



# DIABETES

Founded & Located:  
Newark, DE 2018

# Meet the Team

# DIABETE<sup>TECS</sup>



→ Amjed Hallak, Chief Executive Officer. Employee for Phase Sensitive Innovations. Pursuing BS, Electrical Engineering at UD



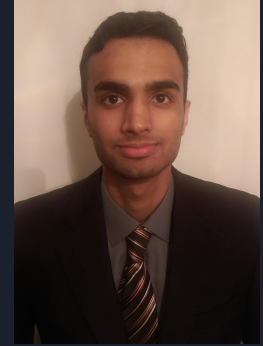
→ Morgan Sanchez, Chief Marketing Officer. Pursuing BS, Computer Engineering at UD who will be IT Project Manager Intern



→ Kolby Kuratnick, Chief Operating Officer. Electrical Engineering major who will be doing research for the Department of Defense



→ Sam Romano, Chief Technical Officer. Electrical Engineering major who wants to develop and market the next big thing



→ Ajay Mani, Chief Financial Officer. Pursuing BS, Electrical Engineering at UD who wants to research medical technologies

# Problem Area

## Focus Areas of Opportunity:

- Diabetes
- Hygiene/Cleanliness —————→
- Mental Cognition —————→



# DIABETES

## Problems:

- Test strip removal
- Disposal of strips & sharps
- Testing BG consistently

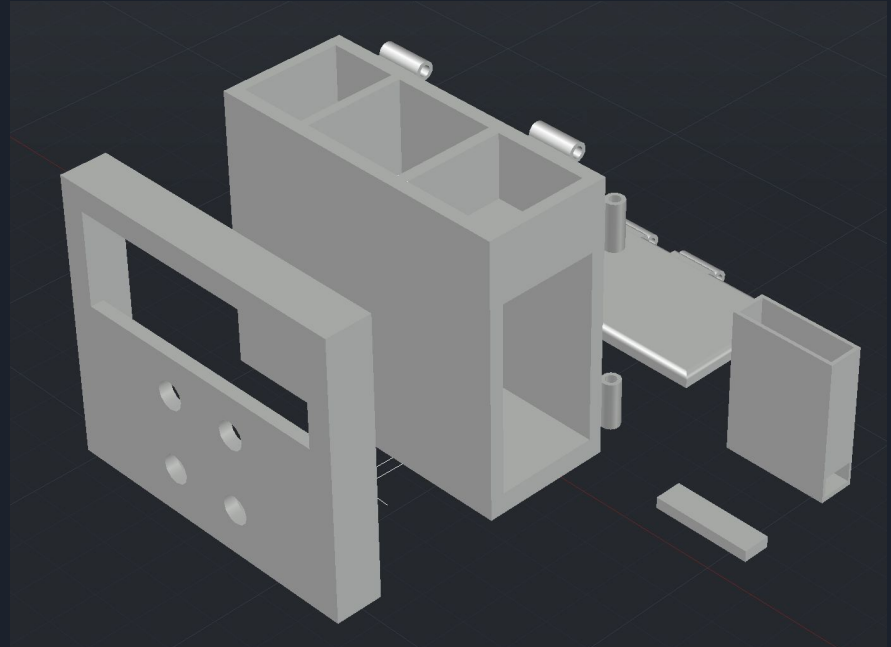


~800% increase in Diabetes in last 50 years<sup>1</sup>

Prevalence of Diabetes: 30.3 million Americans<sup>2</sup>

## Value to Customer:

1. Ease of Use
2. Convenient
3. Clean



# Diabeasy Concept

# DIABETES

## Box Design

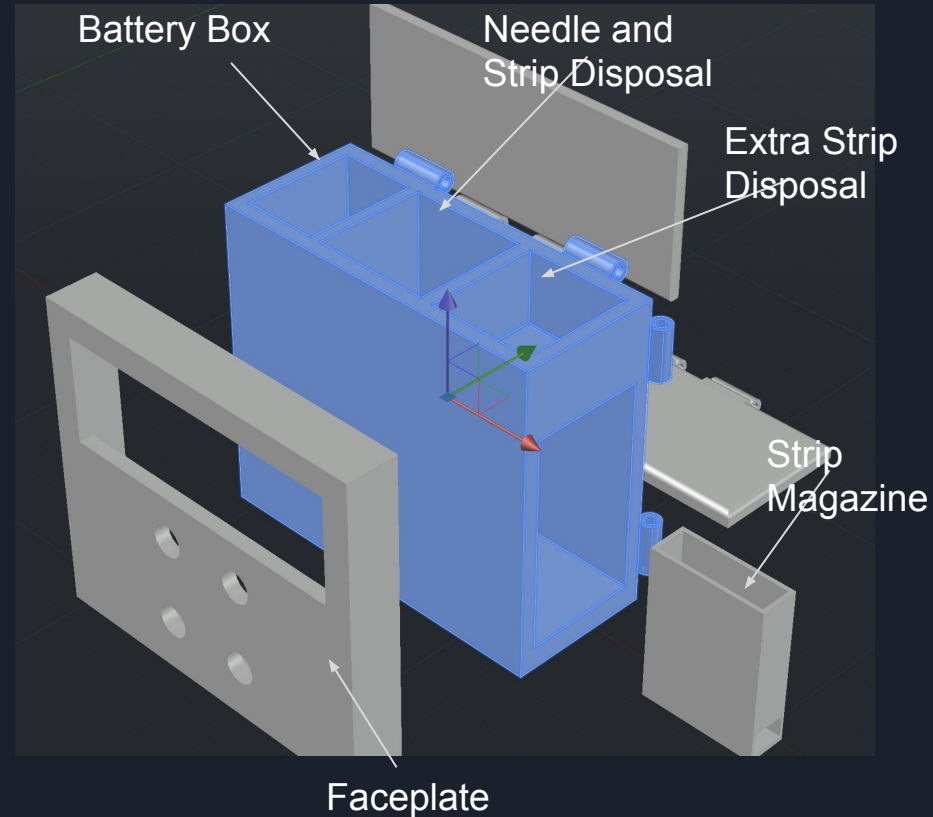
Spatial Efficiency

## Circuit

Solenoid, RTC, LCD Screen, Nano

## Software

4 modules, Ground Up



# Plan of Business

# DIABETECS

- Marketing
  - ◆ Social Media
  - ◆ Doctors, Professionals
  - ◆ Magazines, TV
- Management and Staff
  - ◆ 5 Chiefs
  - ◆ Lawyer
  - ◆ Accountant
  - ◆ Marketing Team
- Production and Creation
  - ◆ Factory and Machines
  - ◆ Machinists
  - ◆ Designers

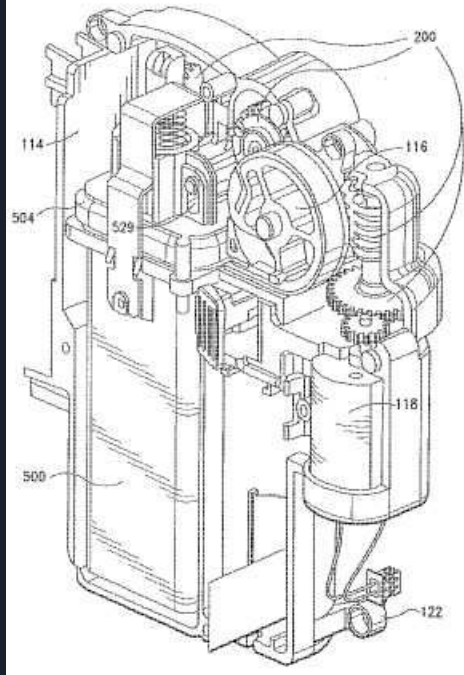


# Competition

## US Patent

WO20060007922A1

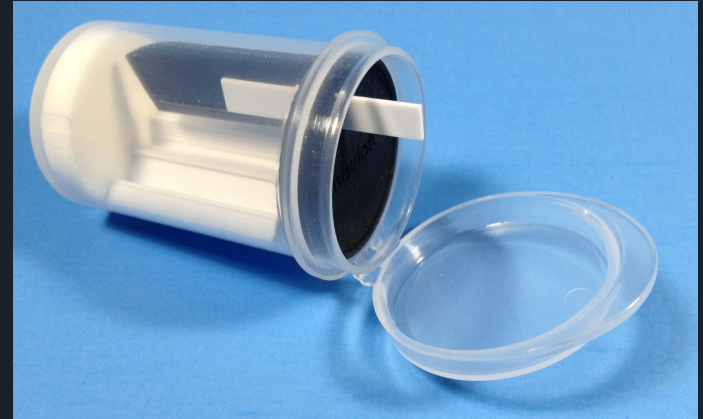
- Electro-mechanical
- Expensive to Produce
- Never came to Market



# DIABETECS

## The Shaker

- Plastic
- Very Cheap and Easy to Produce
- Not User-Friendly





# Market Size & Sales

# DIABETES

Americans 65+ with Diabetes: 12 Million

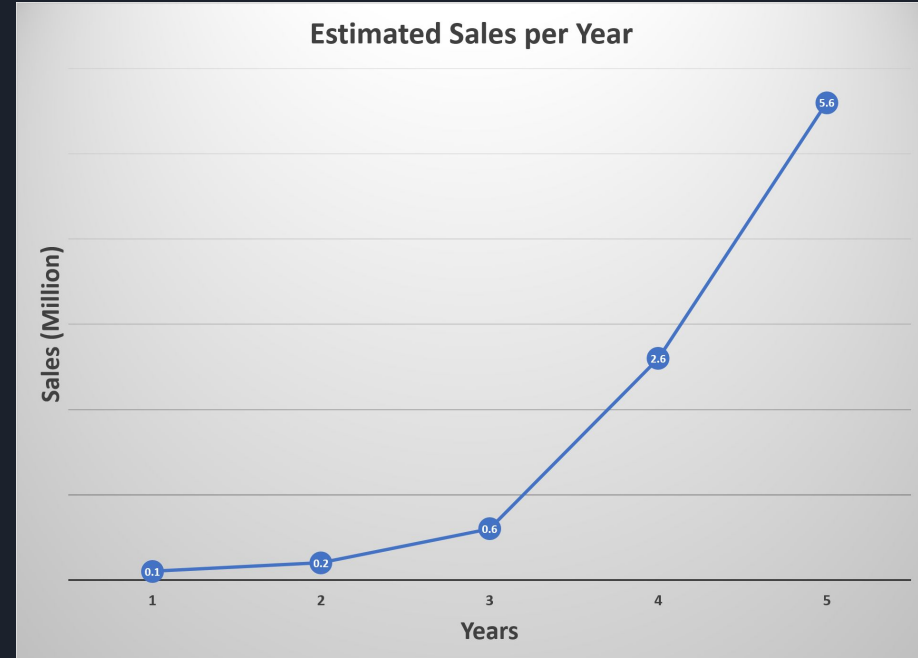
Americans with Diabetes: 30.3 Million

Total People with Diabetes: 425 Million

Expected Total with Diabetes 2045: 629 Million

30 percent of Market: 3.6 / 9.1 / 127.5 / 188.7 Million

Unit Sale Cost: \$30



**Earning Potential: \$108 / \$273 / \$1,148 / \$5,661 Million**



# Our Advantages

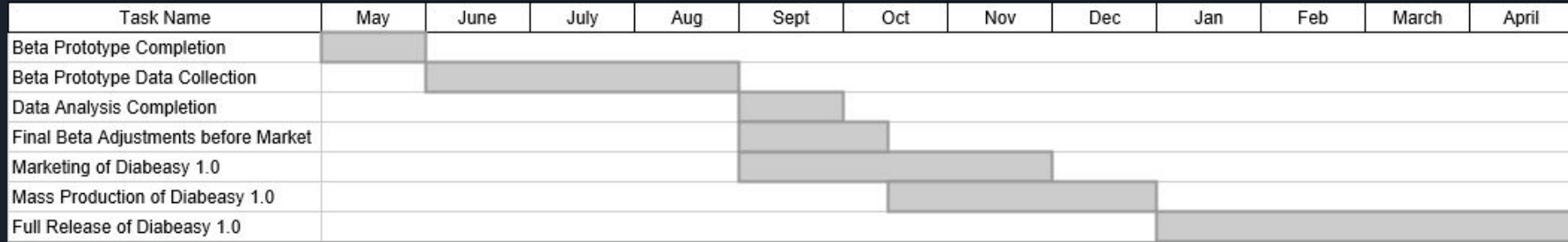
# DIABETECS

1. All-In-One
  - a. Dispenser
  - b. Test Strip Counter
  - c. Alarm/Reminder System
  - d. Storage for Disposal
2. Spatial Efficiency
3. Created by Diabetics



# Timeline

# DIABETECS



Total Prototype Cost

\$29.08

Diabeasy 1.0 Cost

\$8.89

Diabeasy 1.0 Customer Cost

\$30

THANK YOU  
Questions?

# Business

# DIABETES

Estimated Market ~ 9.1 million People

Test Strips Sold Annually ~ \$119.47M

Minimal Competition

We need from you:

1. Time
2. Experience
3. Money



# Diabeasy Hardware

# DIABETECS

- Simple interaction, only four buttons
- Magazine is easy to remove, held in by magnets
- Disposal is easy to use, just hinged doors



# Prototype Material Cost



Plastic Housing	~\$3
Arduino Nano	\$3.80
2x16 Bit LCD Screen	\$5.99
Four Buttons	\$5.24
Small Solenoid	\$4.95
Small Spring Set	\$6.10
Total Prototype Cost	\$29.08

# Diabeasy Final Material Cost

Plastic Housing	\$0.75
Microcontroller	\$1.00
2x16 Bit LCD Screen	\$5.00
Buttons	\$0.20
Solenoid	\$1.50
Spring	\$0.50
Cost/unit	\$8.89



# Diabeasy Code

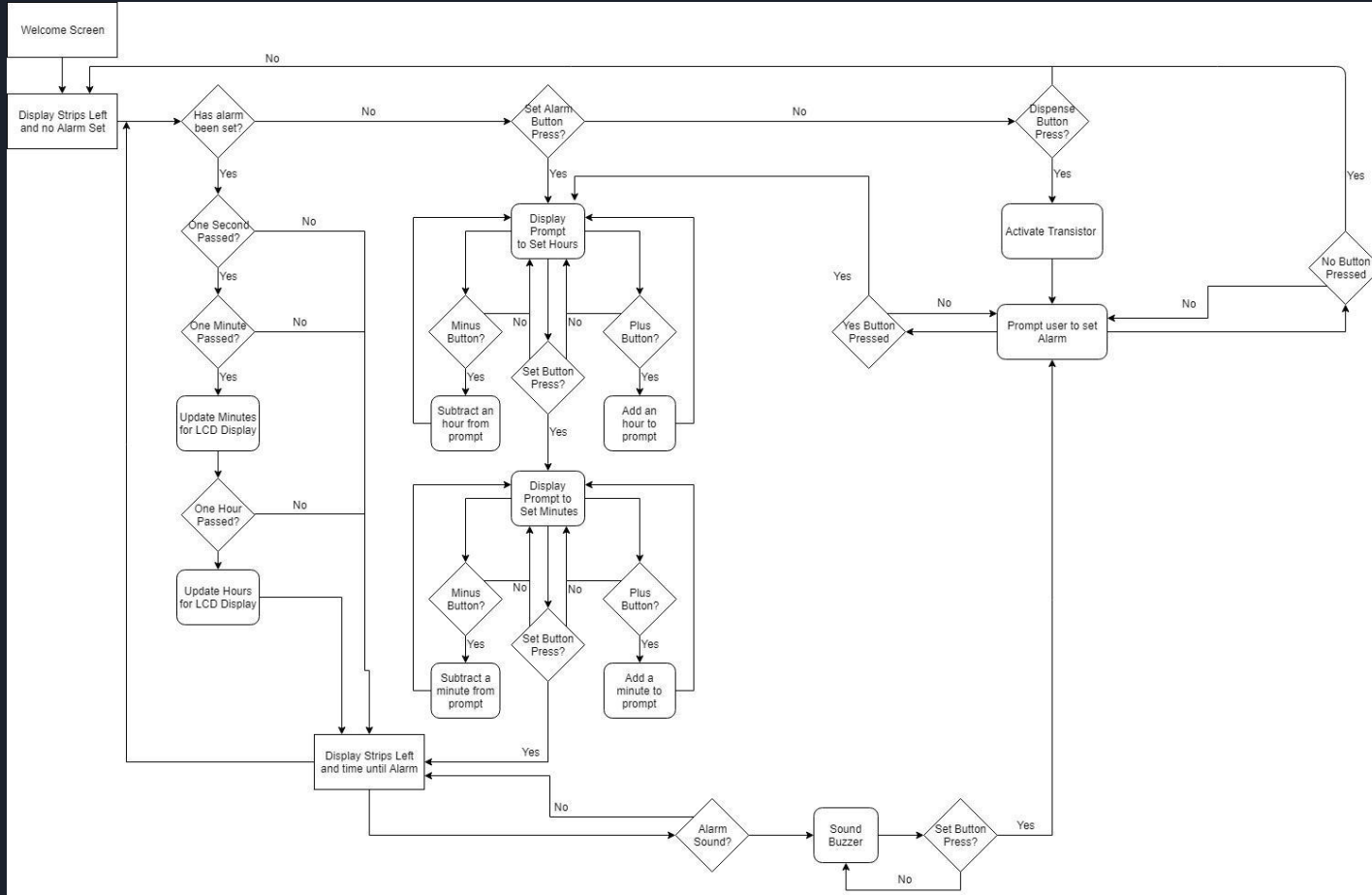
- Main constraint is ease of use, had to make code that flowed in order to facilitate this
- Used same three screens in all operations of device for easy to learn and use

# DIABETECS



# Flow Chart

# DIABETECS



# Works Cited



# DIABETES

“Assisted Living Statistics.” *ASC Senior Care*, American Senior Communities, 28 Aug. 2017, [www.ascseniorcare.com/assisted-living-statistics-a-deeper-dive-into-the-demographics/](http://www.ascseniorcare.com/assisted-living-statistics-a-deeper-dive-into-the-demographics/).

1. “Data & Statistics.” *CDC*, Centers for Disease Control and Prevention, 14 Nov. 2017, [www.cdc.gov/diabetes/data/](http://www.cdc.gov/diabetes/data/).

2. “Statistics About Diabetes.” *Diabetes*, American Diabetes Association, 19 July 2017, [www.diabetes.org/diabetes-basics/statistics/](http://www.diabetes.org/diabetes-basics/statistics/).