UNIVERSITY OF TECHNOLOGY, JAMAICA

School of Computing and Information Technology

Web Systems Design and Implementation (CIT4034)

Group Assessment (35%)

DATE GIVEN: Week of October 25, 2020

**DUE DATE: Week of November 30, 2020** 

Scenario:

A medical centre, **Avocado Medical Centre**, has hired you to develop a website to

digitize their record keeping. Currently, patients have a folder with records of visits

and procedures. The centre desires for you to develop a web system, which could then

be deployed to other branches, should they expand.

Building from the Individual Assignment, Avocado Medical Centre also desires to be

able to register accounts to each staff member. There would be different privileges for

each user type (nurses, doctors, administrators).

Guests would only be able to view the opening hours and contact information as well

as the services, in detail, offered by the Medical Centre. Other information would

include years of service and Mission Statement, etc.

e.g. <a href="https://colorlib.com/wp/html5-medical-website-templates/">https://colorlib.com/wp/html5-medical-website-templates/</a>

# PROJECT: 25%

#### **USER FUNCTIONALITY**

#### **Guest:**

- View the website, see services, calculate BMI.
- Login (successful if part of staff)
- make appointment (first and last name, date)

# **Nurse:** (performs functions of **Guest** and the following)

- Login (Staff ID or Email Address and Password)
- Edit profile (Password, email address, telephone number, mailing address)
- Register and Log when a patient comes in for a doctor visit
- Search patients' records based on first or last name.
- Search for and view appointments, and edit appointment status.

## **<u>Doctor:</u>** (performs functions of Nurse and the following)

- add reason for visits to each patient on the day of visit.

### **Administrator:** (manages all accounts:)

- Add, Edit, Delete User Accounts.

### **WEBSITE:**

Based on the user type, some options should not be visible. Put in place the proper validation, displays and redirection if a user does not have the user rights to enter a particular page.

**DATABASE:** Create a database "avocadoMC DB" with the following tables:

Staff (**StaffID**, Name, Email, Password, Type (*Nurse/Doctor/Administrator*)

Patient: (PatientTRN, Title, First Name, Last Name, Date of Birth, Address,

TelNo., Email)

Appointment: (*PatientTRN*, *StaffID*, Date, ReasonForVisit, Status)

\*StaffID is for the current doctor signed in.

\*Status is either: pending, cancelled, or complete

The database should be populated with at least:

- 2 administrators, 3 nurses and 2 doctors, and 5 patients.
- 3 appointments, each with a different status.

Create a UML diagram of the database to show relationship between the tables.

### PRESENTATION: 10%

The presentation will take the form of a detailed report outlining the following:

- 1. Group Members & Roles in completion of Website.
- 2. Disclaimers for Website operations (login, necessity of web connectivity, etc) should there be any need-to-know things about running the website.
- 3. Report on website development and difficulties faced (timeline, lack of coordination/cooperation, difficult website requirements, etc, errors faced).
- 4. Functional sections of website.
- 5. Non-functional sections of website (if any).
- 6. UML Diagram of Database Relationship
- 7. Learning experience of the team.
- 8. Commentary of Module offered (classroom, lab, lecturer, delivery, etc)

# **RUBRIC**

SECTIONS	0 - 2	3 - 4	5 - 7	8 - 10	GRADE
PHP/ HTML Soundness 10%	The code is a jumble and has no discernible flow. Multiple syntax errors.	A lot of errors are found however,some of the code has correct execution	Few of the code needed lecture intervention to run properly.	Little or no errors found in PHP scripting and all tags are labelled correctly. Proper form input, etc	
Design 20%	Little or no effort was made to make the website appealing.	Some effort was placed in the design, such as the use of tables and basic styles.	Most of the design is appealing with sparsity of errors. Most things understood.	Design is professionally designed, and matches the theme needed. Very user intuitive. Consistent throughout the website	
Form Data and Validation 20%	Few of the form data passed. Little or none of the information has been validated.	Some of the information was validate but not all were correctly formatted.	There was a fair amount of validation of the data entered. User error messages are somewhat clear.	Most if not all data correctly validated with the appropriate format and user error messages easy to understand.	
Database and Patient Management 20%	Tables not implemented or at least one is partially created	All tables created but with most not manipulated by the website	There are working database manipulation within the website.	Most if not all of the database works perfectly with the website	
User Privileges 20%	There are no discernible user privileges.	There is at least one partially working user privilege.	Some of the user privileges is functional in the web system.	Most if not all user privileges are properly implemented.	
Presentation 10%	No report submitted.	Report submitted with few relevant detail.	Report submitted with relevant information in somewhat organized fashion.	Report submitted with all relevant information in an organized fashion	

Submit by email in a .zip/.rar /.7z to lushane\_jones@live.com.