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## **Group 11**

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# Importance of Glucose Monitoring

- Tight blood sugar control reduces the risk of developing microvascular diabetes complications.
- Glucose control significantly prevents the development of clinical neuropathy.
- Diet and exercise, when combined, greatly improve quality of life in Type II diabetics.

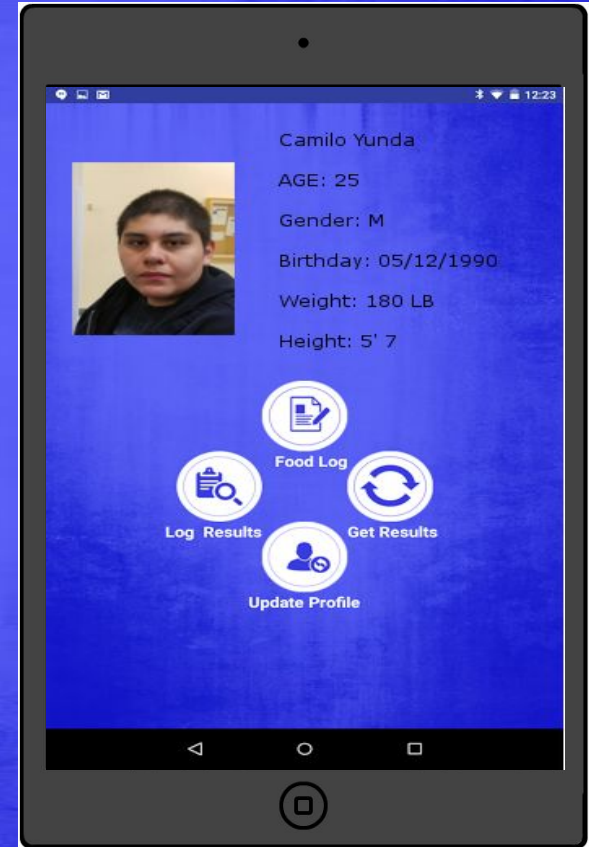
# Main

- Profile
- Healthy Tips
- Information
- Tutorial



# Profiles

- Each person has their own data saved individually.
- When user chooses their profile user is taken to pre-measurement screen.
- If new user uses app their name, age, and gender will be requested.



# Food log

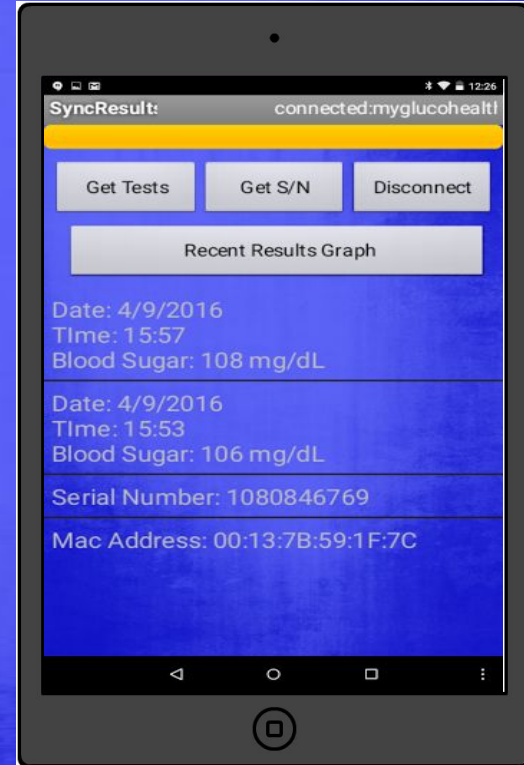
- The user can give a brief description of the food they ate, what they drank, and any medication taken.
- The information will be saved directly to the device so it can be acquired at any time
- When you are ready you can pull up a list of all the meals that you have entered into the app.





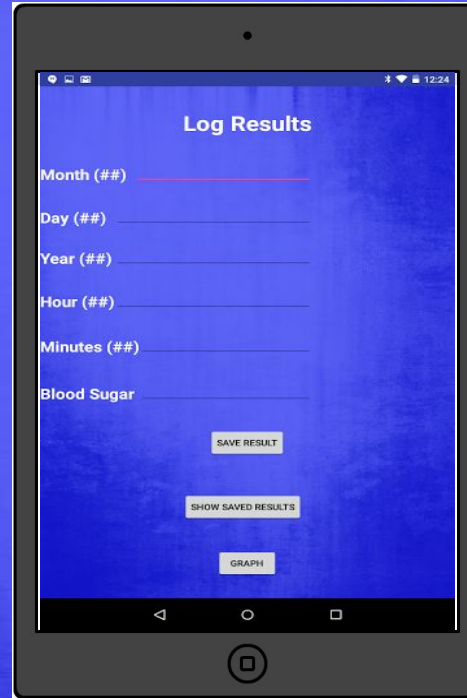
# Get Results

- The user will be able to retrieve the data from sensor and displayed on screen via Bluetooth.
- The serial number and MAC address of the sensor can also be obtained if needed.



# Log Results

- The user will be able to log in results from the get results section as they wish.
- After the data have been saved into device the information can be retrieved without the use of internet connection.
- Can be used to show health provider glucose levels since the last time the patient was seen.



# Tutorial

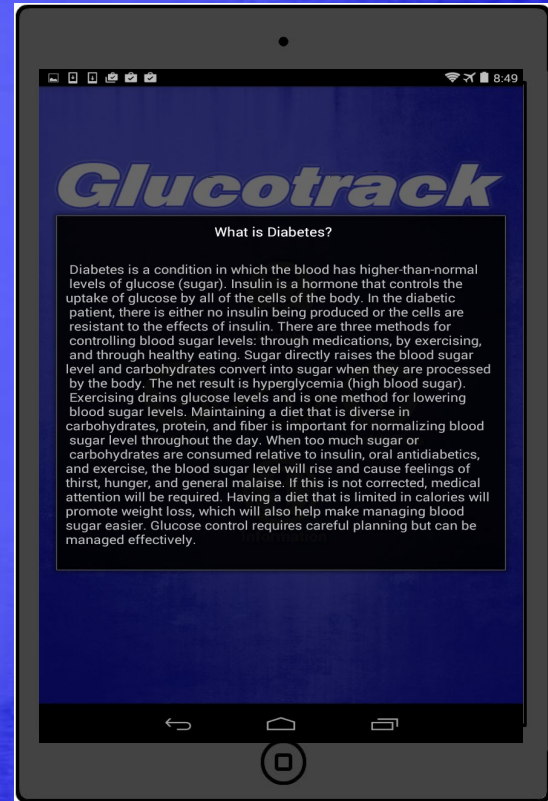
- A tutorial that shows the user how to use the sensor and app.
- The user will be able to navigate throughout the tutorial by sliding the finger on the screen.





# Information

- General Information about diabetes.
  - Definition
  - Causes
  - Prevention
  - Controlling blood sugar



# Health Tips

- Sample Meal Plan
- Interventions
- Food Guide
- App Tools
- Web Tools



# Future

- **Graph of the Results** - Results will be presented as a line graph.
- **Warnings and interventions** - if the users glucose is too high or too low and the corresponding intervention will guide the user.
- **Augmented Reality** - An exact portion of the food that the user needs to eat will be shown if the camera is pointed at a plate.

# References

- Callaghan BC, Little AA, Feldman EL, Hughes RAC. Enhanced glucose control for preventing and treating diabetic neuropathy. Cochrane Database of Systematic Reviews 2012, Issue 6. Art. No.: CD007543. DOI: 10.1002/14651858.CD007543.pub2.
- Fullerton B, Jeitler K, Seitz M, Horvath K, Berghold A, Siebenhofer A. Intensive glucose control versus conventional glucose control for type 1 diabetes mellitus. Cochrane Database of Systematic Reviews 2014, Issue 2. Art. No.: CD009122. DOI: 10.1002/14651858.CD009122.pub2.
- Nield L, Moore H, Hooper L, Cruickshank K, Vyas A, Whittaker V, Summerbell CD. Dietary advice for treatment of type 2 diabetes mellitus in adults. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD004097. DOI: 10.1002/14651858.CD004097.pub4.