

The GlucoTech Project aims to collect and store data in the cloud/server, providing real-time accurate blood glucose levels and system alerts to patients, caretakers, and healthcare professionals to manage diabetes mellitus and prevent its complications effectively. Hence the project will provide more focused patient-centered care and better and interactive data visualization.

Section 1: USER STORIES

The interviewed users for this GlucoTech Project consist of a patient, a physician, a nurse, and a family relative/caretaker. The priority is stated below, and the estimates below are in a number of days.

Story #1

As a diabetic patient, I want to be able to *monitor* my blood glucose levels accurately so that I can effectively and actively monitor my condition to prevent its complications, which leads to having a sense of control and engagement in my own health.

Priority 2
Estimate 2

Story #2

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

Priority 3
Estimate 3

Story #3

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 website so that I will limit having errors writing them manually and not have a hard time remembering them.

Priority 1
Estimate 3

Story #4

As a diabetic patient, I want to be able to *share* my blood glucose monitoring with my clinicians and permitted relatives/family members so that whenever I encounter symptoms (e.g., fatigue, weakness, unconsciousness) from extremely high or low blood glucose levels, they will be able to act accordingly (e.g., provide medication if extremely high blood glucose level or provide sugar if extremely low blood glucose level).

Priority 4
Estimate 4

Story #5

As a permitted relative/family member, I want to be able to *access and receive* blood glucose monitoring with alerts and notifications of my debilitated family members suffering from diabetes so that I can provide them with proper care (e.g., intake of medication, diet, etc.).

Priority 3
Estimate 2

Story #6

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

Priority 5
Estimate 2

Story #7

As a physician-researcher, I want to be able to *access* the anonymized data information with consent about blood glucose monitoring so that I can understand and provide innovative works regarding diabetes.

Priority 8
Estimate 1

Story #8

As a nurse, I want to be able to *access* my patient's blood glucose monitoring so that I can help them be reminded of the proper fingerstick method, the intake of their medications, and their diet.

Priority 6
Estimate 2

Story #9

As a dietician, I want to be able to *access* my patient's blood glucose monitoring so that I can provide an individualized dietary recommendation and be able to collaborate with other clinicians regarding dietary needs.

Priority 7
Estimate 2