

Multimedia im Netz (Online Multimedia)

Wintersemester 2014/15

Übung 04 (Nebenfach)



Today's Agenda

- Assignment 3
- MySQLi with PHP

MySQL at the CIP-Pool

- Access “Datenbank Management” here:
<https://tools.rz.ifi.lmu.de/>
- Create a new account (required)
- Create a new database (required)
- Connect to db2.cip.ifi.lmu.de

PHP and MySQL

- There are multiple interfaces for PHP to access databases:
 - mysql
 - mysqli
 - PDO (PHP Data Objects)
- In the tutorials we are only going to use **mysqli**

Test Connection

```
<?php
$c = mysql_connect("localhost", "user", "password");

if($c){
    echo "Connection to database established.";
} else {
    echo "Could not connect to database.";
}
?>
```

MySQLi

- Establish connection
`$c = mysqli_connect("localhost", "user", "password", "mydb");`
- Select database
`mysqli_select_db($c, "mydb");`
- Close connection
`mysqli_close($c);`
- PHP statement for MySQL query
`$results = mysqli_query($c, $query);`
- Process the results:
`mysqli_fetch_array($result);`
`mysqli_fetch_array($result, MYSQLI_NUM);`
`mysqli_fetch_array($result, MYSQLI_ASSOC);`

Example

Table: Contacts

PersonID	FirstName	LastName	PhoneNumber
1	Max	Mustermann	089455544431
2	Laura	Stern	070815643593
3	Tanja	Baumann	0895673138
4	Felix	Maurer	0894562897

Establish Connection with MySQLi

```
<?php
$c = mysqli_connect("localhost", "root", "");

if($c){
    echo "Connection has been successfully
established.";
} else {
    echo "Connection could not be established. ";
}
?>
```


Create Database (not possible at CIP-Pool!)

```
<?php
$query = "CREATE DATABASE Uebung04";
$result = mysqli_query($c, $query);

if(!$result){
    echo mysqli_error($c);
} else {
    echo "DB has been created.";
}
?>
```

Select a specific database

- Either at connection (DB has to be there already):

```
$c = mysqli_connect("localhost", "username",  
                  "password", "Uebung04");
```

- Or with `mysqli_select_db()`:

```
mysqli_select_db($c, "Uebung04");
```

Create a table

```
<?php
$query = "CREATE TABLE Contacts
(PersonID int NOT NULL PRIMARY KEY AUTO_INCREMENT,
FirstName varchar(255) NOT NULL,
LastName varchar(255) NOT NULL,
PhoneNumber int NOT NULL)";

$result = mysqli_query($c, $query);

?>
```

Add an entry

```
<?php
$query = "INSERT INTO
        Contacts
        (FirstName, LastName, PhoneNumber)
        VALUES
        ('Max', 'Mustermann', 098776557)";

mysqli_query($c, $query);
?>
```

Read entries

```
<?php
$query = "SELECT * FROM Kontakte";
$result = mysqli_query($c, $query);

while ($row = mysqli_fetch_array($result)) {
    echo $row[0] . " ";
    echo $row[1] . " ";
    echo $row[2] . " ";
    echo $row[3];
    echo "<br/>";
}
?>
```

Thanks!
What are your questions?