER,
DBPASS, DBNAME);
```



Handle Connection Errors

MySQLi

- *# mysqli_connect_error returns string description of the last connect error*
- `$error = mysqli_connect_error();`
- `if ($error != null) {`
- `$output = "<p>Unable to connect to database<p>" . $error;`
- *# Outputs a message and terminates the current script*
- `exit($output);`
- `}`



Handle Connection Errors

MySQLi

```
if ( mysqli_connect_errno() ) { // mysqli_connect_errno returns the last error code
die( mysqli_connect_error() );
}
```

3 Executing the Query

MySQLi

- `$sql = "SELECT * FROM Categories ORDER BY CategoryName";`
- `$result = mysqli_query($connection, $sql);` // returns a `mysqli_result` object

Executing a query that doesn't return data

MySQLi

```
$sql = "UPDATE Categories SET CategoryName='Web' WHERE CategoryName='Business'";  
if ( mysqli_query($connection, $sql) ) {  
    $count = mysqli_affected_rows($connection);  
    echo "<p>Updated " . $count . " rows</p>";  
}
```

★ 4 Processing The Query Result

MySQLi

```
$sql = "select * from Categories order by CategoryName";  
if ($result = mysqli_query($connection, $sql)) { // run the query  
    ▶ // fetch a record from result set into an associative array  
    ▶ while($row = mysqli_fetch_assoc($result))  
    ▶ {  
        ▶ // the keys match the field names from the table  
        ▶ echo $row['ID'] . " - " . $row['CategoryName'];  
        ▶ echo "<br/>";  
    ▶ }  
}
```

```
$sql = "select * from Paintings";  
$result = mysqli_query($connection, $sql);
```

`$result`
Result set is a type
of cursor to the
retrieved data

ID	Title	Artist	Year
345	The Death of Marat	David	1793
400	The School of Athens	Raphael	1510
408	Bacchus and Ariadne	Titian	1520
425	Girl with a Pearl Earring	Vermeer	1665
438	Starry Night	Van Gogh	1889

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

`$row`
Associative
array

ID	Title	Artist	Year
345	Death of Marat	David	1793

keys

values

mysqli_fetch_all()

Fetches all result rows as an associative array, a numeric array, or both.

MYSQLI_ASSOC
MYSQLI_NUM
MYSQLI_BOTH

mysqli_fetch_assoc()

Fetches a result row as an associative array.

mysqli_fetch_array()

Fetches a result row as an associative array, a numeric array, or both.

mysqli_fetch_row()

Gets a result row as an numeric array.

5 ★ Freeing Resources and Closing Connection

MySQLi

```
■ $connection = mysqli_connect($host, $user, $pass, $database);  
■ ...  
■ // release the memory used by the result set. This is necessary if  
■ // you are going to run another query on this connection  
■ mysqli_free_result($result);  
■ ...  
■ // close the database connection  
■ mysqli_close($connection);
```