**Universiti Tun Hussein Onn Malaysia**

**Faculty of Computer Science and Information Technology**

**BIS 20303 Web Security**

**Instructions:**

1. Develop one web application for UTHM Students.
2. Equipped the web application with the following security features.

**Activity 1: Registration (30 marks)**

1. Allow users to register themselves with at least a user ID, password, name, UTHM Matric Number, IC number, and security phrase.
2. Perform data validation and sanitization for name, password, UTHM matric number, and IC number.

* Whitelisting
* blacklisting

1. Password needs include uppercase letters, lowercase letters, numerals, special characters, and at least 10 characters.
2. Display a suitable error message (do not reveal information).

**Activity 2: Authentication (15 marks)**

1. Use salts with the password stored in the database.
2. Apply Multifactor authentication (captcha etc)
3. Display a suitable error message (do not reveal information).

**Activity 3: Parameterized Query (10 marks)**

1. Demo the use of parameterized query

**Activity 4: Login (5 marks)**

1. Display at least 2 pages that only can be viewed after login.

**Activity 6: Report (each activity 10 marks)**

1. Arrange the content of the report based on the activities.
2. The report's due date is at the end of week 12 (Thursday, 9 June 2022).

**Activity 6: Presentation (20 marks)**

1. Every group member must take part
2. The presentation session will start on week 13.
3. The time of the presentation is ten minutes including Q&A.
4. No slide is needed, just demo your system.
5. Demo your system as you want to promote them to your client on your highly secure system.
6. The presentation will be evaluated based on clarity, creativity, appearance, and Q&A.