

## C203 SKILL TEST

**Module:** Web Applications Development in PHP

**Code:** C203

**Deliverables:** A zipped file containing project folder and a one-shot continuous 15-min (max) video.

### Grading Criteria

- Good organization of files and assets in project folder (e.g. css, images, js folder).
- An aesthetically well designed website using Bootstrap and external CSS.
- Form elements to adopt given name attributes provided in the skill test.
- Consume at least **one** PHP web service using jQuery.ajax ().
- Good programming practices displayed in the codes.

### Instructions

- 1 You are required to complete **ALL** the tasks stated in this skill test.
- 2 Complete the website before doing the recording. Draft design is not required to be submitted or recorded. At the start of recording, **please state your name, ID and class clearly**.
- 3 Record yourself demonstrating the use of the website, before explaining what you have implemented in your php pages. This recorded video should be one-shot and continuous. It should **NOT EXCEED 15 minutes**. In your recording, you should demo use of your website within 2-3 minutes, and then use the remaining time to clearly explain your codes.
- 4 Before exporting your video to **mp4**, ensure that the audio is **clear** and video content **unobstructed**. Name exported video in the following format: [StudentID\_Name\_Class].mp4. Other video format will **NOT** be accepted for submission.
- 5 Zip up your work (project folder, and recorded video) and named your zipped folder in the following format: **[StudentID\_Name\_Class]**  
**e.g. 19012345\_PeterTan\_W64P.**
- 6 Deadline for submission is **19 Aug, 2359hrs**. Submission is done at the **P13 student package**.

**Late submission will be penalized. Late submission must be done before your skill test interview. Non-submission will be a default failure for this module.**

On the day of your skill test interview, your interviewer will evaluate your work, and may require you to do code adjustments.

## Brief

You are creating a PHP web app that allows a person with diabetes keep track of their sugar reading after meal times.

## Materials

Before starting the skill test, you are provided the following materials in a zipped file '**C203\_skill\_test\_material**'. Work with only these materials.

Files	Description/usage
dbFunction.php	Credentials to access database.
C203_SkillTestSQL.sql	Create tables 'user' and 'sugarreading' in mySQL
index.php	New user to register, and existing users to login
sugarMonitoring.php	Allows user to input sugar reading, and view previous entries.
doRegister.php	Process new user registration.
doLogin.php	Performs user's credential before accessing sugarMonitoring.php
doLogout.php	Close user's session, and directs user to index.php.
InsertReading.php	Insert user sugar-reading entry.
getReading.php	Retrieve previous sugar-reading entries.

### Task 1: Create database

In PHPMysqlAdmin, create a database: **c203\_sugarmonitoringdb**.

Import '**C203\_SkillTestSQL.sql**' into this database. Table *user* (see Figure 1.3) and table *sugarReading* are provided.

#### user table

Fields	Type	Special
userid	int (11)	AUTO INCREMENT, PRIMARY KEY
username	varchar(60)	
password	varchar(40)	
height	Int (4)	
weight	decimal(4,1)	

**sugarreading** table

Fields	Type	Special
readingID	int (11)	AUTO INCREMENT, PRIMARY KEY
userID	int (11)	
readingDate	date	
readingTimes	varchar(40)	
readingLvl	decimal(3,1)	

\* When writing to these tables, do **NOT** perform server-side validation.

**Task 2: Implement WebApp pages**

Design the webapp pages from **scratch** with the aid of **Bootstrap 4**. The website should be **viewable on all devices**.

\*Form validation is **NOT** required for both sign-up and login. Assumed that user enters all fields in the registration and login.

\*Images used on webpage are to be sourced from freely-usable images sites such as <https://unsplash.com/>.

The webapp has the following features described.

**Features****1. Register**

For registration, the following details are required from the user. Use the corresponding **name attributes** for the form elements

input	Name attribute
username	username
password	password
height (in cm)	height
weight (in kg)	weight

\*Checking of duplicated username in database is **NOT** required.

\*Passwords are to be hashed using SHA1 () method.

## 2. Login

For login, user enters the username and password. Successful login takes user to the sugar monitoring (sugarMonitoring.php) page **automatically**, while a failed login displayed an error and a link for user to return to login page.

*\* For testing purpose, user and password are to be the same.*

*E.g. username: michelle, password: michelle.*

*\* 'Remember me' feature is **NOT** required.*

Use the corresponding name attributes for the form elements in login.

input	Name attribute
username	entered_username
password	entered_password

## 3. Sugar monitoring Page

This page has two features

- Allow user to input sugar reading taken 2 hours after a main meal (breakfast, lunch dinner), and
- View previous sugar reading entries.

*\*This page should **NOT** be accessed without a proper login. If the session is invalid, user is **automatically** redirected to the login page (index.php).*

*\* To retrieve previous sugar reading entries, perform an asynchronous HTTP (Ajax) request and populate a Bootstrap table or equivalent.*

*\*When user inserts sugar reading, the webpage checks and issues a message in a confirm popup box. Based on the sugar reading, the following message is issued.*

Message:

Your Reading entered after XXXX is YY mmol/L Sugar level is: ZZZZ Proceed to submit Reading?
--

*XXXX is the meal where reading is taken, YY is the sugar reading entered, and ZZZZ is the message shown in the table below.*

Sugar reading entry (YY)	Message (ZZZZ)
Less than or equal to 7.8	Normal
Between 7.9 and 11.0	Elevated
Greater than 11.0	High

An example of the confirm popup box is provided.

localhost says

Your Reading entered after Breakfast is 5 mmol/L

Sugar Level is: Normal

Proceed to submit Readings?

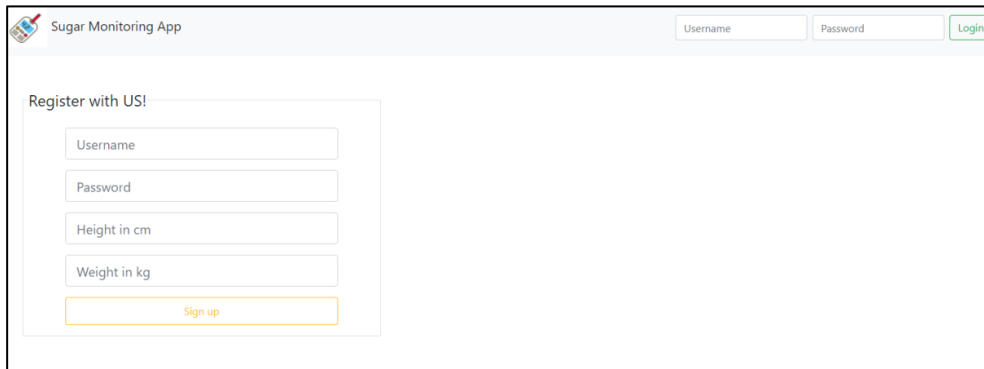
**Use the name attributes for form elements to insert reading.**

	input	Form element	Name attribute
1	reading times	Allow user to input the times when reading was taken (after breakfast, lunch, or dinner)	readingTimes
2	sugar reading	Sugar reading	readingLvl

#### 4. Logout

User destroys the session by logging out of the system. Once logout, user is **automatically** redirected to index.php.

The figures show examples of how your webpages may look like. You need **NOT COPY** the design. **It serves as a guide and your original design will be awarded for aesthetics.**



Sugar Monitoring App

Username  Password

Register with US!

Username

Password

Height in cm

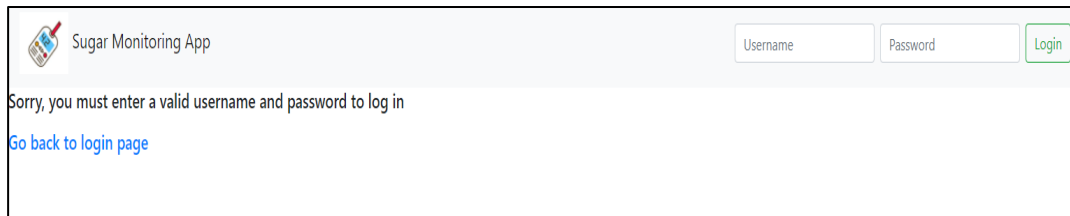
Weight in kg

Index.php (registration and login)

**Get Together - Register**

Your new account has been successfully created. You are now ready to [login](#).

doRegister.php (user registration)



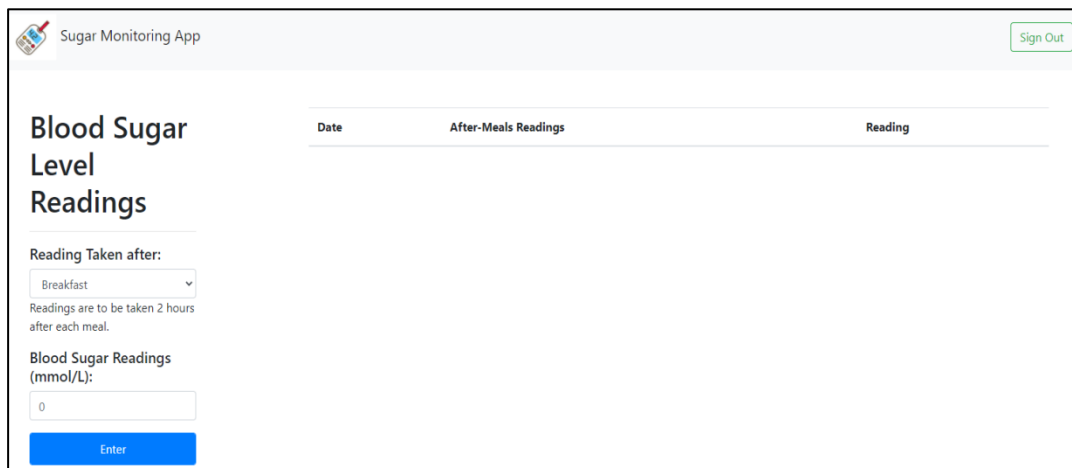
Sugar Monitoring App

Username  Password

Sorry, you must enter a valid username and password to log in

[Go back to login page](#)

doLogin.php (authentication failed)



Sugar Monitoring App

## Blood Sugar Level Readings

Date	After-Meals Readings	Reading
<p>Reading Taken after:</p> <p>Breakfast <input type="button" value="v"/></p> <p>Readings are to be taken 2 hours after each meal.</p> <p>Blood Sugar Readings (mmol/L):</p> <p><input type="text" value="0"/></p> <p><input type="button" value="Enter"/></p>		

sugarMonitoring.php (login successful)

**Blood Sugar Level Readings**

Reading Taken after:  
Breakfast

Readings are to be taken 2 hours after each meal.

Blood Sugar Readings (mmol/L):  
0

Enter

Date	After-Meals Readings	Reading
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sugarMonitoring.php (on small device)

localhost says

Your Reading entered after Breakfast is 8 mmol/L  
Sugar Level is: Elevated  
Proceed to submit Readings?

OK Cancel

**Blood Sugar Level Readings**

Reading Taken after:  
Breakfast

Readings are to be taken 2 hours after each meal.

Blood Sugar Readings (mmol/L):  
8

Enter

Sign Out

Date	After-Meals Readings	Reading
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sugarMonitoring.php (User enters sugar reading after meal taken)

**Blood Sugar Level Readings**

Reading Taken after:  
Breakfast

Readings are to be taken 2 hours after each meal.

Blood Sugar Readings (mmol/L):  
8

Enter

Sign Out

Date	After-Meals Readings	Reading
2021-07-16	Breakfast	8.0

sugarMonitoring.php (Previous entries are displayed in Bootstrap table)

--- End of Skill Test ---