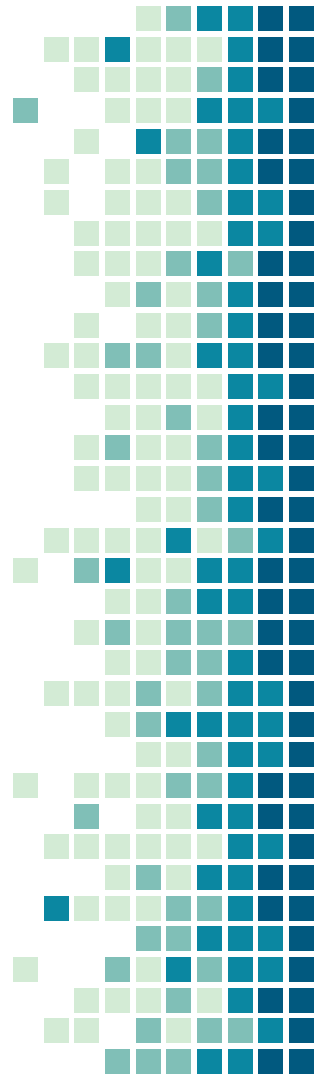
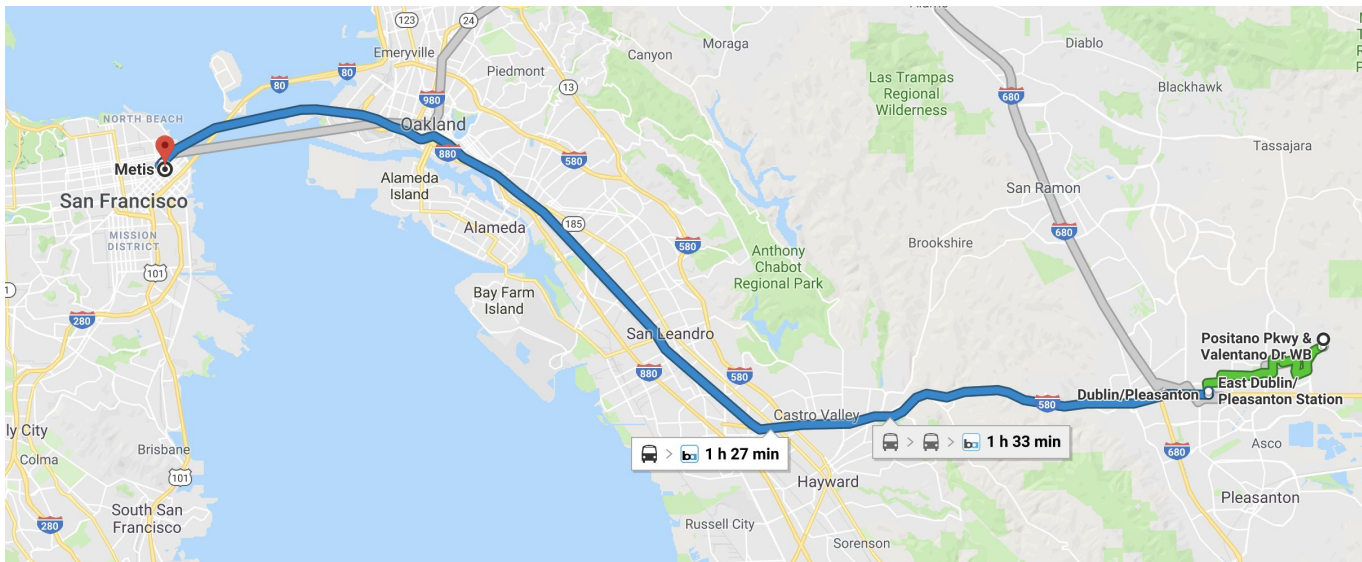


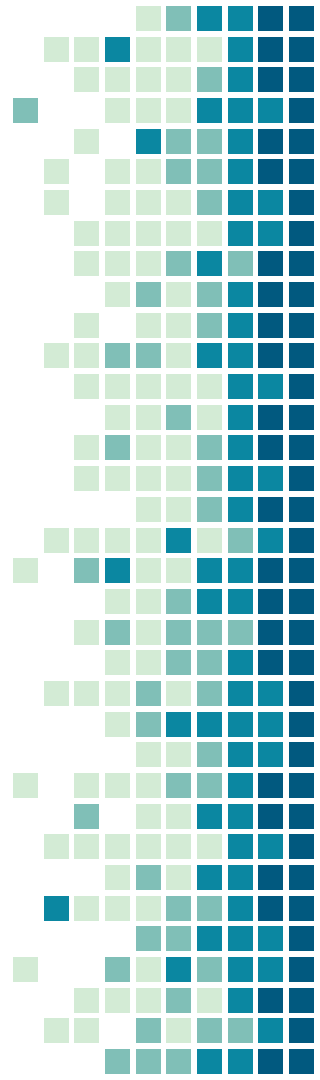
Shopping Cart Recommender

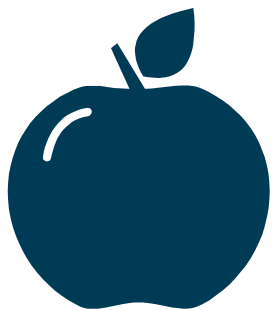
Ka Hou Sio
2018-09-17











Instacart Public Dataset



Released
2017

> 3M
Orders

> 200k
Customers

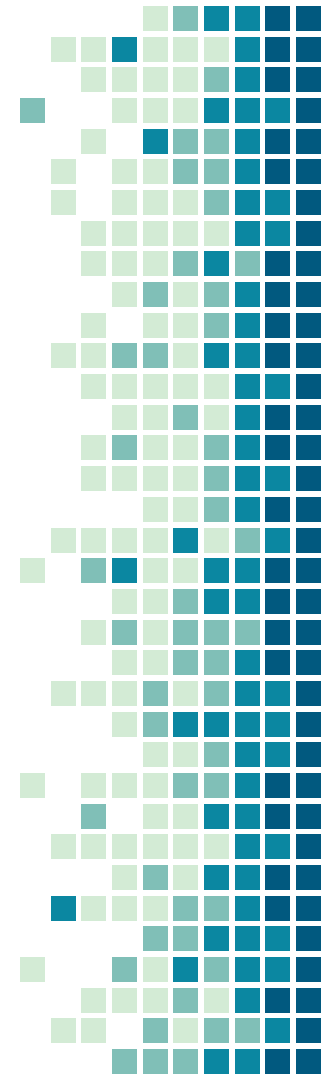
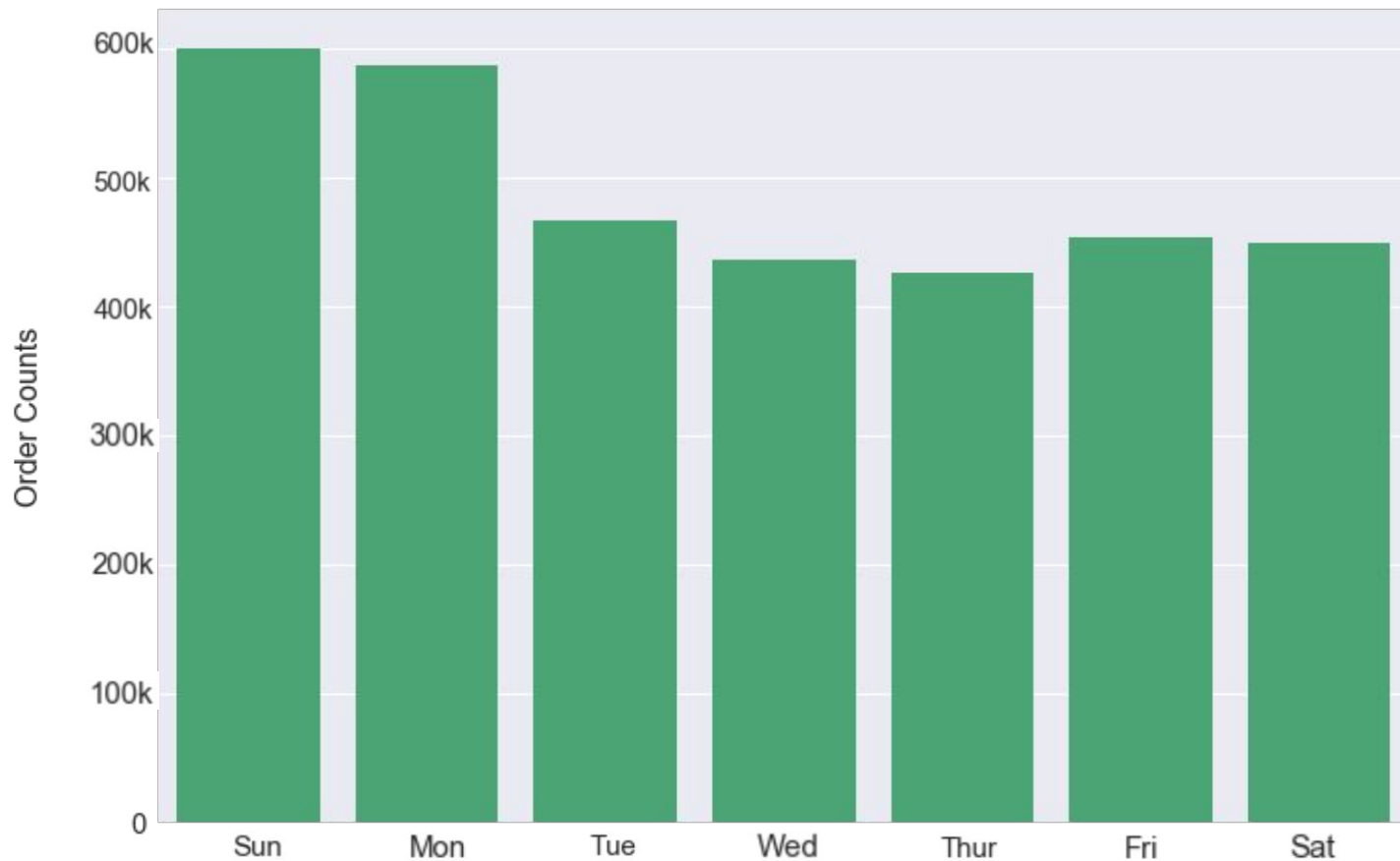
Features:

- Day of week purchased
- Time of day purchased
- Reordered before or not
- Product name
- etc.

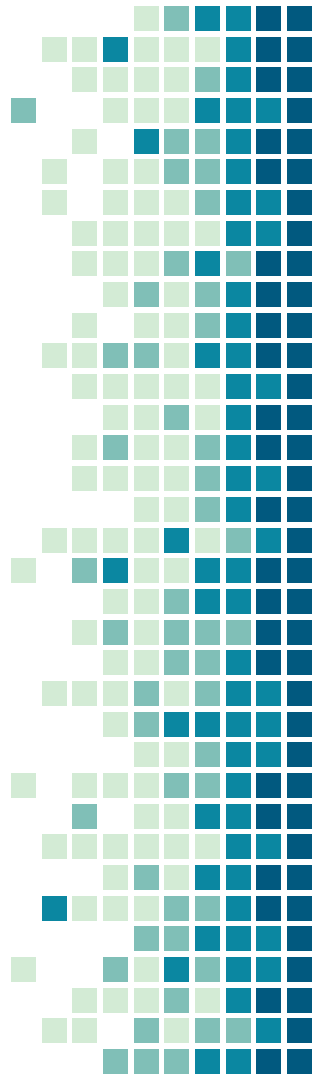
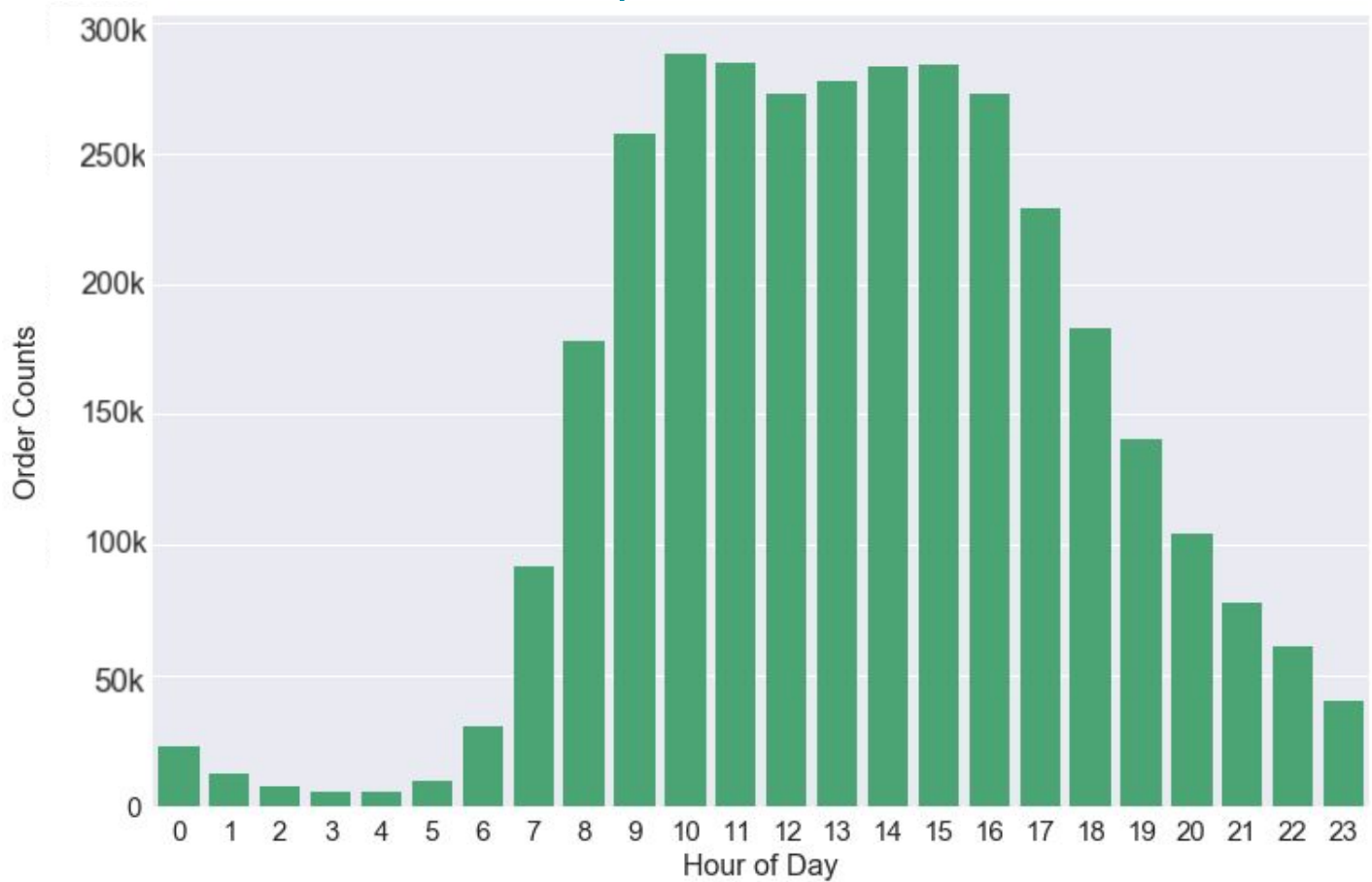
Customer Behaviors



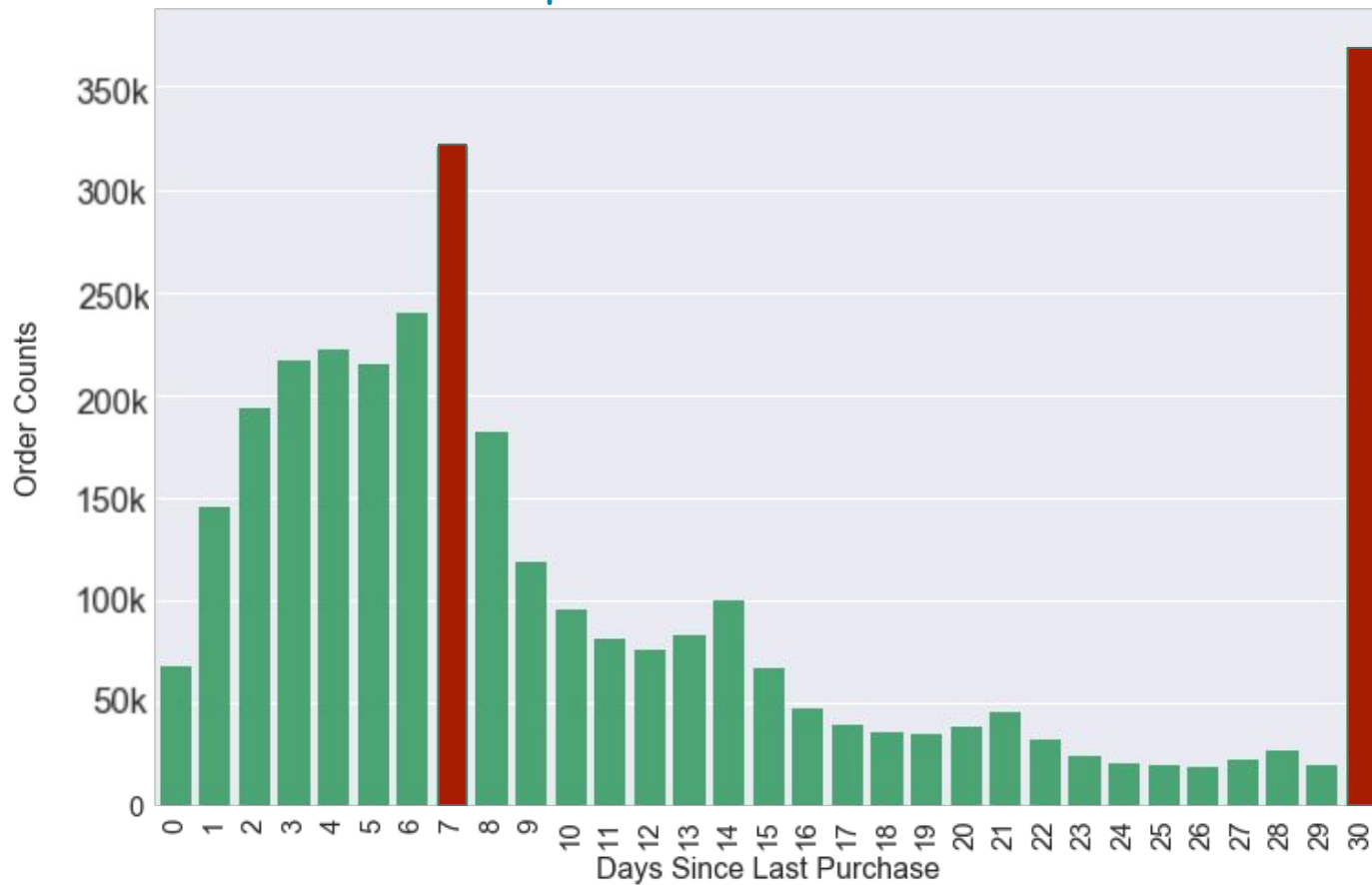
Which Day Has The Most Orders?



What Time Does People Order?



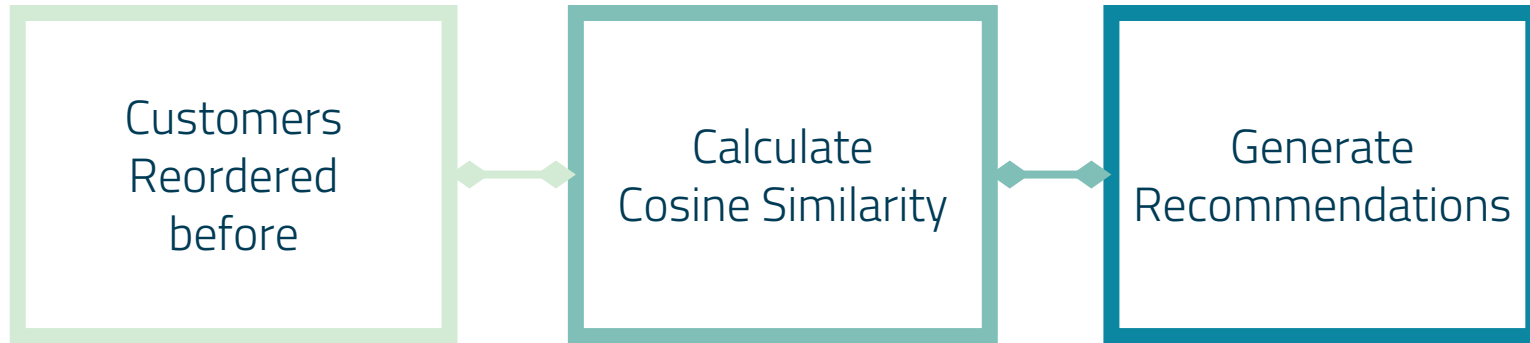
How Often Do People Reorder?



Recommender System



Recommender Design



Recommendations



User: Ka

Organic Whole Milk	19
Organic Chicken Strips	13
Limes	9
Shredded Mild Cheddar Cheese	7
Soft Pretzel Mini Buns	7
Maple & Pecan Granola Gluten Free	7
Smoked Turkey Breast Slices	6
Red Vine Tomato	6
Organic Large Extra Fancy Fuji Apple	6
Organic Traditional Flour Tortillas	6
Ginger Brew Caffeine Free	5
Organic Ginger Root	5
Organic Vanilla Whole Milk Yogurt	5
Organic Decorticated Cardamom	5
Natural Classic Pork Breakfast Sausage	4
Pico De Gallo Chunky Salsa	4
Bag of Organic Bananas	4
Organic Whole String Cheese	4
Organic Strawberries	4
Organic Cream Cheese Bar	4

Recommendations:

- Bag of Organic Bananas
- Organic Whole Milk
- Limes
- Organic Large Extra Fancy Fuji Apple
- Organic Hass Avocado

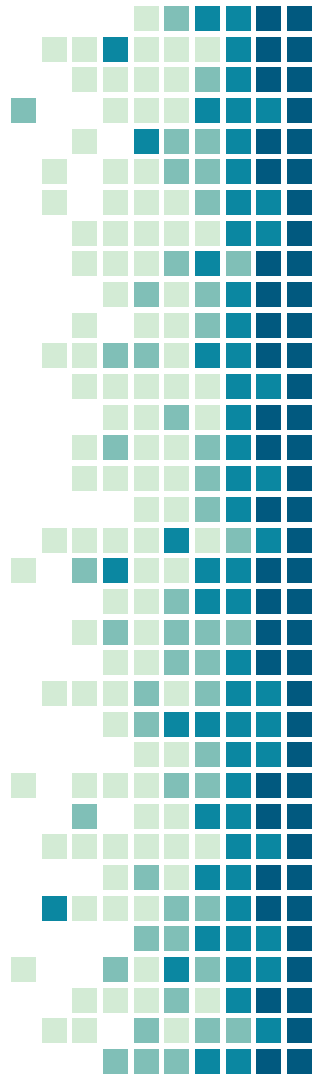
Metric: Recall

0.524



Future Improvement

- Recommend Instacart to collect more users' info, such as:
 - Gender
 - Locations
 - Income Level
 - Number of Household Members
- Flask Application for my Recommender
- A/B Testing on my Recommender



THANKS!

Any questions?

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kahousio@gmail.com

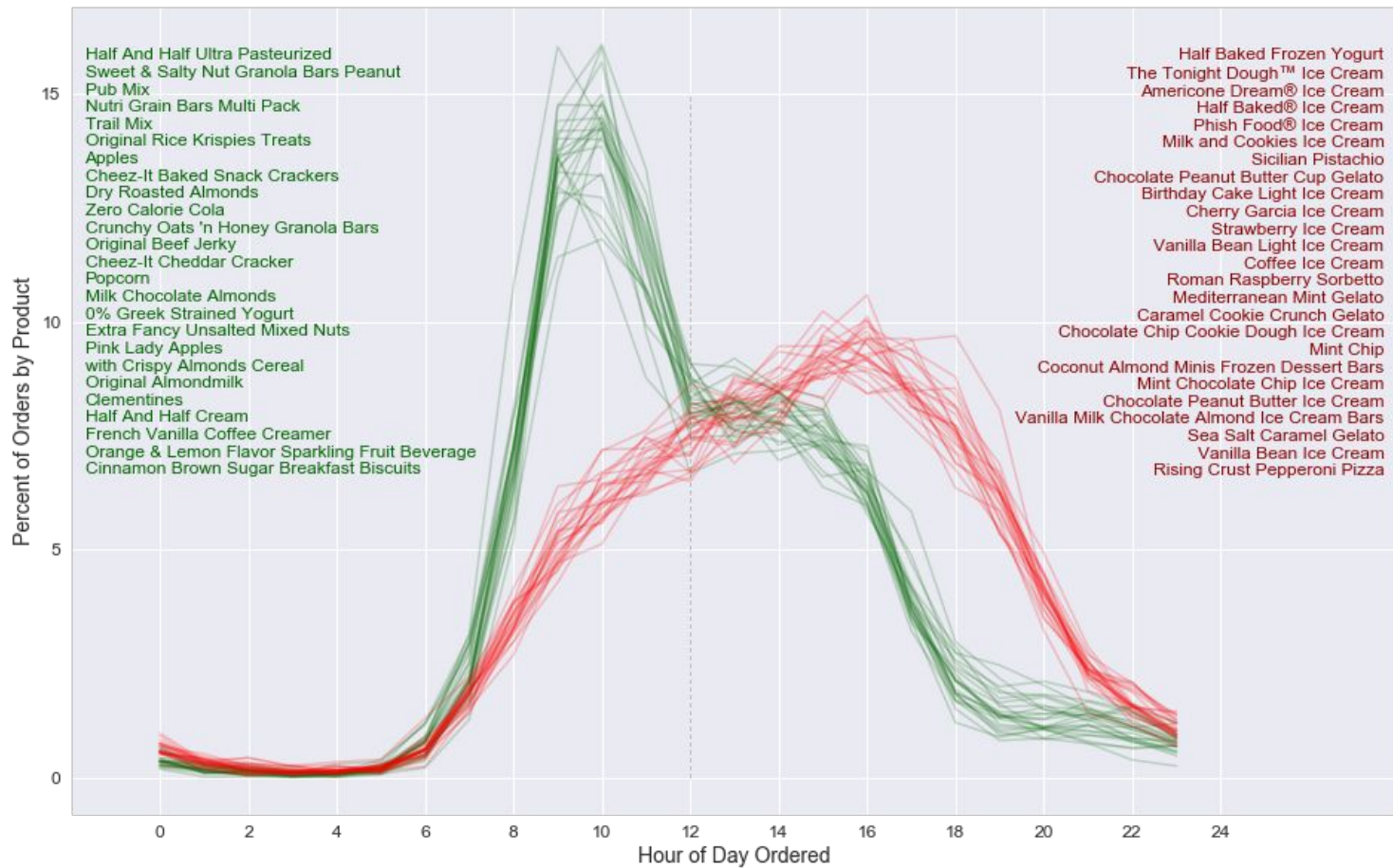


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Pipeline





Flask Demo

