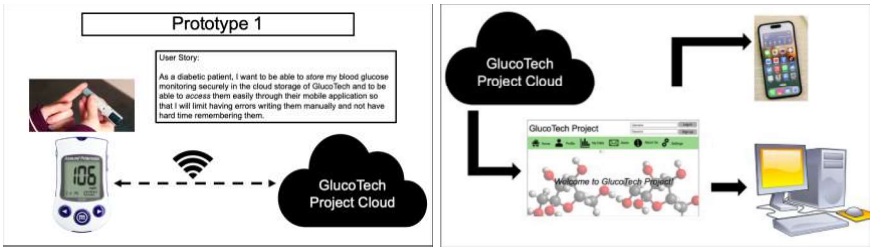
Section 6: PROTOTYPING

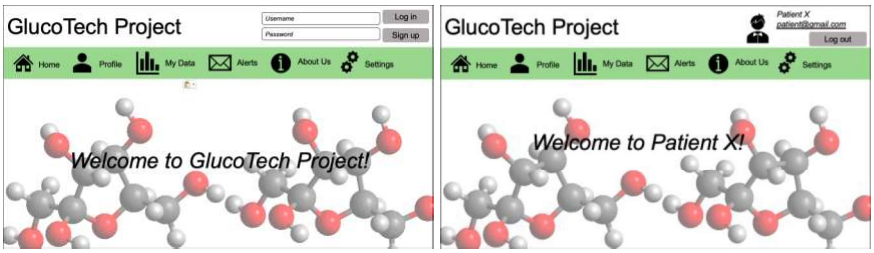
PROTOTYPE 1

User Story:

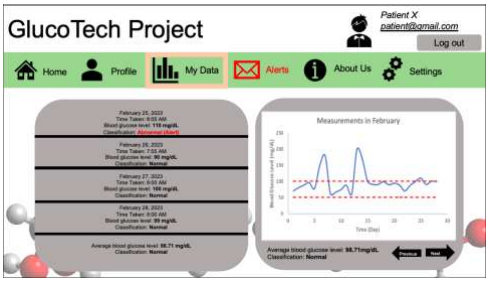
As a diabetic patient, I want to be able to *store* my blood glucose monitoring securely in the cloud storage of GlucoTech and to be able to *access* them easily through their mobile application so that I will limit having errors writing them manually and not have a hard time remembering them.



The patient checks his blood glucose level using a glucometer connected to the internet. The blood glucose level will be automatically uploaded to the GlucoTech Cloud/Server. The patient will automatically see the blood glucose level on the glucometer screen. The project managers will provide the patient with login information to access his previous blood glucose level measurements on the website via a smartphone or computer. The patient needs to type his login information to access his data correctly.



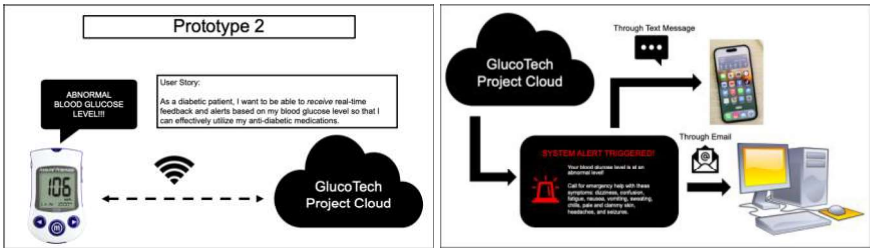
After logging in, patients will select “My Data” to access their blood glucose monitoring record. The blood glucose level monitoring will indicate the date and time taken and its classification. Selecting “My Data” will send the user to another page showing both list and graph of their blood glucose monitoring in the current month. The patients can access their previous recordings by clicking the “Previous” or “Next” buttons.



PROTOTYPE 2

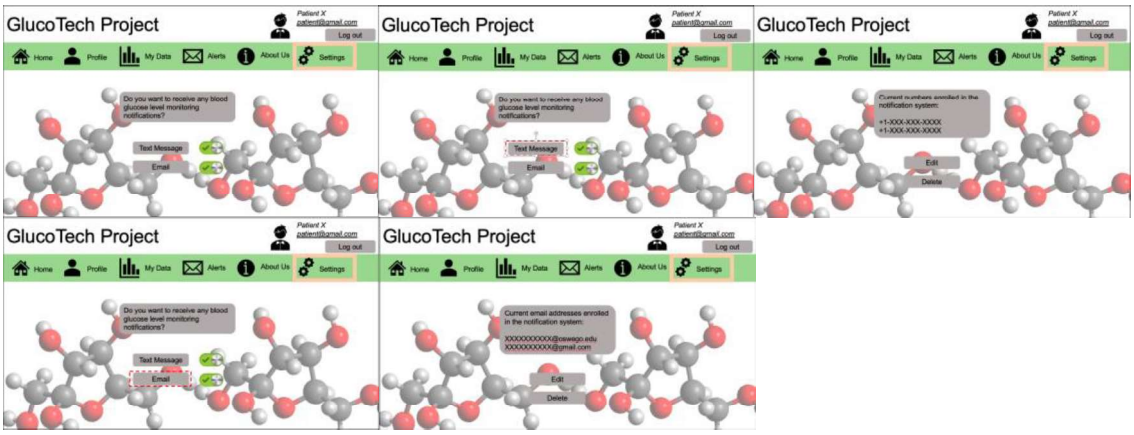
User Story:

As a diabetic patient, I want to be able to *receive* real-time feedback and alerts based on my blood glucose level so that I can effectively utilize my anti-diabetic medications.



Since the data information is uploaded in the GlucoTech Cloud/Server. The alert system will notify the users whenever the system reads an abnormal blood glucose level. Selecting "Alerts" button will show a prompt message about the abnormal blood glucose levels and "View" button that will directly send the users to their "My Data" page.

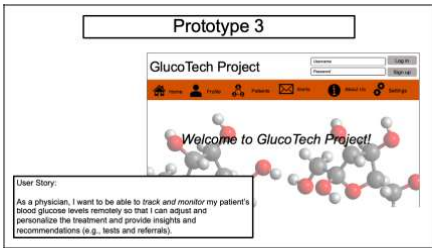
The users can set their preferred notification system via "Settings". They have the option to turn on or turn off the notifications. The notification can be sent via a text message, an email, or both, depending on the preference of the users. If the notification system is turned on, they can add, edit, or delete mobile numbers or email addresses.

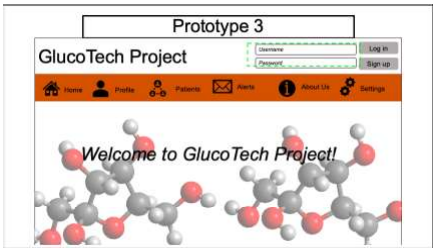


PROTOTYPE 3

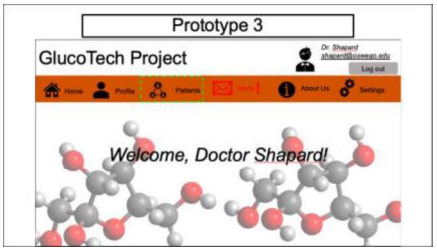
User Story:

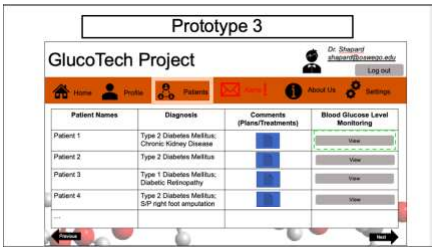
As a physician, I want to be able to *track and monitor* my patient's blood glucose levels remotely so that I can adjust and personalize the treatment and provide insights and recommendations (e.g., tests and referrals).



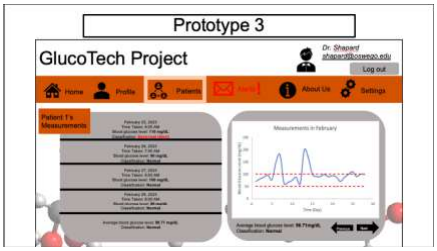


The physician will be provided with login information by the project managers. The physician can use the information to log in into the system. In "Home Page", home, profile, patients, alerts, about us, and settings buttons are seen. Upon logging in, he can access "Patients" to check and monitor his patients' blood glucose levels.





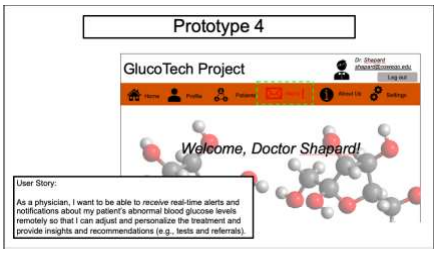
In "Patients" page, a table consisting of patient names, diagnoses, comments and monitoring can be observed. In the monitoring column, "View" buttons can be seen for each patient. This button will lead to the page showing the blood glucose level recordings of the patient. Both graph and list format can be observed. The physician can click on the "Next" or "Previous" button to view the past recordings. Abnormal recordings are in red.

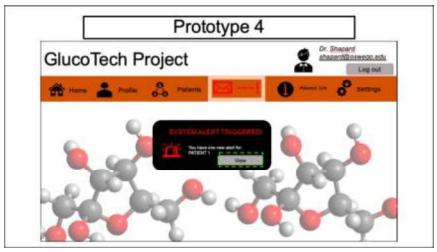


PROTOTYPE 4

User Story:

As a physician, I want to be able to *receive* real-time alerts and notifications about my patient's abnormal blood glucose levels remotely so that I can adjust and personalize the treatment and provide insights and recommendations (e.g., tests and referrals).





Upon logging in, the physician will be alerted if he has new messages/alerts (noted in red). Clicking "Alerts" button will prompt the dialogue box noting the patient who has recorded an abnormal blood glucose level. Clicking the "View" button will transfer the page to the specific patient's recordings page.