Appetize
Amirhossein Abbasi, Arya Rashtchian
19 Nov, Peer Project Review
What is Appetize

- Digitize the dining experience for customers as well as restaurant owners
- Mobile application for customers to be able to use a digitized menu, order food, and pay for it
- Using the data and generate useful visualization for restaurant owners
Task Abstraction

Restaurant owners need to

- Know whether an item is **profitable** or not.
- **Reorder the menu** based on customers’ feedback.
- Identify **loyal customers**.
- Identify **busy-times** of the restaurant.
- **Compare their restaurants** with similar restaurants (based on some defined similarity factors)
- Know how empty their **food containers** are
Data Abstraction

- **Restaurant**: Present a restaurant in the system. It contains ID, name, location, website, address, phone, ...

- **Menu**: Present a menu in the system. It can contain different categories.

- **Category**: Present a group of items.

- **Item**: Present a specific food in a restaurant.

- **Ingredients**: Represents the item’s ingredients.

- **Order**: Present a specific order of food by a certain user at a restaurant in a particular time.
Scenarios of Use: Item

- After pressing on “item”, we would show them some statistics about their items.

- We have not figured this part out yet but, the question is “Is that specific item profitable or not?”
Scenarios of Use: Menu

- Which part of the menu has been clicked more
- Solution: Heat-map
Scenarios of Use: Customer/Promotion

- Which customers are loyal and which ones are not?
- Which customers should be given promotions
Customer Loyalty

Each point on the graph represents a customer. Select a customer to send them a promotion.

Promotion
Send a 10% off all items coupon to this customer.
Send Coupon
Cancel
Scenarios of Use: Customer/Promotion

- compare each restaurant with an average of similar restaurants.
- How should we define some restaurants as similar?
- What time is the busiest time for the restaurant?
Scenarios of Use: Customer/Promotion

3.2k Monthly Customers

TacoFino

Compare to the average of Similar Restaurants

Oct 15 to yesterday
Scenarios of Use: Inventory management

- how much of their ingredients are left and whether they need to order anything soon or not.

- very hard task for restaurant owners and it has been done manually most of the time.
Implementation

Tasks → Data Scheme → Synthesize Data → D3 → Final Visual Output

Data Scheme Refinement

Data Scheme Refinement
Milestones

- Task Abstraction:
  - User Requirements
  - Sample Dataset
  - User Scenarios
  - Nov 2, 2019

- Data Abstraction:
  - Simulated data set for target tasks
  - Nov 16, 2019

- Implementation:
  - Visualization output
  - Script to integrate with the data using d3 library to show the intended task
  - Nov 30, 2019

- Documentation:
  - Document Results
  - Final Report
  - Dec 10, 2019

**Notes:**
- A list of all to-do tasks based on user requirements
- A Script Creating DB queries, a set of insert queries leading to a complete simulation of real-world data that can help us do the intended tasks
Questions?