KP34903: WEB TECHNOLOGY

Faculty of Computing and Informatics Semester 1 2023/2024

Lab Test 3 (10%): Full Stack Web Development

LEARNING OUTCOMES

CLO3: To construct a cross-functional of full stack web application, includes front-end client-scripting, back-end developments with server-side programming that consists of a server, an application, and a database, and integrate with SOAP or REST API web services. (P7, PLO3)

• User Requirements Document - FCI My Study KPI excel file.

TASK DESCRIPTION

1) SYSTEM GUI DESIGN

- You are required to design a responsive **My Study KPI** website that includes the implementation of HTML5, CSS and responsive web design.
- You need to design your own CSS style for your website and you're free to change the website layout accordingly.

2) DATABASE DESIGN

 Based on the requirements, implement the logical database design with proper tables and attributes with suitable datatypes. Set the Primary and Foreign Keys for each table by referring to their relationship.

3) FUNCTIONAL MODULES CREATION

- Next, you will implement PHP, MySQL and JS to create these 4 modules but not limited to:
 - 1. Authentication module (registration, login, logout)
 - 2. MyKPI Indicator report module, e.g.,
 - i. CGPA: Set/modify your own KPI according to the Faculty KPI and add/update/delete achieved CGPA every semester/year.
 - ii. Student Activity: Set/modify your own KPI according to the Faculty KPI and report achievement for every semester (count the number of activities) based on the entry on the My Activity page.
 - iii. Continue CRUD for other KPIs in the MyKPI Indicator section (in Excel).
 - 3. CRUD operations for the List of Activities module.
 - 4. User profile module for the users to manage their personal information. The information will be displayed on the profile page.

4) PROJECT DOCUMENTATION

- Report MySQL database design, tables, and columns with sample data
- Report Print screen each module of the My Study KPI website with sample data.
- Upload together all the source codes in your zip files.
- Limit any usage of unnecessary images in your project folder, mandatory to use your own profile image (photo) or mark will be deducted.

Evaluation Rubric for LAB Test 3 - MyStudyKPI

| Attributes/Criteria | Weight (%) | Very Poor 1 | Poor 2 | Satisfactory 3 | Good 4 | Very Good 5 |
|--|---------------|--|---|--|--|---|
| Technical Skill – Guided Response (P3) Task 1: Create GUI Design based on system requirements | 25% | Very poor, with inconsistent layout design and not responsive. Very poor use of CSS (Cascading Style Sheet) for page layout, menu, fonts and buttons. | Poor, inconsistent layout design and not responsive. Poor use of CSS (Cascading Style Sheet) for page layout, menu, fonts and buttons. | Minimal, inconsistent layout design and responsive. Minimal use of CSS (Cascading Style Sheet) for page layout, menu, fonts and buttons. | Good, consistent layout design and responsive. Good usage of CSS (Cascading Style Sheet) for page layout, menu, fonts and buttons. | Very neat, and consistent layout design and responsive. Proper and good usage of CSS (Cascading Style Sheet) for page layout, menu, fonts and buttons. |
| Technical Skill – Guided Response (P3) Task 2: Construct a Database Design | 25% | - Very poor database design and modelling, not according to requirements. | - Poor database design and modelling, not according to requirements. | Moderate application of database design and modelling, not very clear table and description. Moderately follows the basic requirements. | Good formulation of database design and modelling, every table is connected and described clearly. Follows the basic requirements | Proper formulation of database design and modelling, every table is connected and described clearly. Follows and improves the requirements. |
| Mechanism (P4) Task 3: Functional Module Creation | 50% | - Modules not working at all, poor design, no validation | - Some modules not working properly, poor design, no validation | - Modules are working with basic CRUD functionality, minimal validation | - Good CRUD modules creation, with good display and proper validation | - Very well written CRUD modules creation, with very good display and validation |