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Human Computer Interaction
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Homework 3: Diabetes Monitoring System

Background

An interface that allows the user to input their daily blood glucose for diabetes monitoring. This application was created using React, HTML, CSS, and Javascript.

Interface Requirements

Login Screen (3 pts)

Diabetes Monitoring

User Login

Sara Norman

Sara Norman

Gregg Norman

Login

The system has the following two users' data built-in, and both users can login by simply selecting their first name..

Blood Glucose (Sugar Level) Monitoring (8 pts)

Once logged in, every other screen in the interface displays the current patient's name and ID number and also allows them to log out at any time. The user is prompted if they have taken their blood sugar reading. If they have, they are allowed to input their reading. If not, you should prompt them to do it

immediately and then record the results. (Acceptable input values are numbers 0 through 999.)

Diabetes MonitoringPatient: Sara Norman (ID: 5344-9709)

Logout

Help

Have you taken your blood glucose reading today?

Yes, I have taken it

No, I have not taken it

If the user's reading is in their low range, you should notify them that this is a reading that is low. You should remind them to eat a sugar source, take their medicine, and eat meals and snacks as described by their doctor.

Diabetes MonitoringPatient: Sara Norman (ID: 5344-9709)

Logout

Help

Glucose Input

12

SUBMIT

Your glucose level is low (12 mg/dL). Please eat a sugar source, take your medicine, and have snacks and meals as advised by your doctor.

If the user's reading is in their normal range, inform them that their reading is within a normal range.

Glucose Input

SUBMIT

Your glucose level is normal (120 mg/dL). Keep up the good work!

If the user's reading is in their high range, you should notify the user that their blood sugar is high. Ask them to call their doctor immediately, providing both their doctor's name and phone number. You should then ask them if there is a presence of ketones in their urine.

Glucose Input

SUBMIT

Your glucose level is high (999 mg/dL). Please contact Dr. Jason Rosenberg immediately at 579-0432. Check for ketones in your urine.

For any abnormal readings (i.e. in the too low or too high ranges), you should request the user to explain why they feel their reading isn't normal (Allow them to input such reasons as Drank soda, Has the flu, Ate a big lunch, etc.)

Glucose Input

999

SUBMIT

Your glucose level is high (999 mg/dL). Please contact Dr. Jason Rosenberg immediately at 579-0432. Check for ketones in your urine.

Abnormal Glucose Levels

Please explain why your reading is abnormal:

Reason (e.g., Drank soda, Has the

SUBMIT REASON

Help (1pt)

Pressing the “help” button prompts an informative menu with descriptions of each task and button in the interface in the case the user does not understand what to do.

Diabetes Monitoring

Patient: Sara Norman (ID: 5344-9709)

Logout

Help

Need assistance? Here are some tips:

- Enter your glucose reading in the field provided.
- If your reading is abnormal, provide a reason in the input box that appears.
- Use the 'Logout' button to exit the system after you've submitted your information.

Logout

Diabetes Monitoring

User Login

Sara Norman ▾

Login

Pressing the logout button returns the user to the login screen.