ISIT307 S1, 2024 Assignment #2

Due: 11:30pm Monday 19 February, 2024

**Marks: 25 marks** (25%)

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

#### **Aims**

In this assignment, you will need to develop a dynamic website - web application "Easy Parking".

The website is offering parking places at several locations. Each location has limited spaces/capacity (limited number of users that can use the parking 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 use the parking place and check-out when leaving.

The *User* can: List all parking locations with currently available spaces, Search for a parking location, Check-in for a parking (if the parking location is not full), Check-out, List the parkings the user has used in the past (already checked out), List the parking(s) that is currently using (checked-in). When the user is checking-in for a parking should insert date/time and intended duration of use (in hours). When check-in is completed, the user should get a notification with the date/time when the parking use will end (when the user should check-out), cost of the parking, and the cost for late check-out. When the user is checking out, should get a notification with the total cost that needs to be paid and the additional cost if the user is checking-out late.

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

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

For every parking location there should be information about: ParkingID, Location, Description, Parking spaces (capacity), Cost per hour, Cost per hour for late check-out (to be calculated only for the time after the intended check-out).

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

Entered information need 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 parking location;
- Check-in;
- Check-out;
- Search parking location;
- Search user;
- List parking locations;
- List *Users*.

### 2. Functionalities

- Both type of users should be able to register into the app;
- A Both type of users should be able to login into the app;
- Both type of users should be able to logout;
- Both type of users should be able to search a parking location;
- The *Administrator* should be able to search a user;
- The *Administrator* should be able to insert/edit parking location into the app;
- The *Administrator* should be able to check-in/check-out user for a parking;
- The *Administrator* should be able to list: all, currently with available spaces, currently full parking locations;
- The Administrator should be able to list: all users, all users checked-in a parking;
- The *User* should be able to list: all parking locations with available spaces, all
  parkings that (s)he has used in the past, all parking(s) that (s)he is currently using;
- The *User* should be able to check-in for a parking (with notice for check-out date/time, cost of the parking, and the cost for late check-out);
- The *User* should be able to check-out of a parking (with notice for total cost that needs to be paid and the additional cost if the user is checking-out late).

# 3. Other Expectations

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

## **Submission**

| • | Prepare a report that has: header                                |  |  |  |
|---|--|--|--|--|
|   | My name: My student number: My email address: Assignment number: |  |  |  |
|   |  |  |  |  |

any requirements, remarks, and a detail user guide/manual of your web site. 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 Moodle submission link. Name the zip file as A2-Txxx-UOWID(Name) where xxx is T01F, T02F, T03F or T01P.
- 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 need, 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 25% 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. | Moodle Quiz 2 (individual)                    | 4     |  |
|    |   | Total |  |