# Dynamic websites – Database - Select





#### **Database connection**

#### Requirement:

All employees are to be queried from the user\_repository database and displayed in tabular form on the website

#### Current

status: • Database connection available • No database table available

No query available
 No table available for output

#### Solution: •

Create database table via SQL query in phpMyAdmin • Create query • Use PHP function for query • Use HTML table and generate values dynamically





#### **Task**

#### database structure

Build the table as shown in the image below. Use a self-written SQL statement for this.

#	Name	Тур	Kollation	Attribute	Null	Standard	Kommentare	Extra
1	ID 👔	int(11)			Nein	kein(e)		AUTO_INCREMENT
2	FORENAME	varchar(255)	utf8_general_ci		Nein	kein(e)		
3	SURENAME	varchar(255)	utf8_general_ci		Nein	kein(e)		
4	AGE	int(11)			Nein	kein(e)		
5	POSITION	varchar(255)	utf8_general_ci		Nein	kein(e)		
6	ACTIVE	tinyint(1)			Nein	kein(e)		
7	ROLE_ID	int(11)			Nein	kein(e)		

## Introducing: Select - PHP Database

- 1. Define query and save in variable
- 2. The connection object(\$conn) provides a method to send the query to the database ->query()
- 3. Store the result of the query in a variable
- 4. Check the number of results (at least 1)
- 5. Use method **->fetch\_assoc()** to add columns Store results in an associative array
- 6. Use loop to process all row results
- 7. Process results



```
<?php

$query = "SELECT * FROM EMPLOYEE e";

$result = $conn->query($query);

if($result->num_rows > 0){
    while($row = $result->fetch_assoc()){
        echo "id : ".$row['ID'];
        echo "<br/>echo "Vorname : ".$row['FORENAME'];
        echo "<br/>echo "<br/>);
}

}
```



#### **Select** – PHP Database - With table output

```
ID
ID
Vorname
Nachname
Nachname
Alter
Position
Aktiv
Aktiv
Role_ID
```

```
<?php
      $query = "SELECT * FROM EMPLOYEE e";
      $result = $conn->query($query);
      if ($result->num rows > 0) {
         while($row = $result->fetch assoc()){
                echo "";
                echo "".$row['ID']."";
                echo "".$row['FORENAME']."";
                echo "".$row['SURENAME']."";
                echo "".$row['AGE']."";
                echo "".$row['POSITION']."";
                echo "".$row['ACTIVE']."";
                echo "".$row['ROLE ID']."";
                echo "";
```

H

### <u>Select</u> – PHP database

Other methods for result assignment:

#### Indexed Array:

```
$result = $conn->fetch_row();
```

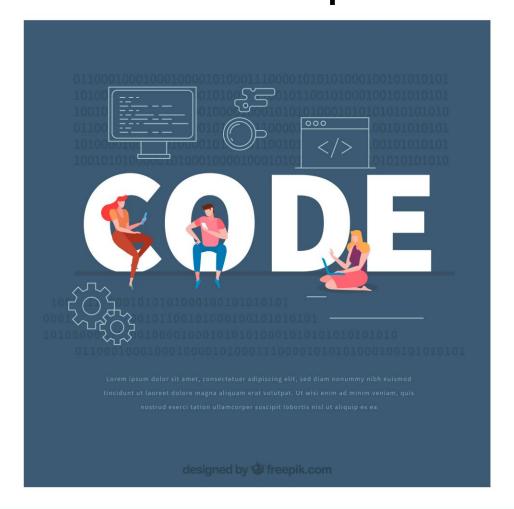
#### Object:

```
$result = $conn->fetch_object();
```





# Dynamic websites – Database – Insert/Update/Delete





#### **Database connection**



A form should be made available with which new employees can be created/ edited and deleted

#### Current

status: • Database connection available • No form available

#### Solution

approach: • Create SQL

statement • Use PHP functions for SQL statements





#### Introducing: Insert - PHP

**Database** 

- 1. Create HTML form
- 2. Enter data record: Compose SQL statement
- 3. method query(); to use
- 4. Check whether the statement was executed successfully

(detail)

```
$query = "INSERT INTO EMPLOYEE(forename, surename, age,

if ($conn->query($query) === TRUE) {
    echo "<h4>Mitarbeiter erfolgreich angelegt</h4>";
} else {
    echo "Error: " . $query . "<br>}
```





#### Introducing: Update - PHP

**Database** 

- 1. Create HTML form
- 2. Edit record: Compose SQL statement
- 3. method query(); to use
- 4. Check whether the statement was executed successfully

(detail)

```
$query = "UPDATE EMPLOYEE set forename = '".$forename."',
if ($conn->query($query) === TRUE) {
   echo "<h4>Mitarbeiter erfolgreich aktualisiert</h4>";
} else {
   echo "Error: " . $query . "<br>}
```





#### Introducing: Delete - PHP

**Database** 

- 1. Create HTML form
- 2. Delete record: Compose SQL statement
- 3. method query(); to use
- 4. Check whether the statement was executed successfully

(detail)

```
$query = "DELETE FROM EMPLOYEE WHERE ID = ('".$employee."')";

if ($conn->query($query) === TRUE) {
    echo "<h4>Mitarbeiter erfolgreich entfernt</h4>";
} else {
    echo "Error: " . $query . "<br>}
```





## finish

# Dynamic websites PHP VI





https://www.w3schools.com/php/default.asp

https://www.php.net/manual/de/langref.php

PHP

https://www.w3schools.com/tags/default.asp

HTML

https://www.w3schools.com/cssref/default.asp

CSS

