**Task#: 42**

**Course**: Web Development

**Topics**: Creating single MySQL Database Class

**Level**: Advance Level

For the future upcoming tasks, we are going to build a photo gallery system, that will include the following features

* There will be a public user site where visitors will be able to see photos uploaded by admin
* Admin user that will be able to login to its dashboard
* Admin will be able to upload files and store them in database
* Admin actions log files will be maintained.
* Admin will be able to logout from the Admin Dashboard

**Project Structure**

* **Includes**
  + Config.php
    - This file contains the Database Configuration information
  + Database.php
    - This file is the main connection class for MySQL Database
  + Database\_object.php
    - This file will be used to save and use Database helper functions
  + Functions.php
    - This file will be used to create and save application helper functions
  + Initialize.php
    - This file is used to include and require all necessary files to run the application
  + Session.php
    - This file is used to save session information, mainly allow admin to login and logout feature using $\_SESSION Global variable
  + User.php
    - This file will contain all the business logic for the user/admin properties and methods.
* **Logs**
  + This folder will contain all the log files created by our application
* **Public**
  + This is the directory from where our traffic will be served. It contains following directories
    - **Admin**: this area contains all files related to admin dashboard
    - **Images**: this folder will contain all uploaded images
    - **Javascripts**: this folder will contain javascript files if required
    - **Layouts**: this folder will contain our header / footer layouts as they are common on each page.
    - **Stylesheets**: this folder will contain our styles / css

**Requirement**

* Complete functions of **database.php** Class
  + **Query()** complete this function whenever it is called we should run the mysqli\_query and return result.
  + **escape\_value()** complete this function whenever it is called, it should clear the string with all Restricted characters which are not allowed for MySQL. Some Characters are ; , SELECT, FROM & other special characters. For further reference  
    <https://dev.mysql.com/doc/refman/8.0/en/string-literals.html>
  + **fetch\_array()** Complete this function , $result\_set should be passed in the mysqli\_fetch\_array function and returned the $result.

**Best of Luck**