

#### Salma Riazi

in Linkedin: www.linkedin.com/in/salmariazi

GitHub: github.com/salmariazi

email: salmariazi@gmail.com

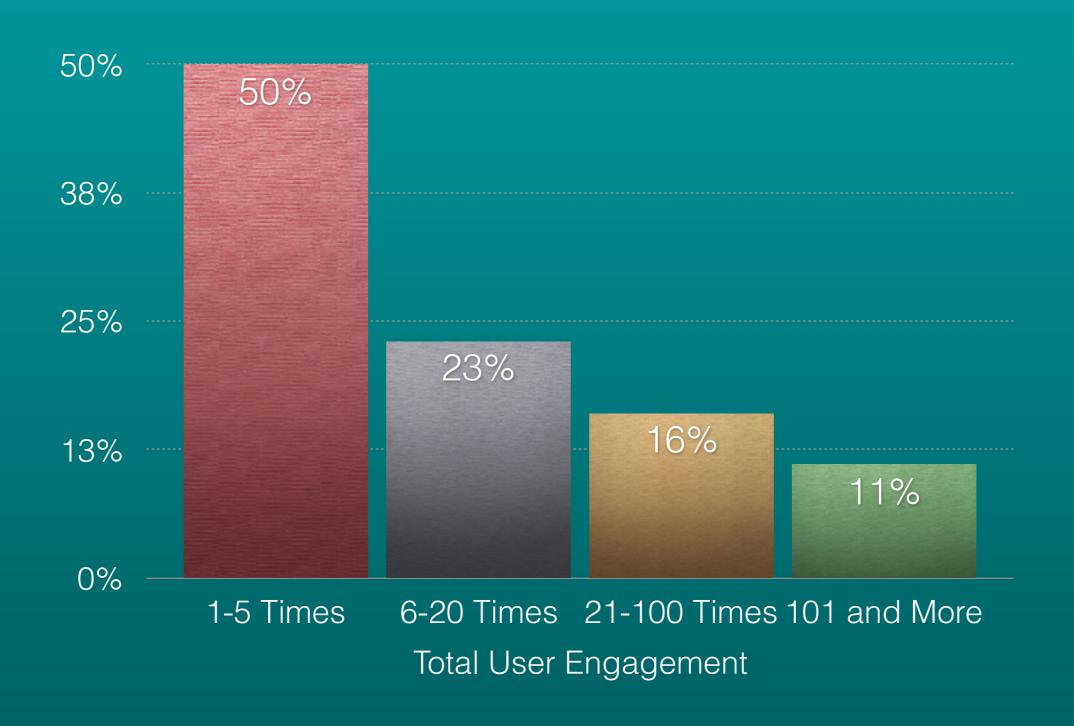
# Goal: Increase Engagement

User Retention 2016





# How Engaged are Users?



### Fading Engagement



## Fading Engagement



## Fading Engagement



#### **Features**

-Blood Glucose
-Weight Entry
-Gender
-Diabetes Type
-User Interaction

#### Feature Engineering

Defining New parameters:

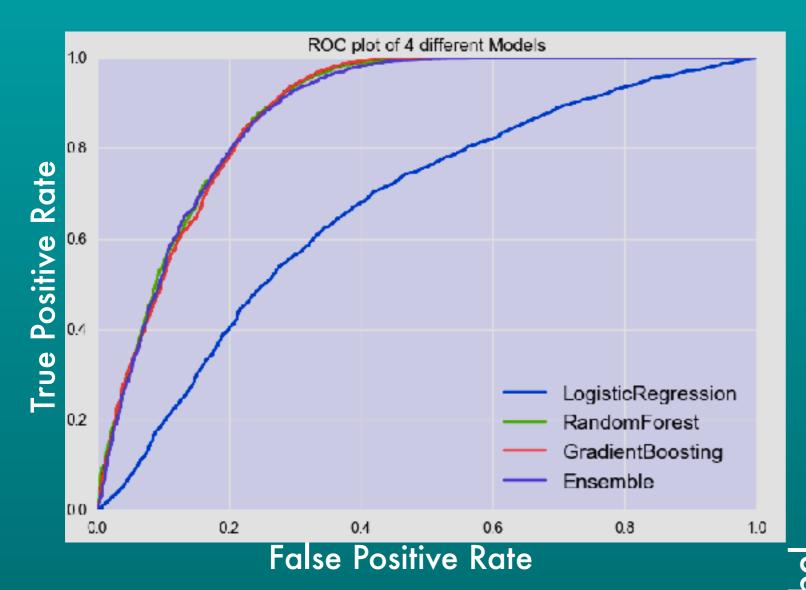
-1st week/1st day interaction-session interval

#### Machine Learning

-Logistic Regression
-Random Forest
-Gradient Boosting
-Ensemble



### 82% Accuracy 92% Recall



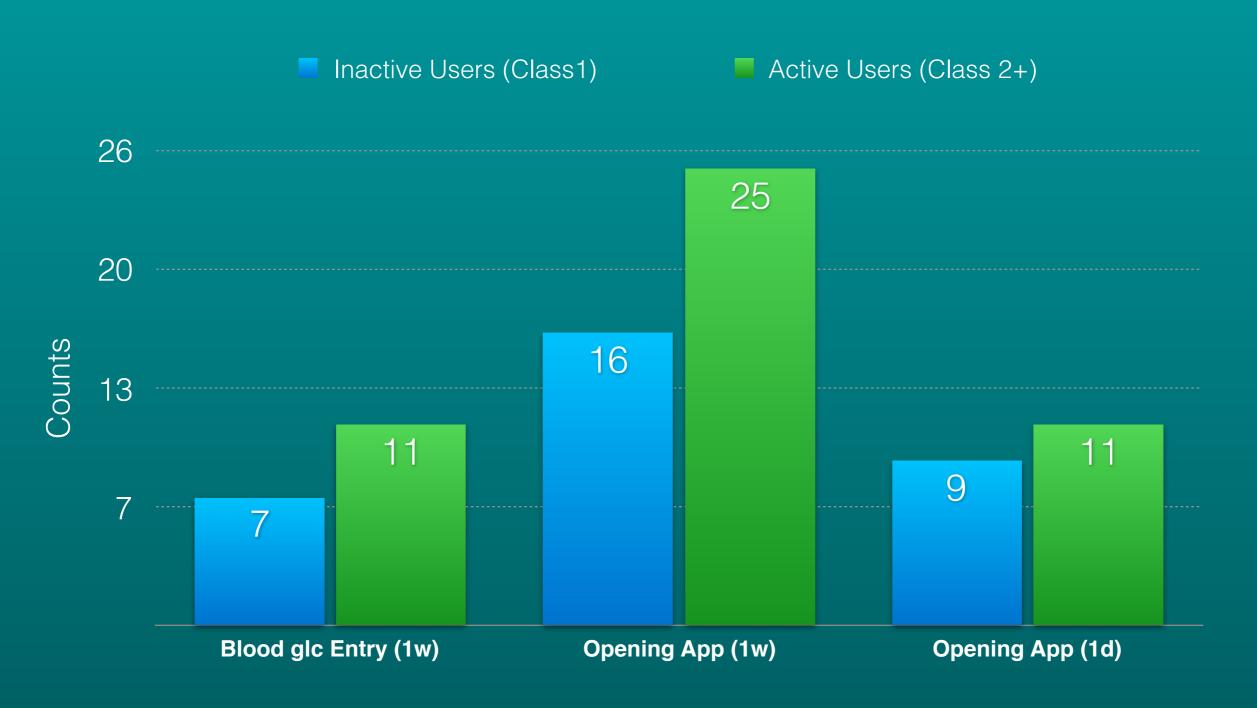
#### Normalized Confusion Matrix



**Predicted Label** 

### Recommendations

### Important Features



### Recommendations



- Set interaction goals for first week and first day
- Have a reward system
- Connect similar users and encourage them to compete

Push notifications



# Next Steps

- Cluster similar users based on additional features.
- A/B Testing
- Explore different metrics for App engagement: (e.g. session length)
- Predict blood glucose trends using more features (e.g. user age, weight, health background)

