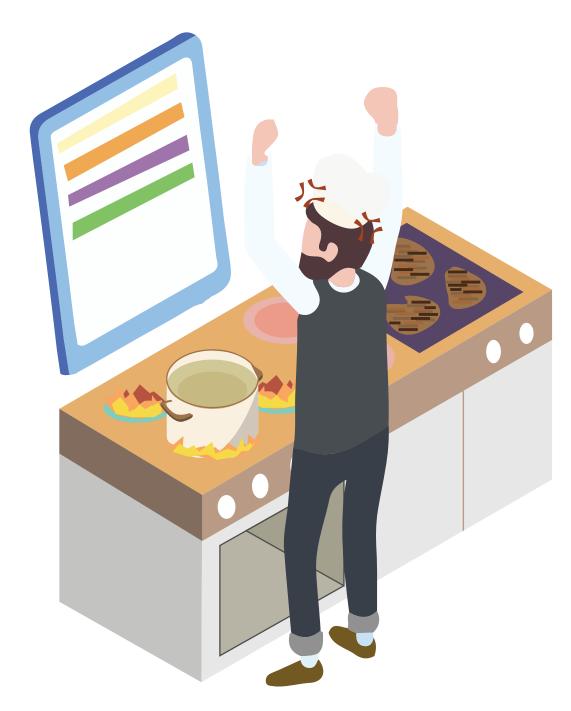
Being the only canteen in SUTD, the canteen is always packed. During lunchtime, the Western stall's current order and collection system isn't the most efficient...



F07 Group 1 Digital World 1D

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During peak periods, orders pile up and chefs cook food in batches. This results in irregular waiting time for customers and orders getting mixed up or forgotten.

It is difficult to call for order number and take new food orders from new customers at the same time. This causes great disruption in workflow for the canteen vendors.

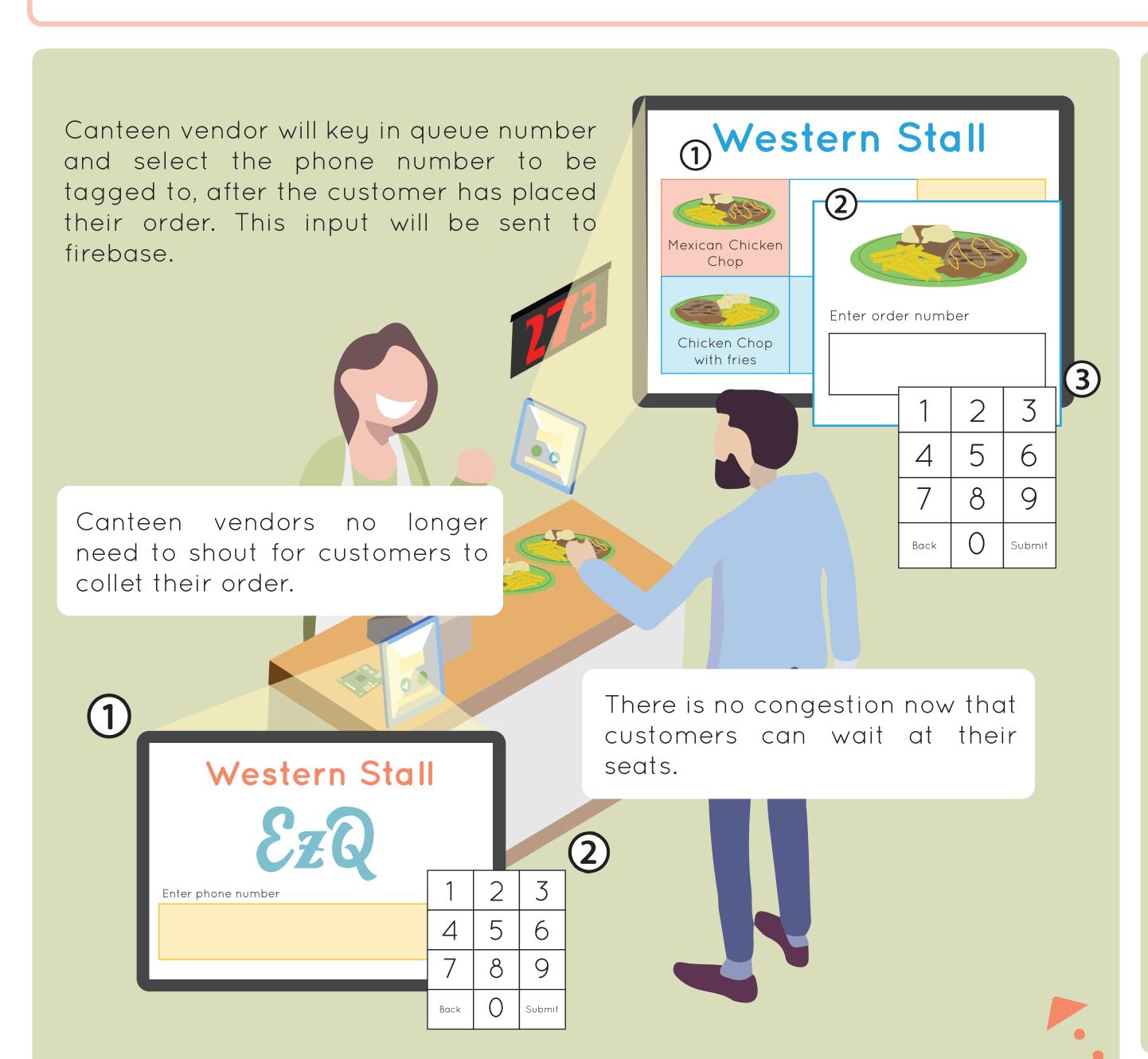


The lack of a clear queuing system causes **much confusion** amongst new customers. They are unsure who is queuing to order and who is waiting for their food.

## Problems

Mr 273

Canteen vendors face much inconvenience when they have to constantly shout for customers like Mr 273, who don't pay attention to the collection number.



On the customer end, customers will only have to key in their mobile number. The mobile number will be tagged to the queue and order number sequencially on firebse.

Whatsapp is the messaging platform used but future works will allow users to select which messaging platfom they wish to receive their order notification from.



Sirloin Steak

When new order comes in, the orders are automatically categorise the order based on item (in firebase) and sent to the screen in the kitchen.

•••••

Once the order is done, the chef can select the order prepared and select 'Submit' to complete the order. The food is ready for collection and the notification will be sent to the respective phone number.

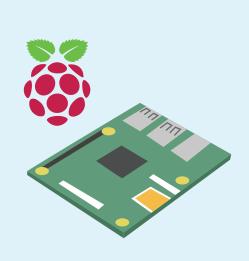


Chefs have an easier time cooking as orders are optimised. They don't have to sort out orders and can focus on cooking quality food.

Canteen vendor keys in food order, queue number, and additional information.

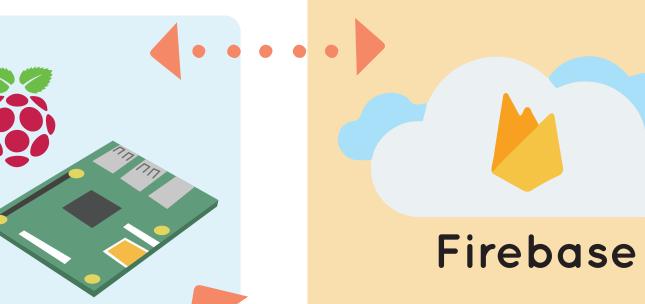
Aglio Olio

RPI sends the information to firebase

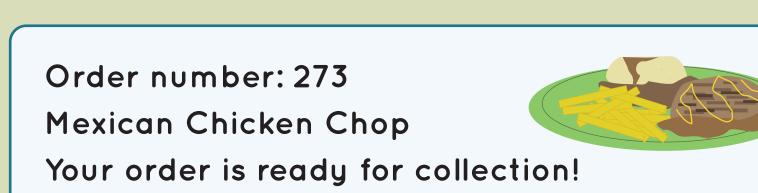


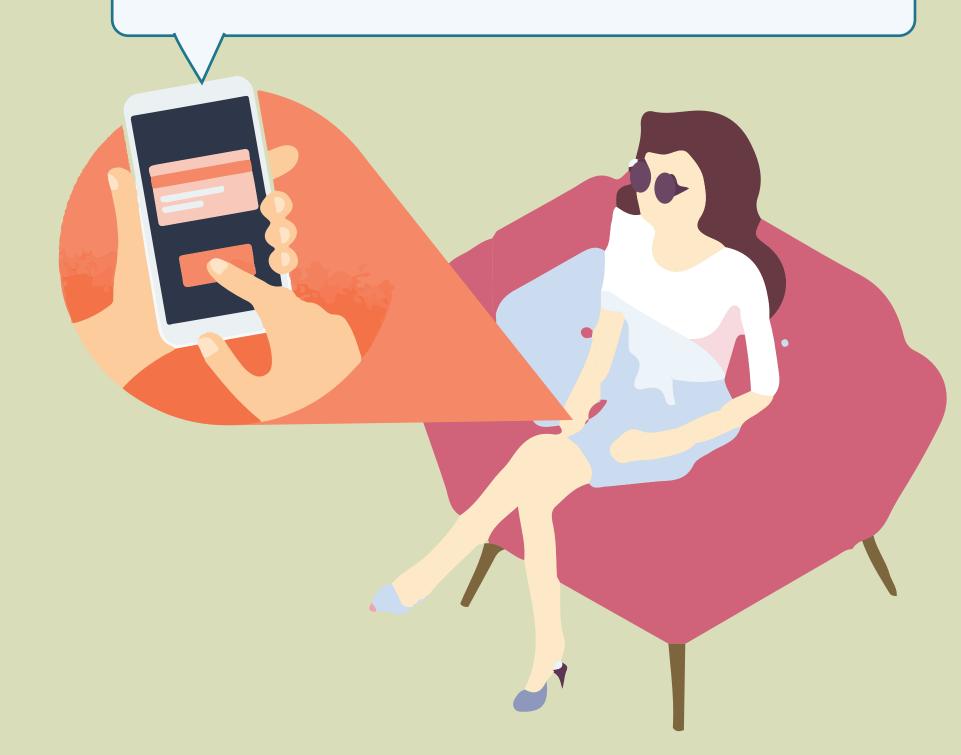
RPI is used to run the following:
Chef display and interface
Send completed orders to firebase
Send number of people in queue
Run code for sorting of orders in kitchen

RPI is used to run the following:
User interface
Darknet Yolo
Proximity Detector
Sends information to firebase

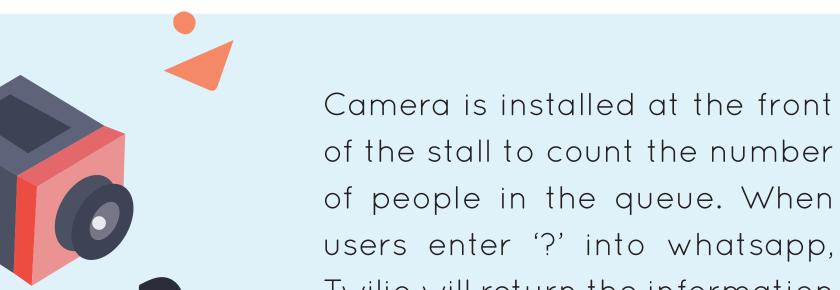


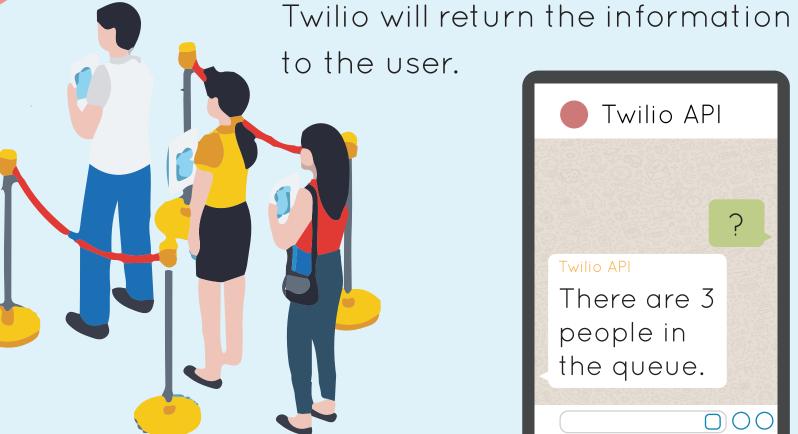
In Firebase, the order number and phone number of the customer will be sorted and grouped together based on order. Firebase stores this information neatly.

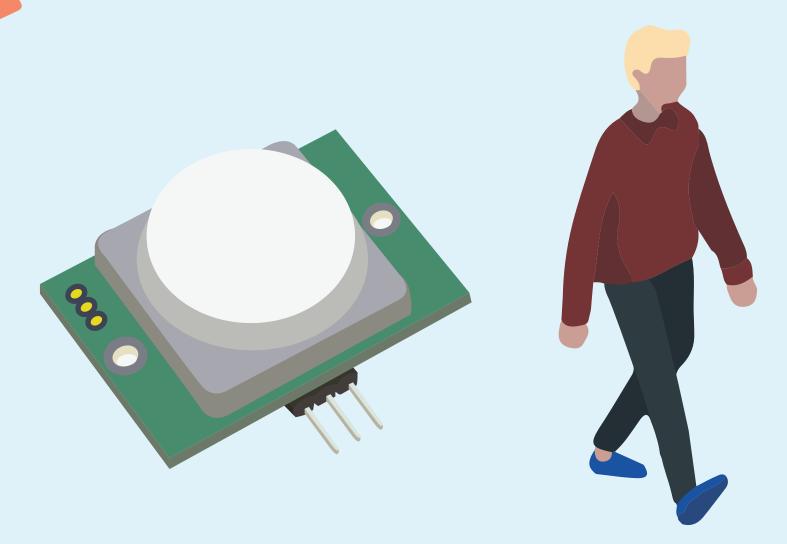




When your order is ready, you will receive a notification to collect your food. Now you can sit back, relax, while your order is being prepared like a Diva!







Passive Infrared (PR) sensors are used to detect the proximity of a customer. When there are no customers, the screen will go to power saving mode.