

# PHP Lab Assignment (Student Platform)

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## Observations :

The assignment focuses on the **defensive coding style**, which is oriented towards security and avoidance of vulnerabilities. Your implementation will follow the **guidelines and indications received from the courses and laboratories**.

- For the development you will need a text editor (your favorite one) and the following technologies (**XAMPP** is recommended, because it contains all you need):
  - Apache
  - MySQL
  - PHP
- For configuration, you get the following:
  - Partially developed web-app
  - SQL file you can import in MySQL called `student_delivery.sql`
- Your deliverable will be a zip archive with name **Firstname\_Lastname.zip**

## Requirements

You need to implement the functions defined in **student\_delivery.php**, with the **instructions above each function's header**. The file contains important information, make sure you **read it carefully**.

You will deliver two files inside the zip file: **student\_delivery.php** and **answers.txt**. The **student\_delivery.php** file will be used to validate the functional and security requirements of your solution, and **answers.txt** will contain the security problems you identified in the original code.

## App description

The web-app has the following features:

- allow students to communicate with each other using the Live Chat mechanism
- add profile picture to account
- store and view memos

## Development environment configuration:

1. Install XAMPP (or configure Apache, MySQL and PHP on your device)
2. Import the **student\_delivery.sql** in MySQL. After importing you will have a **student\_delivery** database, which contains the following tables and fields:
  - messages
    - username
    - message
  - users
    - username
    - password

- file\_userphoto

3. You will get a ZIP file with the source files of the application. Copy the contents of the zip in **{xampp\_install\_folder}\htdocs\xampp**. You can access **login.php** in the browser using the url <http://localhost/xampp/login.php>
4. For login you will use one of the two existing users (**victim** or **attacker**). The both have the password **parola**.

## FAQ

- I can't login with the **victim/parola** credentials. What am I doing wrong?
  - Make sure you implemented the login function correctly and you're returning the right information from the function
- How do I import the **student\_delivery.sql** file into MySQL?
  - The file contains only SQL queries. You can use the **import** feature from PHPMysqlAdmin, or you can run the queries manually.
- How should the delivered zip file look?
  - LaszloCiople.zip
    - student\_delivery.php
    - answers.txt
- To securely implement the solution, do I need to modify other files besides the **student\_delivery.php** file?
  - No, the validator will only use your **student\_delivery.php** file and will test your solution with a number of test cases. Any other files will be ignored. The assignment has the purpose of you experimenting with a number of vulnerability patterns that could appear in the source code and has a didactic purpose.
  - If you see any other problems with the code you get from us, you can however signal those in the **answers.txt** file for the possibility of bonus points.