

# Data 606 -Capstone Project (Part 1)

## Predicting Instacart Customers Purchasing Behavior

(When they will make their next purchase and what products  
to expect in that purchase )



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SPRING 2020

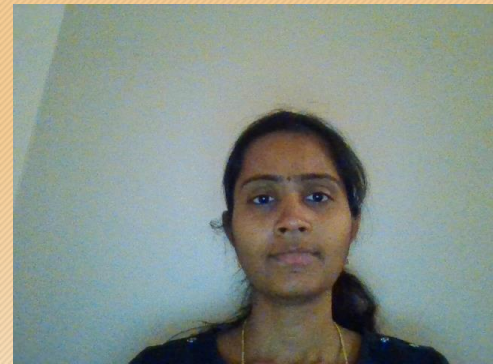
University of Maryland Baltimore county



# About Instacart

- A mobile and web-based on-demand grocery delivery company
- Offer around 500,000 category items from local retailers
- Operations in 26 metro areas
- Partnered with thousands of local to branded grocery stores

Reference: <http://grow.segment.com/Instacart-Segment-Case-Study.pdf>



# Project Overview

## Problem Definition

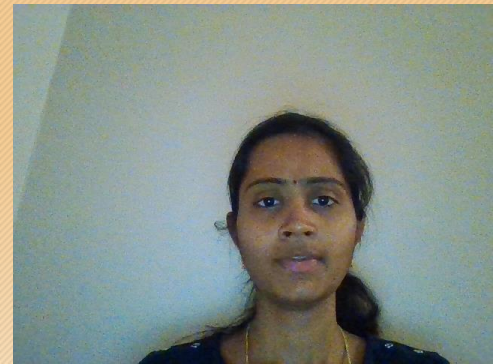
- Satisfy customer product needs and enhance customer experience
  - How to satisfy ?
    - ❖ Instant or fast delivery

## Solution

- Understanding Customers and their requirements

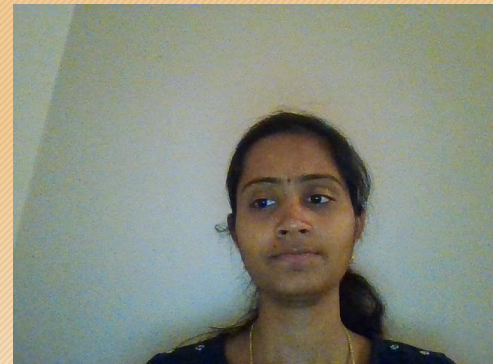
## Result

- Best strategic decisions
  - Stock management to offer delivery without any delay
  - Recommendation of related products based on similar customers



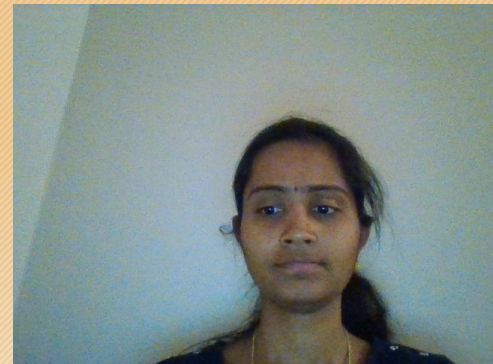
# Project Objective

- Analyze Customers purchase orders
  - Customer's purchase frequency
  - Product preferences based on their previous purchases
- Create a machine learning model that can predict a customer's next purchase order and the possible products in their next order at greater accuracy.



# Dataset Description

- 3 million orders
- A collection of six datasets
- Includes
  - I. Anonymized user information
  - II. Product and category information
  - III. Days between prior order information

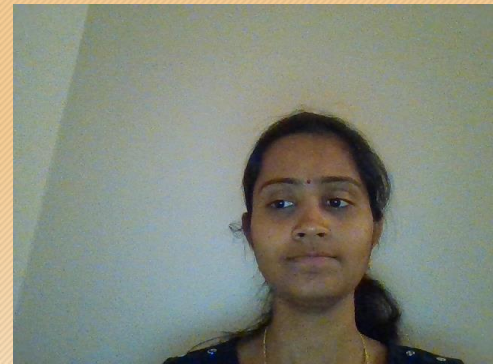


# Source of the Data

*Real Anonymized Instacart order data from Instacart*

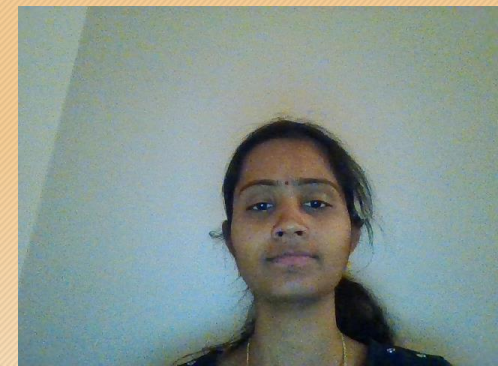
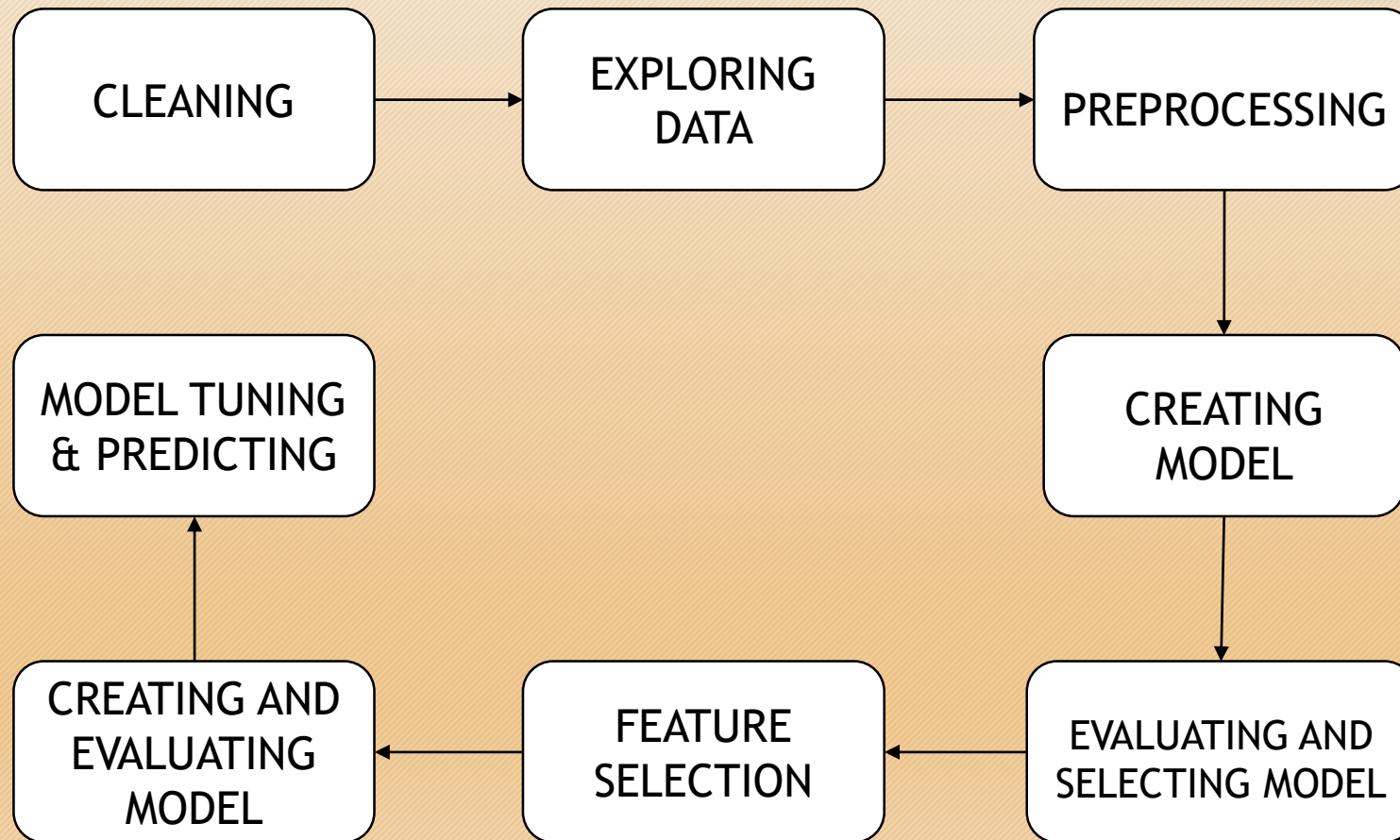
*Source:*

*“The Instacart Online Grocery Shopping Dataset 2017”, Accessed from <https://www.instacart.com/datasets/grocery-shopping-2017> on <1/2/2020>*





# Next Steps



Thank you for listening !!!  
Suggestions are most welcome!!!!

