

ISIT307 S3, 2025

Assignment #2

Due: 15/08/2025 23:59pm

Marks: 25 marks (25%)

The purpose of this assignment is to create an interactive website by using Object-oriented PHP and MySQL Database.

Aims

In this assignment, you will need to develop a dynamic website - web application “CityEVChargers”.

The “CityEVCharges” is offering electrical vehicle charging stations at several locations. Each location has limited stations (a limited number of users can charge the EV cars at the same time).

There are two types of users: *Administrator* and *User*. Both types of users should have options to register or login into the app. The *User* should check-in to charge the EV car and check-out when finished with charging.

The *User* can: List all locations with currently available EV stations, Search for a location, Check-in for charging (if there is an available station at the location), Check-out, List the charging locations the user has used in the past (already checked out), List the charging location(s) that is currently using (currently checked-in). When the user is checking-in for a charging, should insert date/time and receive confirmation that the charging started and info regarding the charging costs. When charging is completed and the user is checking out, should get a notification with the total cost that needs to be paid for the charging.

The *Administrator* can: Insert/Edit charging locations into the app, Check-in/Check-out a user for charging. The Administrator should be also able to List all charging locations, List all charging locations with currently available stations, List all charging locations that are full, List all users, Search for a charging location, Search a user, List all users currently checked-in charging location (s).

For every user (*Administrator* or *User*) there should be information about: ID, Name, Phone, e-mail and Type.

For every charging location, there should be information about: LocationID, Description, Number of charging stations, Cost per hour.

The Search options can be done by a combination of different fields (e.g. LocationID, Description). The user can enter only part of the searching term.

Entered information needs to be validated in the PHP script.

The payment is not part of this assignment (the provided solution should not have that functionality).

Requirements

1. Design Requirements

The website should have interfaces for:

- Registering/Login the users;
- Insert/Edit charging location;
- Check-in;
- Check-out;
- Search charging location(s);
- Search user(s);
- List charging locations;
- List *Users*.

2. Functionalities

- Both types of users should be able to register into the app;
- Both types of users should be able to login into the app;
- Both types of users should be able to logout;
- Both types of users should be able to search charging locations;
- The *Administrator* should be able to search users;
- The *Administrator* should be able to insert/edit charging location into the app;
- The *Administrator* should be able to check-in/check-out user for charging;
- The *Administrator* should be able to list: all locations, locations with currently available charging stations, charging locations that are currently full;
- The *Administrator* should be able to list: all users, all users checked-in for charging;
- The *User* should be able to list: all locations with currently available charging stations, all charging locations used in the past, all locations at which is currently charging;
- The *User* should be able to check-in for a charging (with notice for the date/time the charging started and info regarding the charging costs);
- The *User* should be able to check-out of a charging station (with notice of a total cost that needs to be paid).

3. Other Expectations

- The students should create classes and database with tables based on the requirements of the assignment;
- The website should have good interfaces and navigation through the given options.

Submission

1. Prepare a report that has: header

 My name:
 My student number:
 My email address:
 Assignment number:

any requirements, remarks, or readme for your website. The report should also include the list of the web site's files, a brief description for each file and class, a short description of the database tables.

2. Submit a ZIP file containing all assignment files and your report (in .pdf) over the Moodle submission link.
3. You are not required to submit a hardcopy of the report, nor copy out all the source code. Make sure you have included all the information needed, so your solution can be run in a browser.
4. The students should present their solutions to the tutor during the next lab session.

NOTES:

1. Submit your assignment before the due date. Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will attract a penalty of 5% of the assessment mark. This amount is per day including weekends. Work more than 4 days late will be awarded a mark of zero.
2. Submission via email is not acceptable.
3. Assignments without reports will not be marked.
4. Not being able to answer to tutor's questions (regarding the website) or not being able to change your program, based on the tutor's requests may result in the deduction of marks for the assignment.
5. Enquiries about the marks can only be made within a maximum of 1 week after the assignment results are published.
6. By submitting this assignment, you declare that this assignment is **Your own work and you did not collaborate with or copy from others.**

Assessment Criteria		Total Marks	Given Marks
1.	Structure/Documentation	2	
2.	Interface	6	
3.	Functionality	8	

4.	Presentation and answers to tutor's questions	5	
5.	<i>Moodle Quiz 2 (individual)</i>	4	
Total			