CHAT ASSISTANT:

Real-time experience is only available in-store (through the mobile application):

- Chatbots handle basic NLP problems i.e. easy unambiguous questions only.
- When chatbots are unable to answer, the question is pushed to a chat associate; who will handle the user until the end of the conversation.
- At home, the response by the chatbot/ associate may not be real-time.
- Would be integrated into the main application.
- Feedback would have to be provided after the end of each conversation; if they are not provided after the end of the conversation the feedback has to be provided before the start of a new session.

Station Terminals:

Will serve the following purpose

- Allow the user to ask questions from a set of predefined questions.
- Questions that aren't provided in the list can be entered manually; for this, the user has to provide some information (email or phone number, with full name). No feedback required immediately; could ask for feedback through email or text message.
- Assist with item locator. Explained briefly below.
- Provide a map/ layout of the store.
- Provide item cost.

Item Locator:

In the mobile app and station terminals.

Each store will have a predefined layout of items in the store. Which will be hardcoded; restricting it to serve each store individually.

System/ program will interact with the active inventory database of the store.

Will have two modes of interaction: a.) customer mode b.) management mode

a.) customer mode:(active)

The item being searched will be first fetched from the inventory(and find out if it is in stock) if so then its location will be provided, if not then notify the user that the item is out of stock.

Location of the item will be retrieved from the layout model of the store.

b.) management mode:(passive)

Cameras in each aisle will scan the SKU codes on each shelf and match it with the items in that area. If the area of the shelf is empty an alert can be passed to the manager/ administrator of the store to restock it.

If the item in that area does not match with the SKU codes posted below, an alert would be passed stating improper organization of the items in the shelf.

Analyze the sale of organic food(trend)

Basic Logic:

- The logic of this of this is that we observe the shelf life of things and how we can manage them and replace them with better products; for management use only.
- Observe the shopping trends of the customer and recommend them to buy better/ similar products (fresh and locally farmed at a particular place); build for customer use only.
- Once we have enough data from one particular customer we can build a model for a recommender system that will suggest items based on the customer's behavior.

Minimizing the time spent queuing at the checkout zone. (Mobile app integration)

To reduce the time spent and speed up the whole process, the customer can scan the items in their cart and generate a tentative invoice.

This invoice will be shared by the cashier who will cross verify the veracity of the invoice as they load up items into the bag.

Once the cashier is able to confirm that all items have been scanned by the customer, they can generate the tentative bill which will become their final bill and proceeding with the final payment of the items.

This will speed up the whole process and minimize the time spent at the checkout zone. If the customer is half done or has some items left the scan, the cashier can append the new items to the tentative bill.

How to share the bill to the cashier: a QR code which will allow the customer to share the data with the cashier.

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