TASK TRACKER WEB APPLICATION

(http://tasktracker.ml)

There are some tools which I made myself to be familiar with when I started working on this assignment:

1. Brackets is one of the available text editors which I used to perform programming and coding for the task tracker web app. This is very powerful as it provides auto-indent, code highlighting, opening/closing tag & parentheses highlighting.
2. MAMP is a suit including Apache server and MySQL server which is used to host the website.
3. phpMyAdmin is a tool to support operations of MySQL including managing databases, tables, columns, relations, etc. In other words, I can create and manipulate database, even execute SQL statement via this tool. There are 2 core tables in database used in this assignment:
- accounts table contains 5 columns id, username, password, fullname and date (when user creates account)
- userdb table contains columns id, username, tasktitle, description, due date and date (when user enter information about the task)
4. GitHub is used to store all source codes and can be shared later.

There are 4 files (new_task.php, view_task.php, edit_task.php and del_task.php) defining all actions related to the task tracker. Methods including GET and POST are applied in all PHP form submissions. POST method was used to submit user login details to server without displaying the form post values (username and password) in the URL. Meanwhile, GET method was applied to pass value of id (in this assignment, id is primary key in both tables in MySQL) to HTML query string, for example, when users want to view any created task. For instance, when a user wants to edit one of their tasks, the URL link will be displayed like http://tasktracker.ml/edit_task.php?id=8 , which means the referred task is in index 8 in userdb table.

Other files (login.php, logout.php, register.php and welcome.php) are checking authentication and authority of users. The index.php file is used to check if users already log in. If so, users will be directed to welcome.php; if not, they will be navigated to login.php.

The common.php file stores the function to convert special character to HTML entity.

```php
<?php
function escape($html) {
    return htmlspecialchars($html, ENT_QUOTES | ENT_SUBSTITUTE, "UTF-8");
}
?>
```

The config.php file contains username and password to get access to mySQL databases.

In my local host, configuration is

```
$host        = "localhost";
$db_username = "root";
$db_password = "root";
$db_name     = "u3149385";
```

When using freecluster to host the website, I changed the config.php as below:

```
$host        = "sql211.freecluster.eu";
$db_username = "fceu_18023329";
$db_password = "211283";
$db_name     = "fceu_18023329_1"; // v
```

There are also 2 files in templates folder called "footer" and "header" containing CSS and HTML style, which was used to make all pages consistent.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Task Tracker</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <link rel="stylesheet" href="https://cdn.metroui.org.ua/v4/css/metro-all.min.css">
    <style type="text/css">
        body{ font: 14px sans-serif; }
        .wrapper{ width: 450px; padding: 20px; }
        .datepicker{ width: 250px; padding: 20px; }
    </style>
<script src="https://code.jquery.com/jquery-3.3.1.min.js"></script>
<script src="https://cdn.metroui.org.ua/v4/js/metro.min.js"></script>
</head>
<body>

</body>
</html>
```
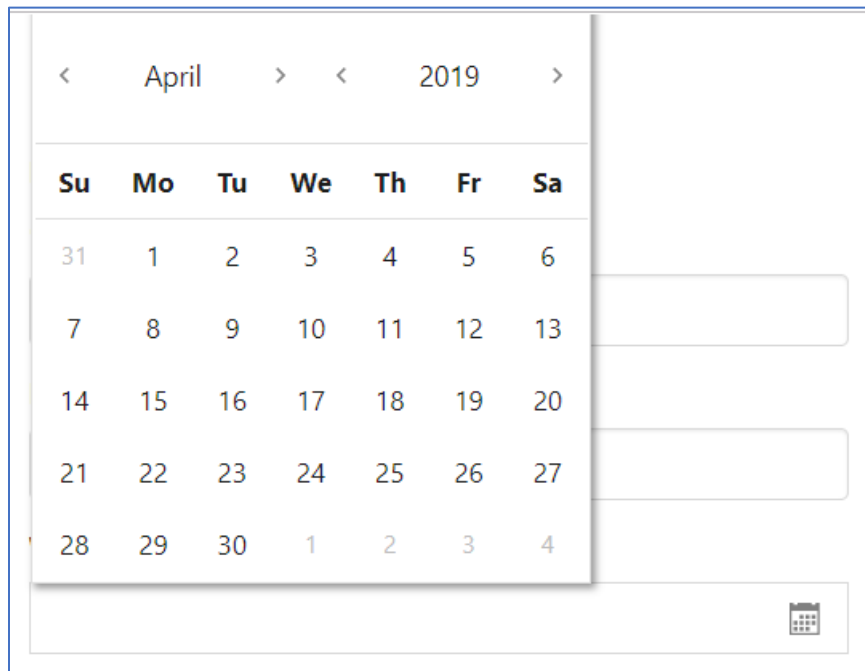
Those files were embedded into each individual page without being re-written. Below is how it was deployed in "login.php" as an example.

```php
<?php include "templates/header.php"; ?>

<?php include "templates/footer.php"; ?>
```

The JavaScript function is also added into "view.php file. This is needed to display a pop up message for users to confirm before deleting any task.

```php
<? echo "<a onClick=\"javascript: return confirm('Please confirm deletion');\" href='del_task.php?id=".$row['id']."'>Delete</a>"; ?>
```

Calendar picker JavaScript is inherited from MetroUI. This component helps user to select a particular due-date for their tasks.

<	April	>	<	2019	>
Su	**Mo**	**Tu**	**We**	**Th**	**Fr**	**Sa**
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Due to the limited time and resource, there is some other functions which need to be added later such as counting down due date or sending text/email messages to remind the users closing to the due date.

User Interface Walk-through

1) SIGN UP – LOG IN – RESET PASSWORD

Sign Up

Please fill this form to create an account.
Fullname

Nick Smiths

Username

nick

Password

••••••

Confirm Password

••••••

Submit   Reset

Already have an account? Login here.

Login

Please fill in your credentials to login.

Username

nick

Password

••••••

Login

Don't have an account? Sign up now.

Reset Password

Please fill out this form to reset your password.

New Password

Confirm Password

Submit   Cancel

2)   WELCOME PAGE

Hi, **Nick Smiths**.

View task   Create new task

Reset Your Password   Sign Out of Your Account

3) ACTIONS RELATED TO TASK (CREATE/VIEW/EDIT/DELETE)

New Task

Please fill this form to create an task.

Title

Description

Work Due Date

Submit   Reset   Back

Congratulation, you just add a new task successfully

New Task

Please fill this form to create an task.

Title

Assignment 1

Description

Letterpress for Uni Open Day

Work Due Date

2019-05-14

[Submit] [Reset] [Back]

You currently have 1 task

Task: Assignment 1
Description: Letterpress for Uni Open Day
Due Date: 2019-05-14
Edit Delete

[Main Page]

Edit your task

Task name

Assignment 1

Task Description

Letterpress for Uni Open Day

Work Due Date

2019-05-14

Save View Task

---

tasktracker.ml says

Please confirm deletion

OK Cancel

Description: Letterpress for Uni Open Day
Due Date: 2019-05-14
Edit Delete

Main Page

REFERENCE

Guru99, "PHP Registration Form using GET, POST Methods with Example", https://www.guru99.com/php-forms-handling.html, viewed 15 Mar 2019.

TutorialRepublic, "PHP MySQL Login System", https://www.tutorialrepublic.com/php-tutorial/php-mysql-login-system.php, viewed 15 Mar 2019.

Metro - Component Library, "Calendar Picker", https://metroui.org.ua/calendar.html, viewed 16 Mar 2019.