

Web Service Development	Student number	21300691
Homework 4	Name	Cheung, Won Sik

MySQL 쿼리

```
CREATE TABLE `class_web`.`user`(`NAME` VARCHAR(20) CHARACTER SET utf8 COLLATE utf8_general_ci NOT NULL, `ID` VARCHAR(20) NOT NULL PRIMARY KEY, `PASSWORD` VARCHAR(128) NOT NULL, `GENDER` VARCHAR(2) NOT NULL, `MAJOR` VARCHAR(10) NOT NULL, `YEAR` INT NOT NULL, `MESSAGE` VARCHAR(512) CHARACTER SET utf8 COLLATE utf8_general_ci) ENGINE=InnoDB CHARSET=utf8 COLLATE utf8_general_ci;
```

결과

#	이름	종류	데이터정렬방식	보기	Null	기본값	설명
1	NAME	varchar(20)	utf8_general_ci		아니오	없음	
2	ID 	varchar(20)	utf8_general_ci		아니오	없음	
3	PASSWORD	varchar(128)	utf8_general_ci		아니오	없음	
4	GENDER	varchar(2)	utf8_general_ci		아니오	없음	
5	MAJOR	varchar(10)	utf8_general_ci		아니오	없음	
6	YEAR	int(11)			아니오	없음	
7	MESSAGE	varchar(512)	utf8_general_ci		예	NULL	

HTML 코드

form 태그와 fieldset 태그를 이용하여 유저가 회원가입 할 수 있는 인터페이스를 제공한다.

Name과 ID는 text 타입으로 input을 받는다. Password는 password 타입으로 input을 받는다.

Gender는 radio 타입으로 input을 받는다. Major는 checkbox 타입으로 받으며 name을 major[] 로 지정하여 php상에서 배열로 다룰수 있도록 한다. Year는 select로 받으며 마지막으로 Message는 textarea 로 받는다.

```

<body>
  <h3>Sign Up Page</h3>
  <form action="hw4.php" method="POST">
    <fieldset>
      <legend>Type Your Personal Information</legend>
      <p>Name <input type="text" name="name"></p>
      <br>

      <p>ID <input type="text" name="id"></p>
      <p>Password <input type="password" name="password"></p>
      <br>

      <p>Gender
        <input type="radio" name="gender" value="M">Male
        <input type="radio" name="gender" value="F">Female
      </p>
      Major
      <br>
      <input type="checkbox" name="major[]" value="GLS">Global Leadership School
      <input type="checkbox" name="major[]" value="IS">International Studies
      <input type="checkbox" name="major[]" value="LL">Language Literature
      <br>

      <input type="checkbox" name="major[]" value="Man">Management
      <input type="checkbox" name="major[]" value="Eco">Economics
      <input type="checkbox" name="major[]" value="CS">Computer Science
      <br>

      <input type="checkbox" name="major[]" value="EE">Electrical Engineering
      <input type="checkbox" name="major[]" value="GE">Global Entrepreneurship
      <input type="checkbox" name="major[]" value="ICT">Information Communication Technology
      <br>

```

```

      <p>
        Year
        <select name="year">
          <option value="1">Freshman</option>
          <option value="2">Sophomore</option>
          <option value="3">Junior</option>
          <option value="4">Senior</option>
        </select>
      </p>
      <br>
      <p>Message
        <br>
        <textarea name="message" cols="30" rows="10"></textarea>
      </p>
    </fieldset>
    <input type="submit" value="Submit">
  </form>
</body>

```

결과

Sign Up Page

Type Your Personal Information

Name

ID

Password

Gender ☐ Male ☐ Female

Major

☐ Global Leadership School ☐ International Studies ☐ Language Literature

☐ Management ☐ Economics ☐ Computer Science

☐ Electrical Engineering ☐ Global Entrepreneurship ☐ Information Communication Technology

Year

Message

Submit

PHP 코드

회원가입 정보를 DB에 삽입 하는 코드

```
$conn = mysqli_connect($db_host, $db_user, $db_pw, $db_name);

if(mysqli_connect_errno($conn)){
    echo "Database connection failed: ".mysqli_connect_error();
}else{
    //echo "Database connected";
}

$name = $_POST['name'];
$id = $_POST['id'];
$pw = $_POST['password'];
$gender = $_POST['gender'];

// major array to major string by using implode built-in function
$majors = $_POST['major'];
$major_str = implode(", ", $majors);

$year = $_POST['year'];
$message = $_POST['message'];
// if message is longer than 512 characters, make it truncated by using substr built-in function
if(strlen($message) >= 512){
    $message = substr($message, 0, 512);
}

if(checkIDDuplicated($id, $conn)){
    echo "Duplicated ID";
}else{
    addAttribute($name, $id, $pw, $gender, $major_str, $year, $message, $conn);
}
```

ID 중복 확인 함수 및 DB 데이터 삽입 함수

```
// return true if id was duplicated else return false
function checkIDDuplicated($id, $conn){
    $qry = "SELECT id FROM user WHERE id='".$id."'";
    $result = mysqli_query($conn, $qry);
    $row = mysqli_fetch_array($result);
    // No such id in user table
    if($row == NULL)
        return FALSE;
    else
        return TRUE;
}

function addAttribute($name, $id, $pw, $gender, $major, $year, $message, $conn){
    $qry = "INSERT INTO `user` VALUES('".$name."', '".$id."', '".$pw."', '".$gender."', '".$major."', '".$year."', '".$message."')";
    $result = mysqli_query($conn, $qry);
    if($result == FALSE)
        echo "Add Attribute Failure";
}
```

결과를 보여주는 코드

HTML 코드

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8"/>
    <title>HW4</title>
  </head>
  <body>
    <h3>Sign Up Result</h3>
    <table border="1">
      <caption>User List</caption>
      <tr>
        <th>Name</th>
        <th>ID</th>
        <th>Password</th>
        <th>Gender</th>
        <th>Major</th>
        <th>Year</th>
        <th>Message</th>
      </tr>
      <?php
        showTable($conn);
      ?>
    </table>
  </body>
</html>
```

테이블 삽입 함수

```
function showTable($conn){
  $qry = "SELECT * FROM `user`";
  $result = mysqli_query($conn, $qry);
  while($row = mysqli_fetch_array($result)){
    echo "<tr>";
    echo "<th>".$row['NAME']. "</th>";
    echo "<th>".$row['ID']. "</th>";
    echo "<th>".$row['PASSWORD']. "</th>";
    echo "<th>".$row['GENDER']. "</th>";
    echo "<th>".$row['MAJOR']. "</th>";
    echo "<th>".$row['YEAR']. "</th>";
    echo "<th>".$row['MESSAGE']. "</th>";
    echo "</tr>";
  }
}
```

결과

첫번째 삽입

Sign Up Result						
User List						
Name	ID	Password	Gender	Major	Year	Message
정원식	cws0173	1q2w3e4r	M	CS	3	Hello World!

ID 중복시 중복 메시지 보여주고 삽입하지 않음

Sign Up Result						
Duplicated ID						
User List						
Name	ID	Password	Gender	Major	Year	Message
정원식	cws0173	1q2w3e4r	M	CS	3	Hello World!

복수 전공시 두 전공을 문자열로 바꾸어 입력

Sign Up Result						
User List						
Name	ID	Password	Gender	Major	Year	Message
정원식	cws0173	1q2w3e4r	M	CS	3	Hello World!
김태환	kimtaehwan12	1234qwer	M	CS, EE	3	Hello World!