

# Diabetic Sensor Measurements



Shrooq Jan - Nouf Alhazzani - Rahaf Shesha - Anhar Malibari - Sarah Fatani

Computer Science Department, Umm Al-Qura University, Makkah, KSA

## Introduction

Recently, hospitals in Saudi Arabia have reported many diabetic coma cases. and diabetic coma is a major concern of caregivers of children with diabetes who may enter the stage of hypoglycemia and may develop brain damage without alerting them.[1]

## Target people



The hearing and speech impairment caregivers



Diabetics children



Elderly people / Alzheimer

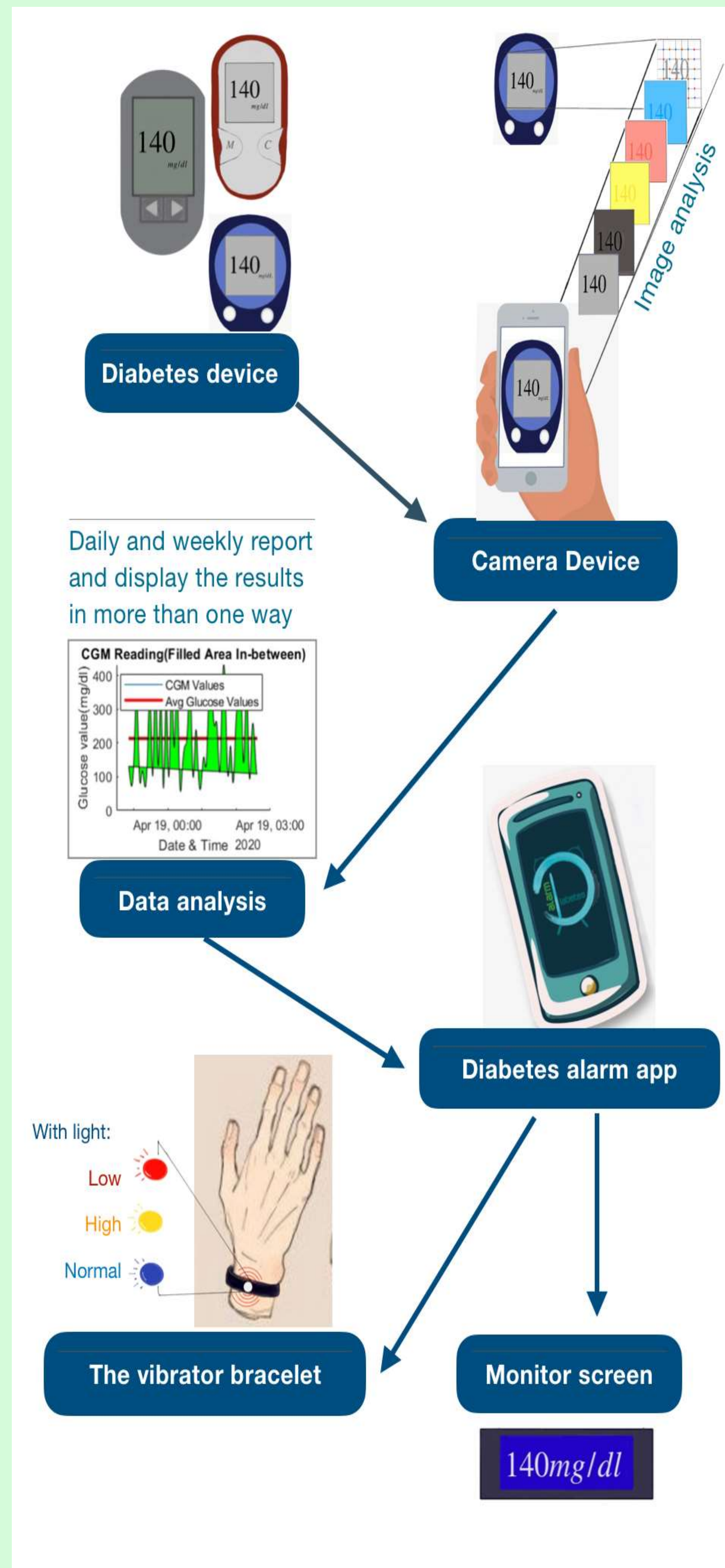
## Purpose

Our application builds on the technology used to measure blood glucose automatically on diabetic individuals.

The project novelty:

- 1) Readings are sent across networks mobiles via email.
- 2) Application is developed by adding notifications for hearing and speech impairment caregivers.

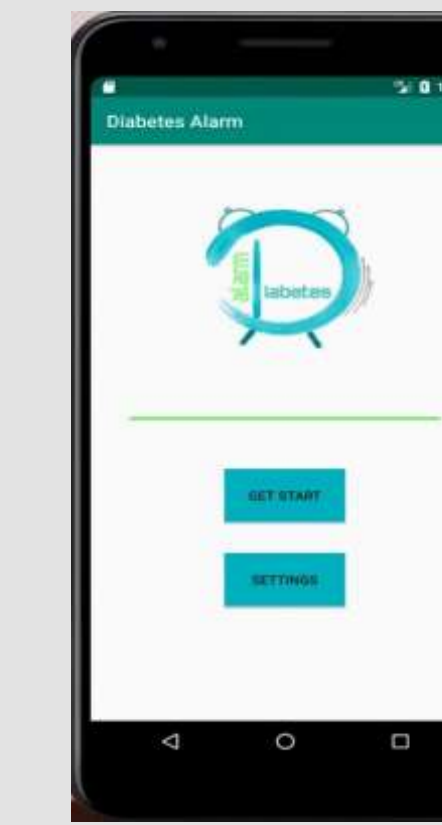
## Methodology



## Results

The output of our project :

Diabetes alarm app



With light:

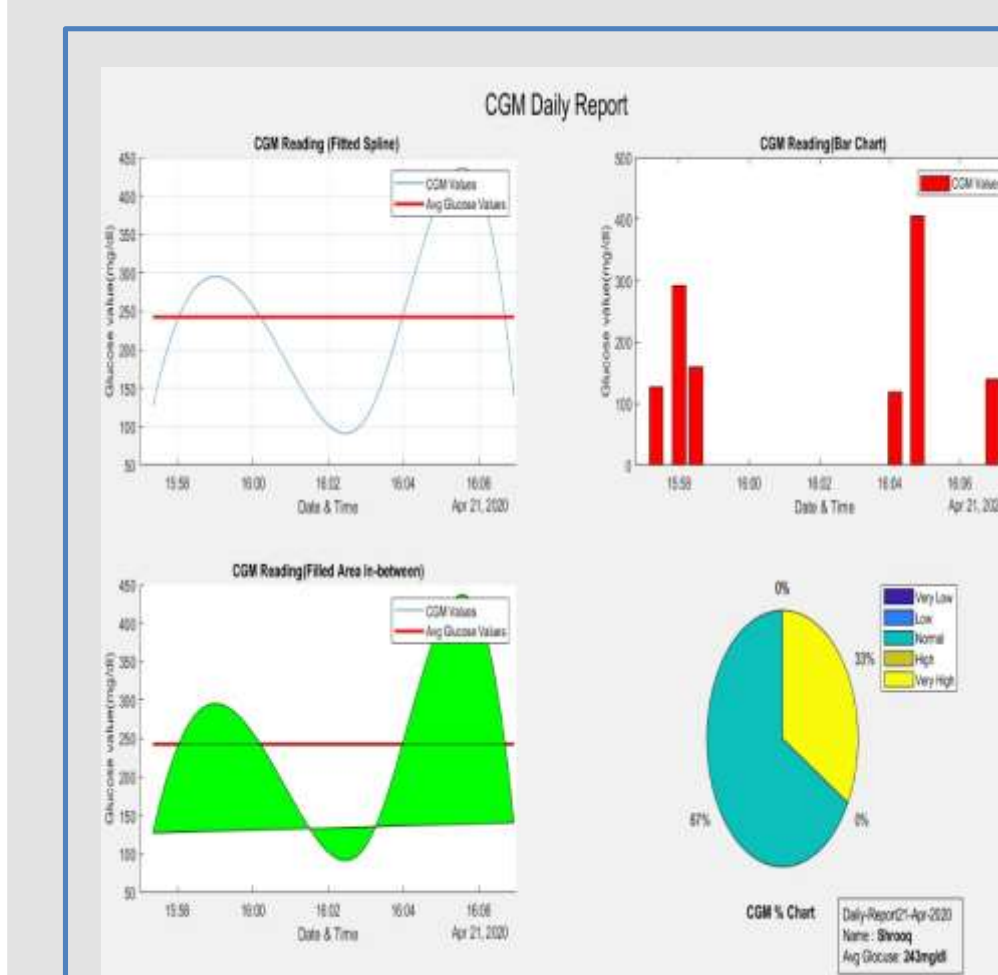
- Low
- High
- Normal



The vibrator bracelet

Monitor screen

140mg/dl



Daily and weekly data analysis

## Materials



## Future plan

- In the future plan, a camera will be programmed within the application that will automatically take a screenshot of the measurements.
- Designing the bracelet.
- Patent submission.

## Conclusion

Our project is aiming to aid children, Alzheimer and the hearing and vision impairment caregivers a special bracelet is designed to illuminate and vibrate in response to that adjustment. the hearing and speech impairment caregivers, will benefit from this technology more than others. However, the main purpose of this project is to avoid the diabetic coma by monitoring the glucose level on a daily or weekly bases and then analyzing data as a diagram or a chart.

## Contact Information :

**Supervisor :** Dr.Elham Hassanain  
emhassanain@uqu.edu.sa

**Leader :** Shrooq jan  
St436000237@uqu.edu.sa

## References :

[1] <https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=90&contentid=P01960>