

The background is a dark teal color. It features two large, overlapping circles in a lighter shade of teal. A thin white line runs diagonally from the top right towards the bottom left, passing through the circles. Another thin white line runs diagonally from the bottom left towards the top right, also passing through the circles.

# FOODCLOUD

## Grab

studio project

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# PAINS

## FOOD DELIVERY

### PROBLEMS

- Delayed food delivery
- restaurants closed
- out of distribution

### CAUSES

- long waiting for food preparation
- order jam
- lacking riders

# Design statement

TO CREATE A SERVICE AND PRODUCT THAT  
INCREASES THE EFFICIENCY AND  
CONVENIENCE OF FOOD DELIVERY FOR  
CUSTOMERS, RESTAURANTS AND RIDERS  
DURING PEAK HOURS.

# value proposition

## CUSTOMER JOB

- Pre-order before the peak hour
- Set a delivery time
- Waiting for the food to come

## GAIN

- convenient
- Better time management
- Food arrived with a good condition (warm or cold)
- Cheaper delivery during peak hour
- Shorter delivery time
- Food can be kept securely

## PRODUCT AND SERVICE

- Pre-order services
- Food will be prepared in advance
- Food will be stored in a box which can control the temperature cold or warm constantly.
- Riders can pick it up efficiently once the delivery time is ready.

## GAIN CREATOR

- Setting up food collection points around the food centre
- it's convenient for restaurants to use, and riders can pick it up quickly.
- Easy operation with the booking system
- Fixed delivery fee before peak hour
- It eases the problem of order jamming.



# Design criteria

## TEMPERATURE

Food needs to be kept warm or cold as in a fresh condition before being delivered

## SAFTY

Prevent food from being stolen or damaged

## LARGE CAPACITY

Large capacity allows restaurants to preserve more pre-prepared food.

## TIMER

The product can set a timer to inform the riders to pick up food on time.

# BUSINESS MODEL

## SCALABLE

Products can be joined with one another to increase the capacity.

## WELLNESS

End-user will feel relieved and excited if they know the food can be efficiently sent to them.

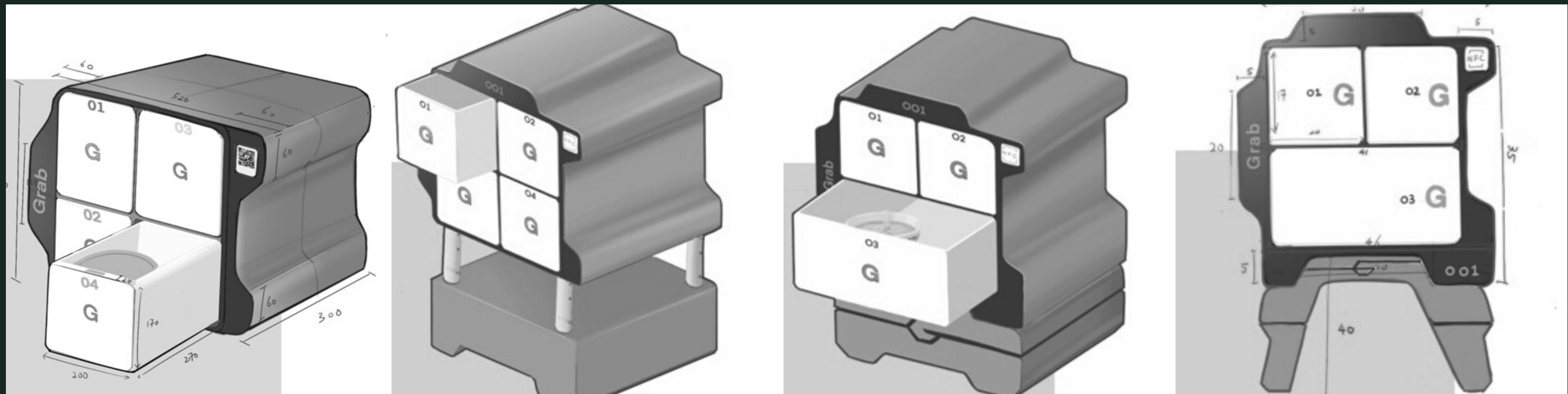


# DESIGN EVOLUTION

The Process of Design Sketches

THE MAJOR IMPROVEMENTS

- AESTHETIC STAND
- DOOR DESIGN



chosen idea

refinement 1

refinement 2

final design

# DESIGN EVOLUTION

The Process of Model Making

THE MAJOR IMPROVEMENTS

- HEIGHT
- CAPACITY
- CONVENIENT UNLOCKING



chosen idea



refinement 1



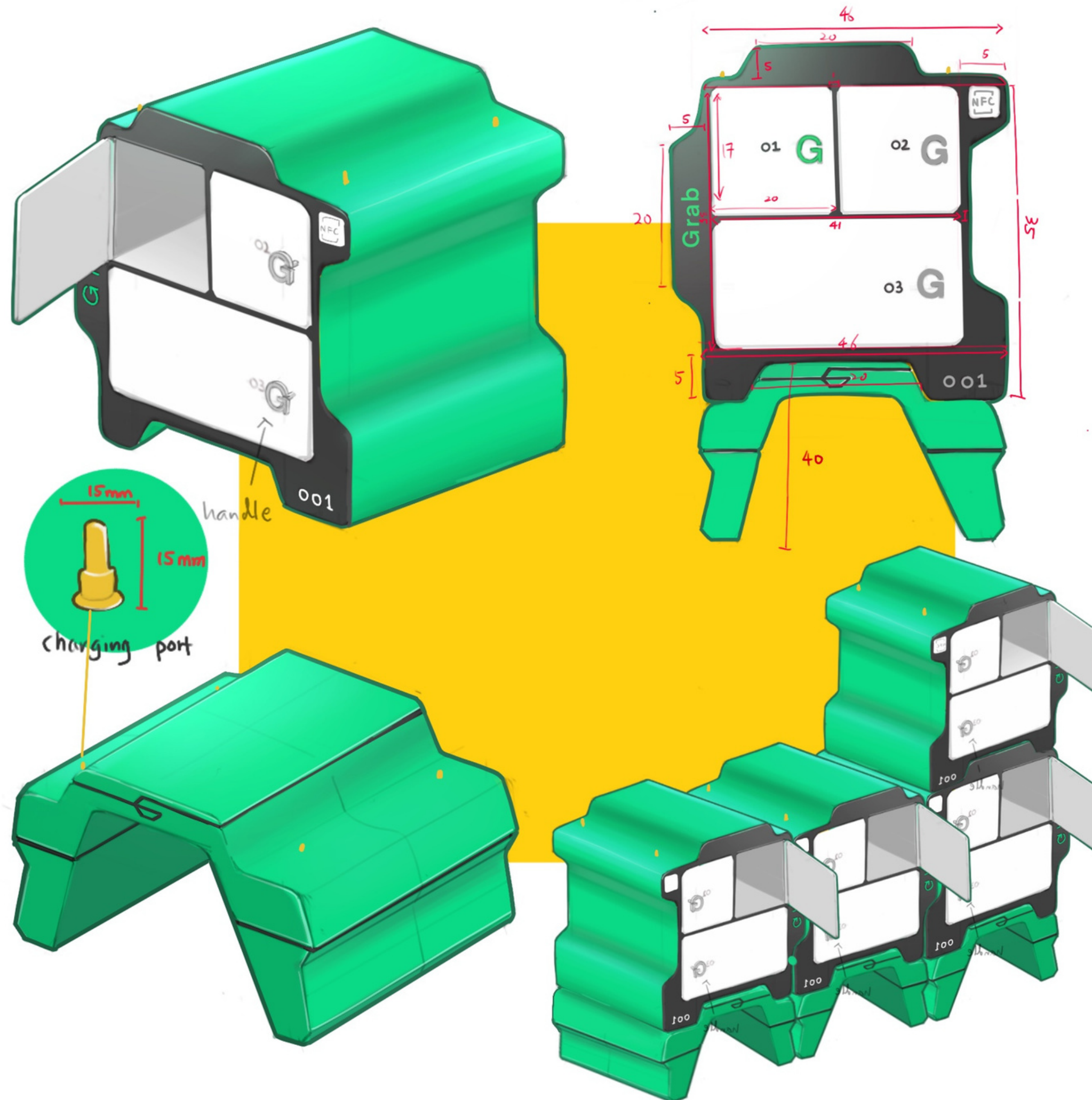
refinement 2



final design







# FINAL DESIGN

## FEATURES

- Scalable
- Notification
- Energy-saving
- NFC synchronisation
- Temperature control



# FINAL MODLE PRESENTATION

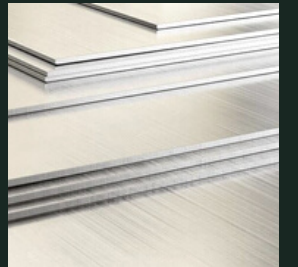




# MATERIALS

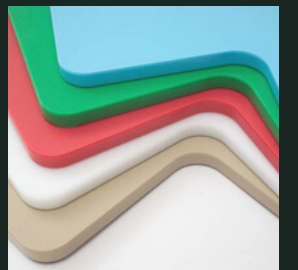
## SHEET METAL

used for body and stand



## POLYPROPYLENE (PP)

used for doors



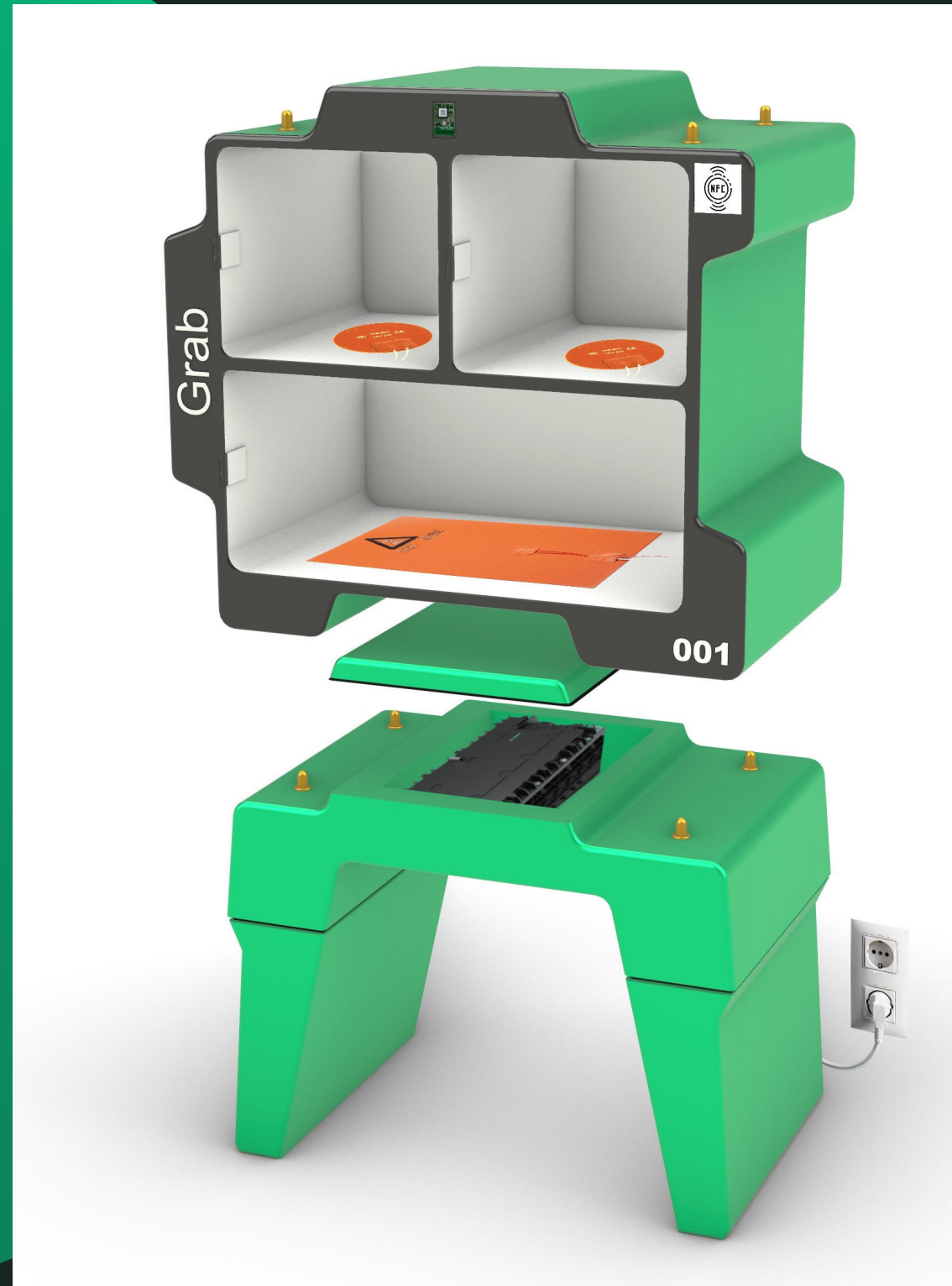
## POLYCARBONATE (PC)

used for handles



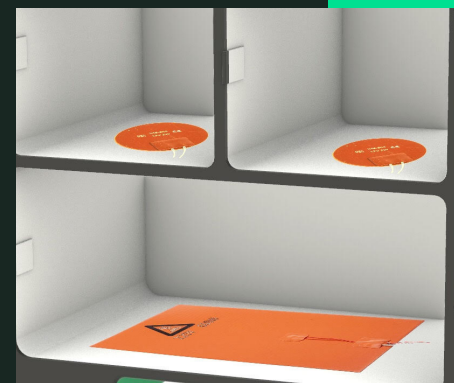


# Proof Of Concept



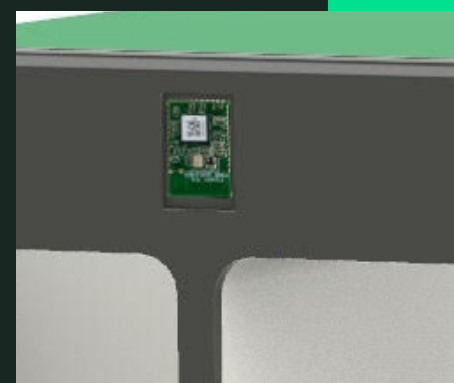
## NFC SYNCHRONIZATION

Using NFC to synchronise boxes is more convenient



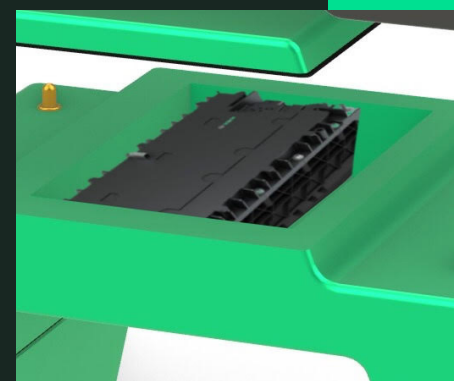
## SILICON HEATING PLATE

it keeps the food warm (60°) or cold (4°) as in a fresh condition in the box



## BLUETOOTH CHIP

it allows users to adjust temperature on their phone via Bluetooth



## POWER STATION

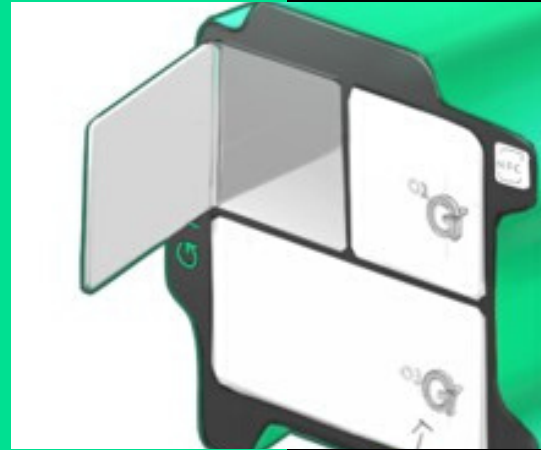
The stand is used as a power station to charge boxes in one row. (maximum 3 boxes)

# FEATURES



## SCALABLE

product is highly scalable by staking the box on top of one another



## LARGE CAPACITY

3 boxes allow restaurants to preserve more pre-prepared food



## NOTIFICATION & HANDLE

The “G” logo is used for both notification (light up when the box is available/sparkling when food is ready to be sent) and handles of the box.



## ENERGY SAVING

Boxes will be charged via the contact charging point when staking together

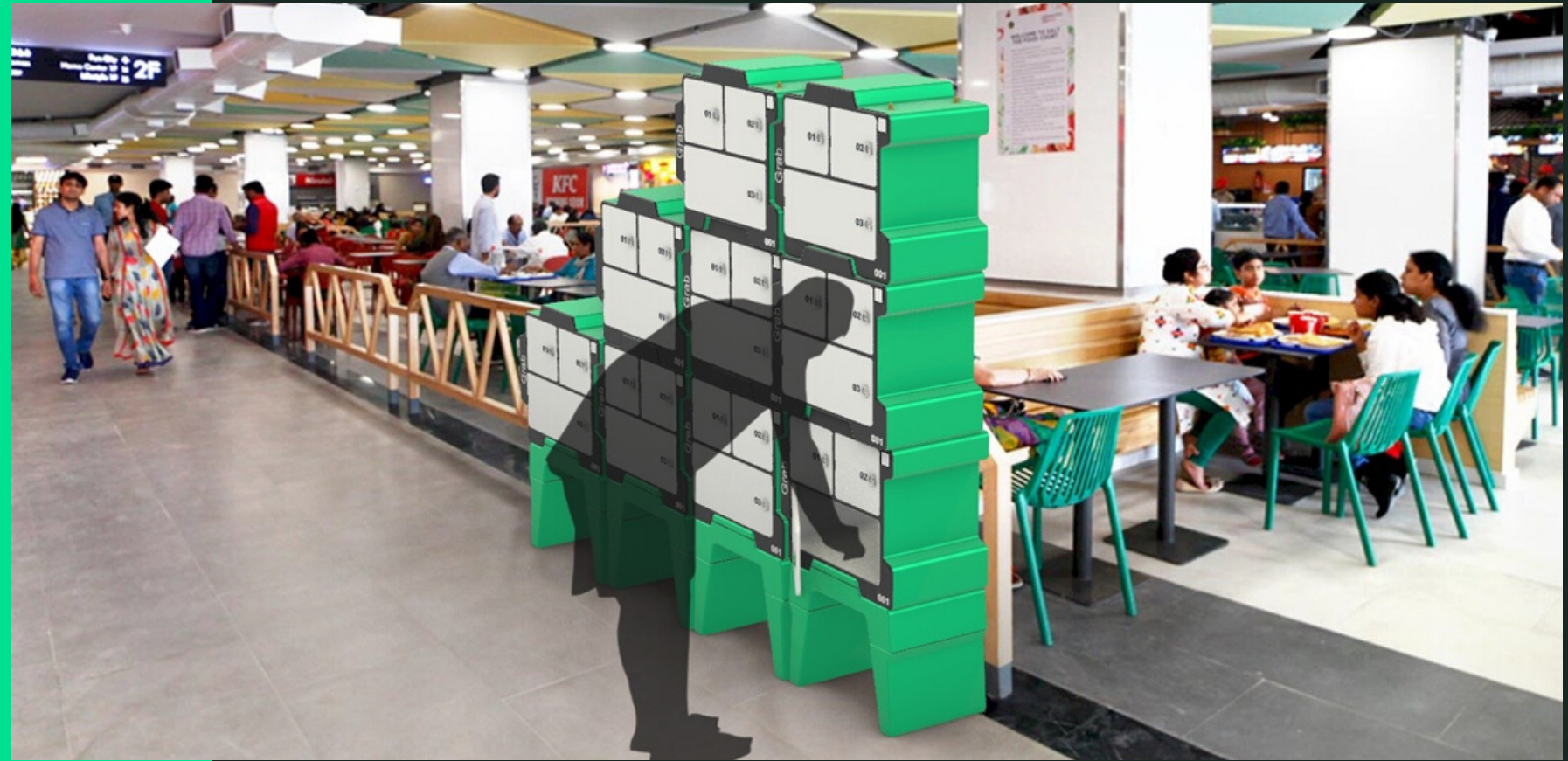




**PROTOTYPE**



# CONTEXTUAL IMAGES



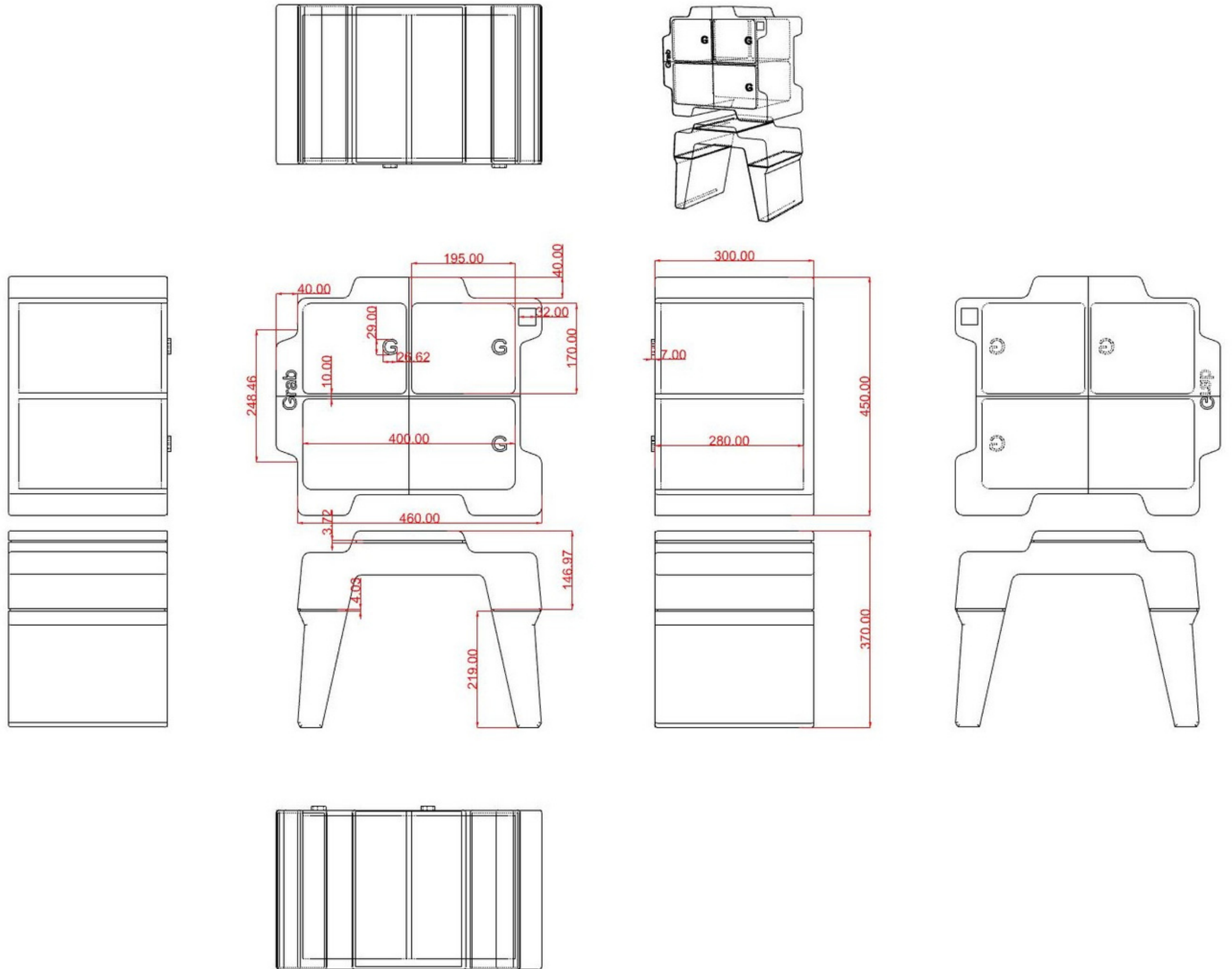
FOOD JUNCTION



RESTAURANTS



# ORTHOGRAPHIC DRAWING



# USER JOURNEY MAP

## CUSTOMER

pre-order



## RESTAURANT

pre-prepare



## RESTAURANT

preserve



## RIDER

delivery



1

10:45 am

2

11:15 am

3

12:30 pm

4

12:45 pm

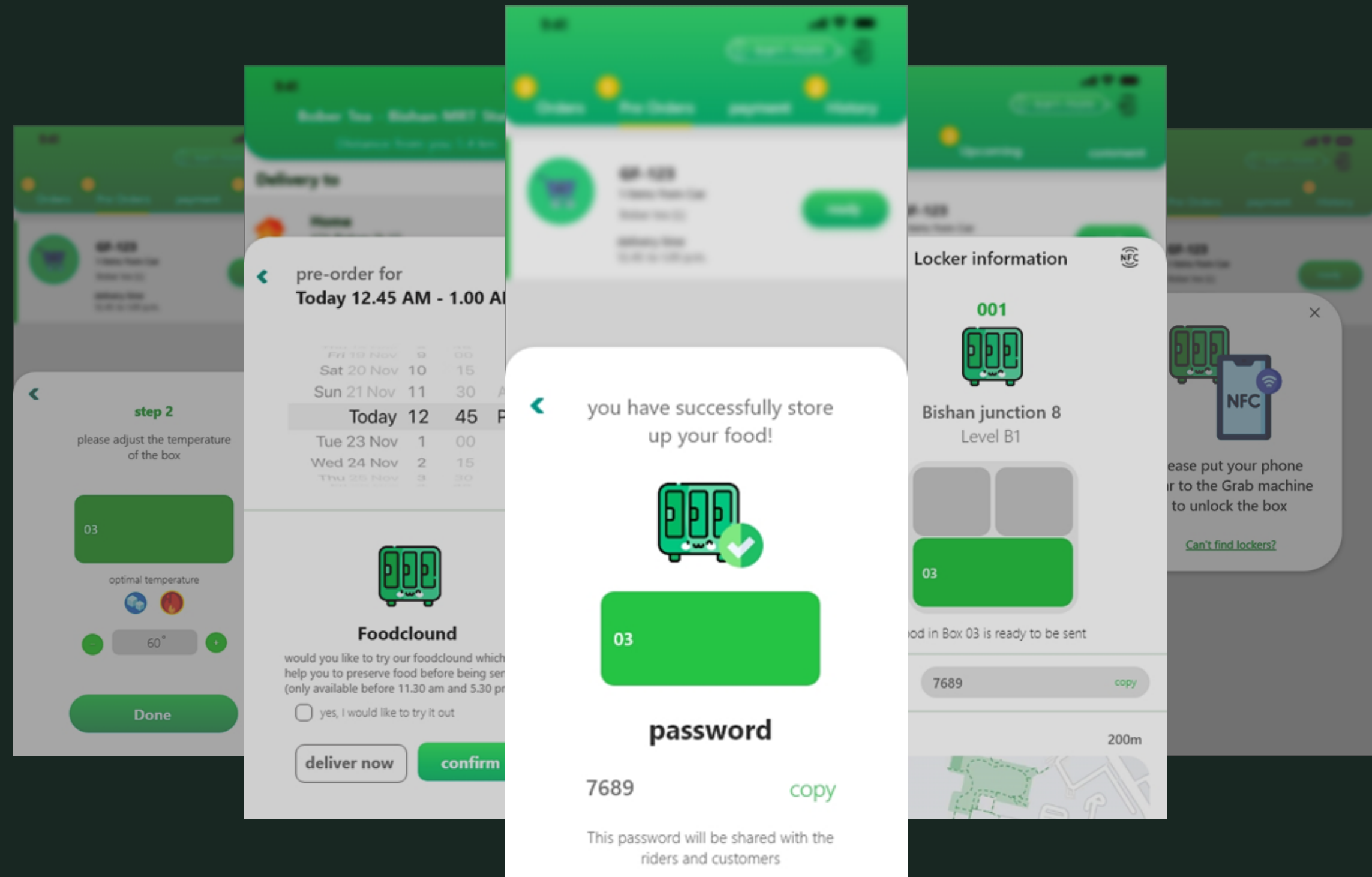
Place pre-order  
before peak hours  
to get discount

Pre-prepare food  
earlier

store food in  
Foodcloud boxes for  
preservation

pick up food from  
Foodcloud collection  
point and send it to  
customer

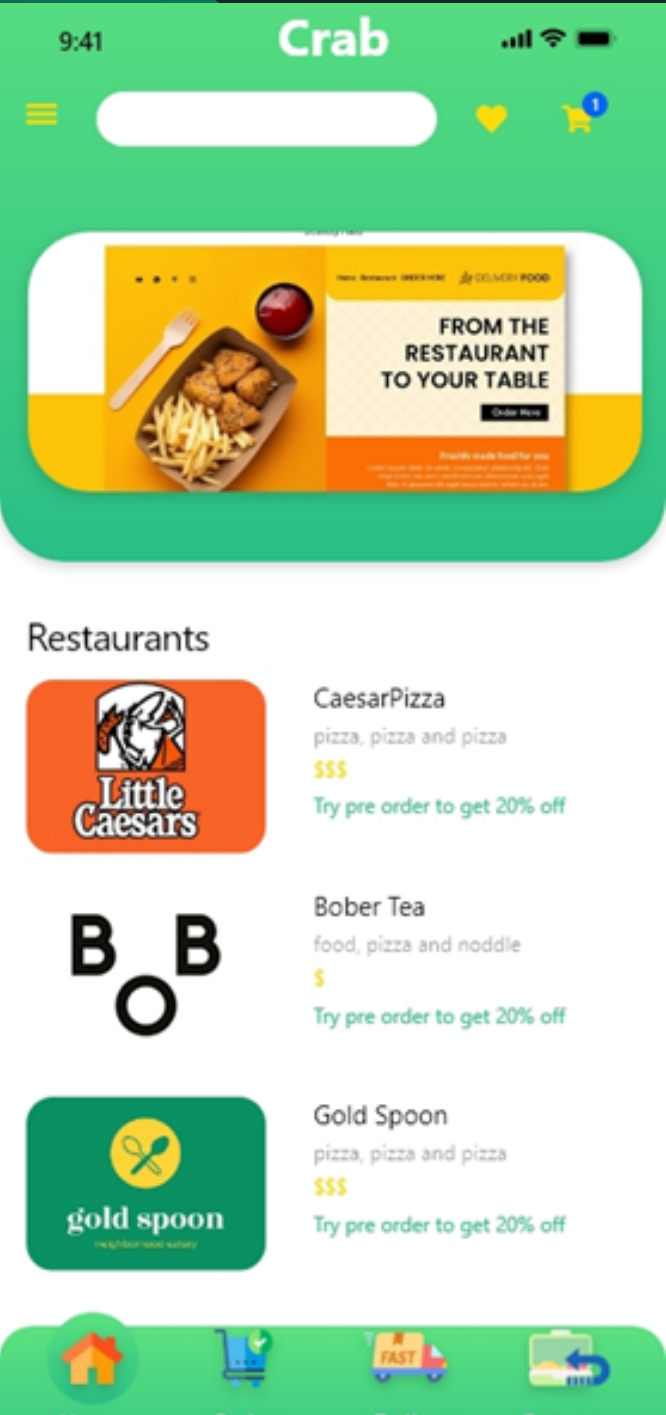
# Final Wireframe



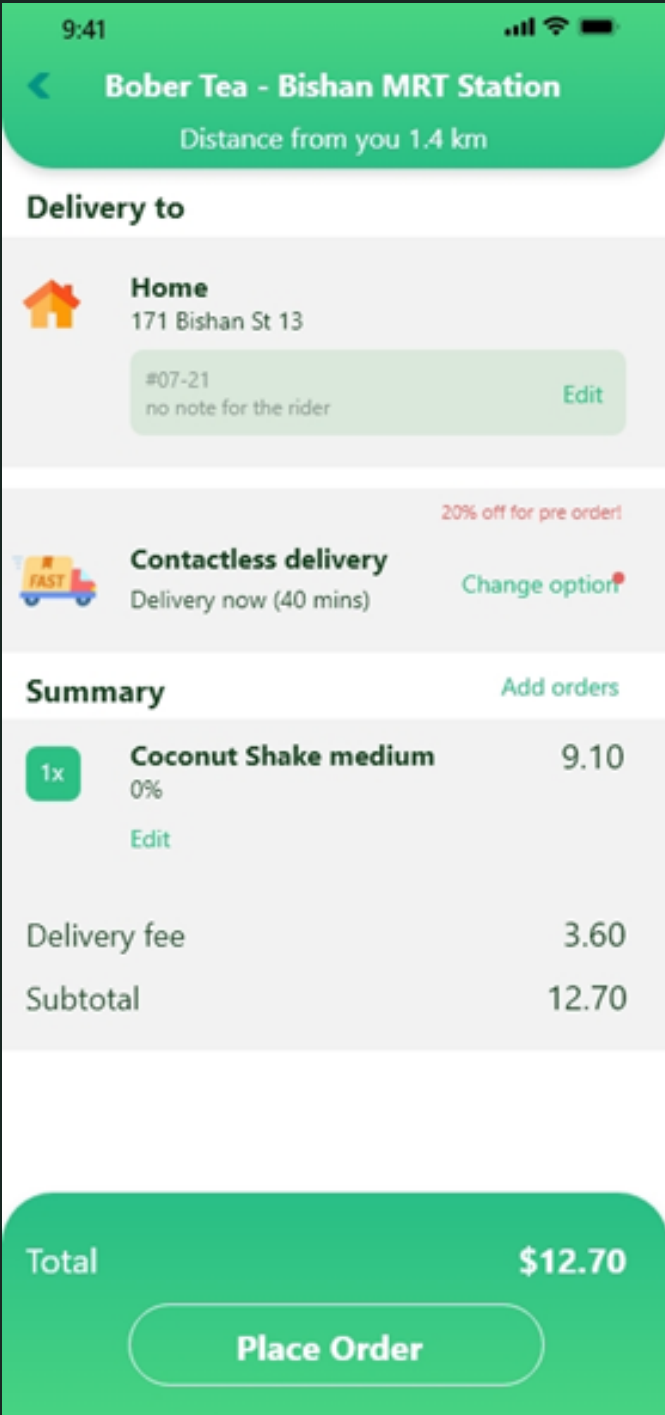


# CUSTOMER

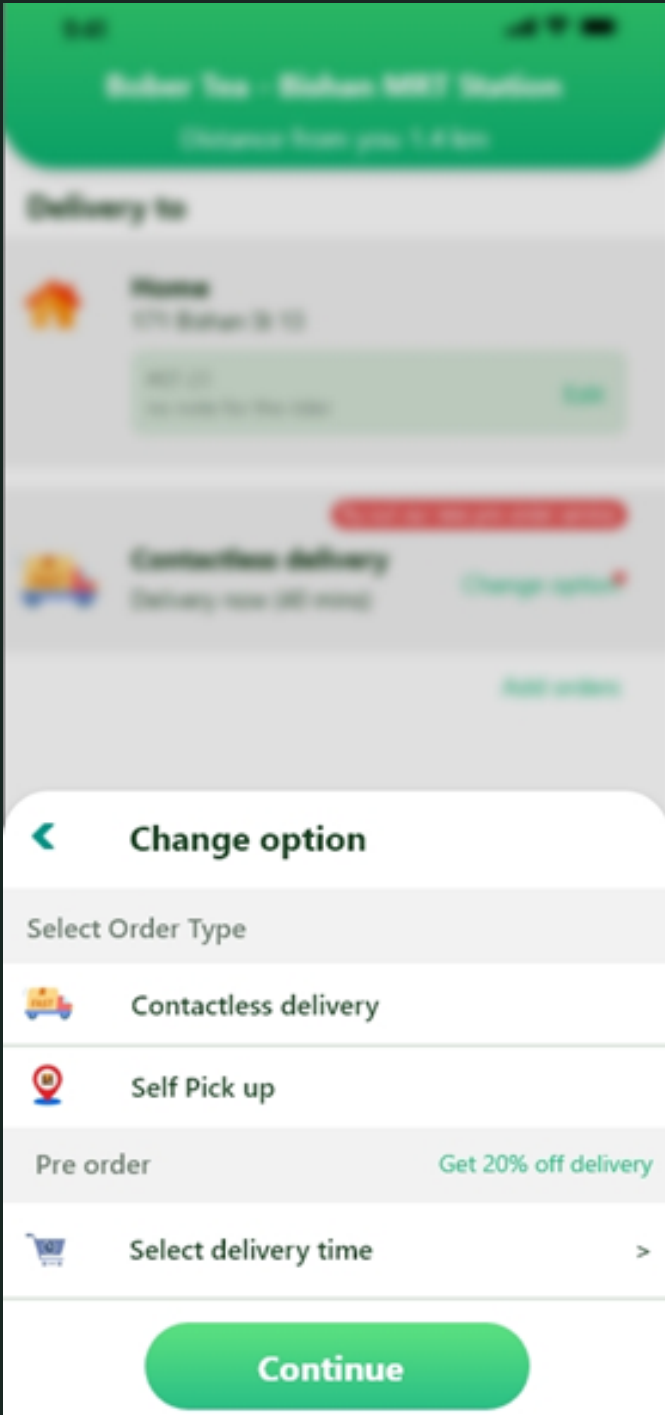
<https://xd.adobe.com/view/ee6e797d-7d42-447d-8c53-ccb756f38e33-bb3d/screen/2795e7f3-67a1-4e9f-9613-0f5169f64bcd>



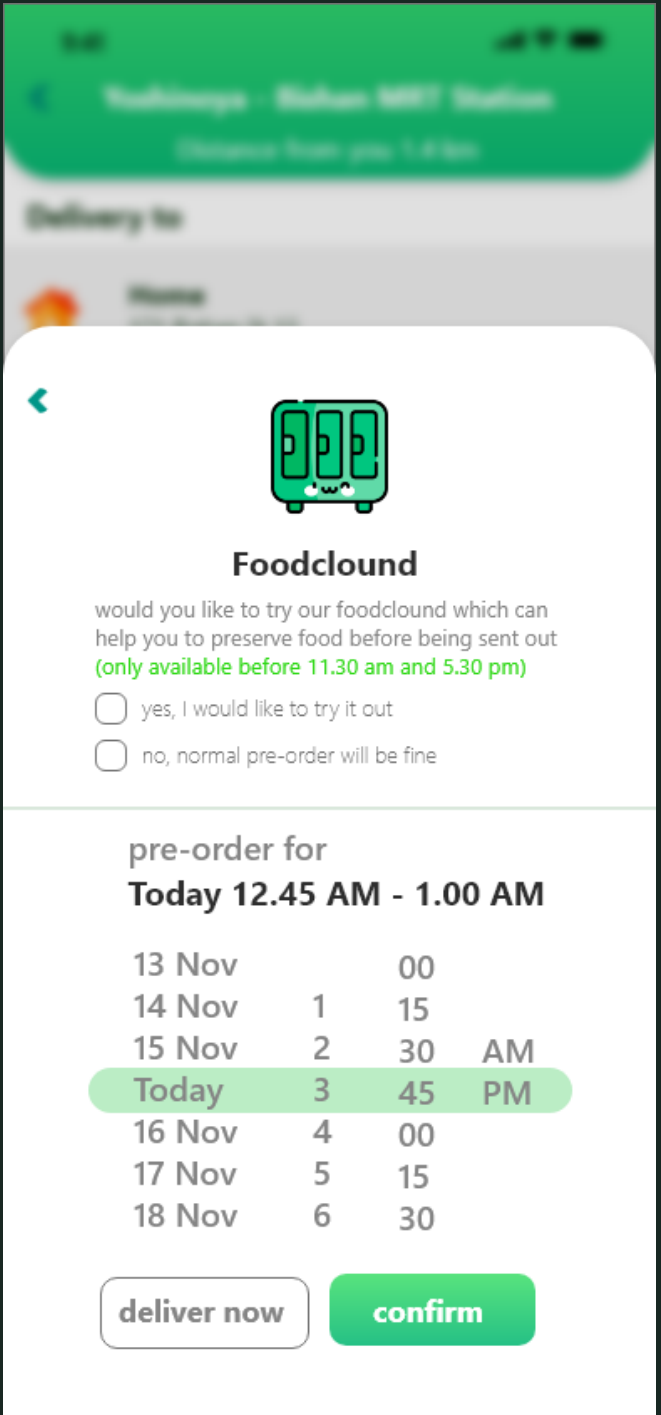
main page



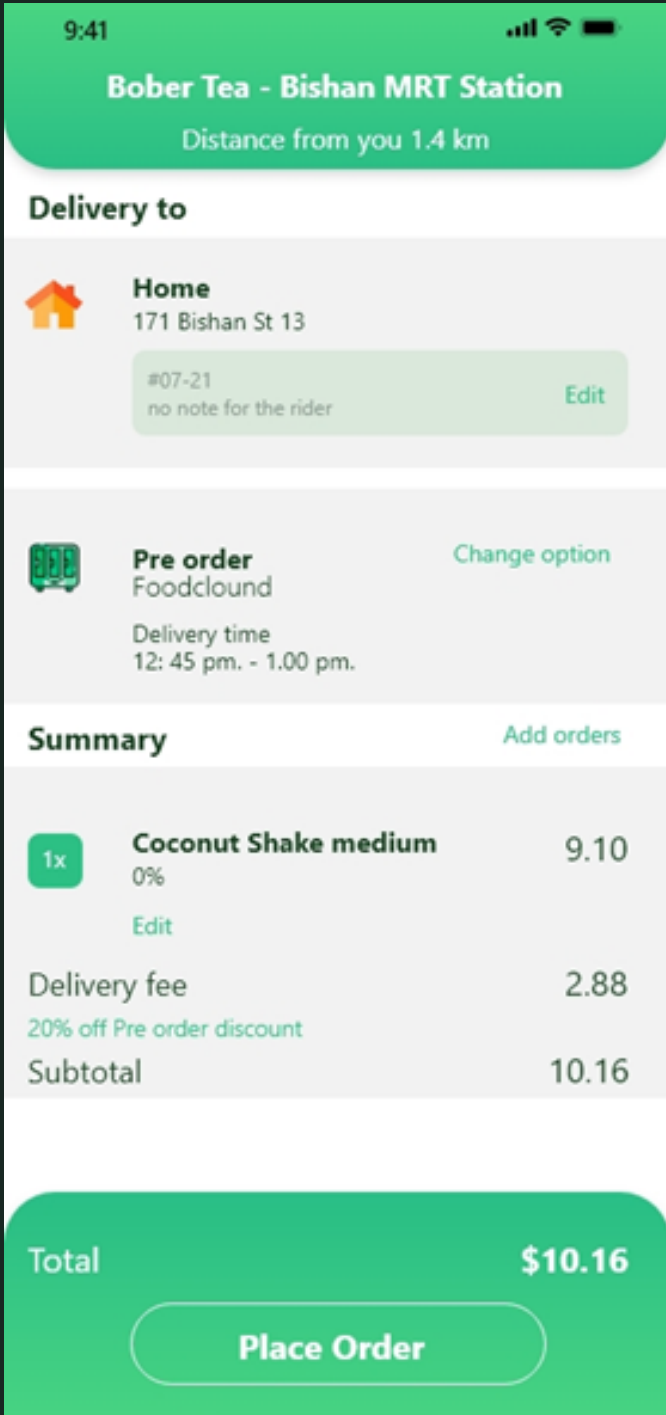
order summary



select pre-order



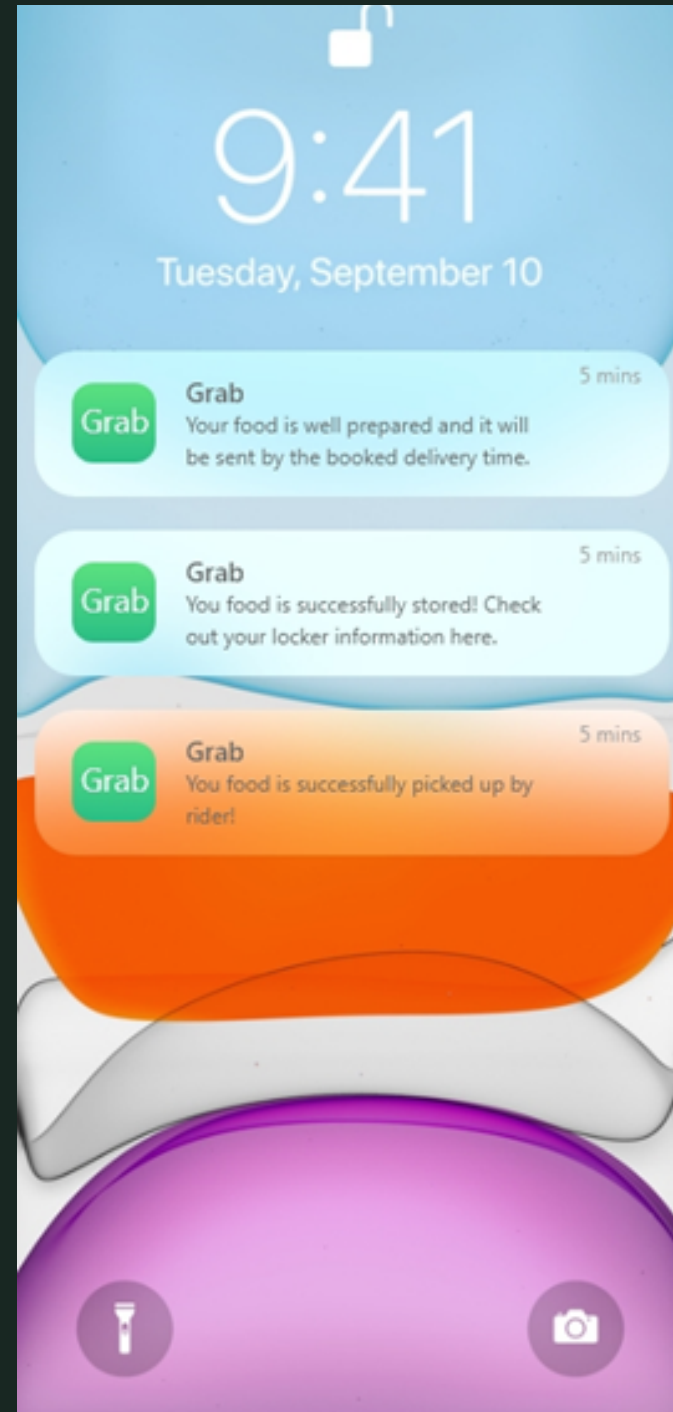
set delivery time and  
tick for the foodcloud  
service



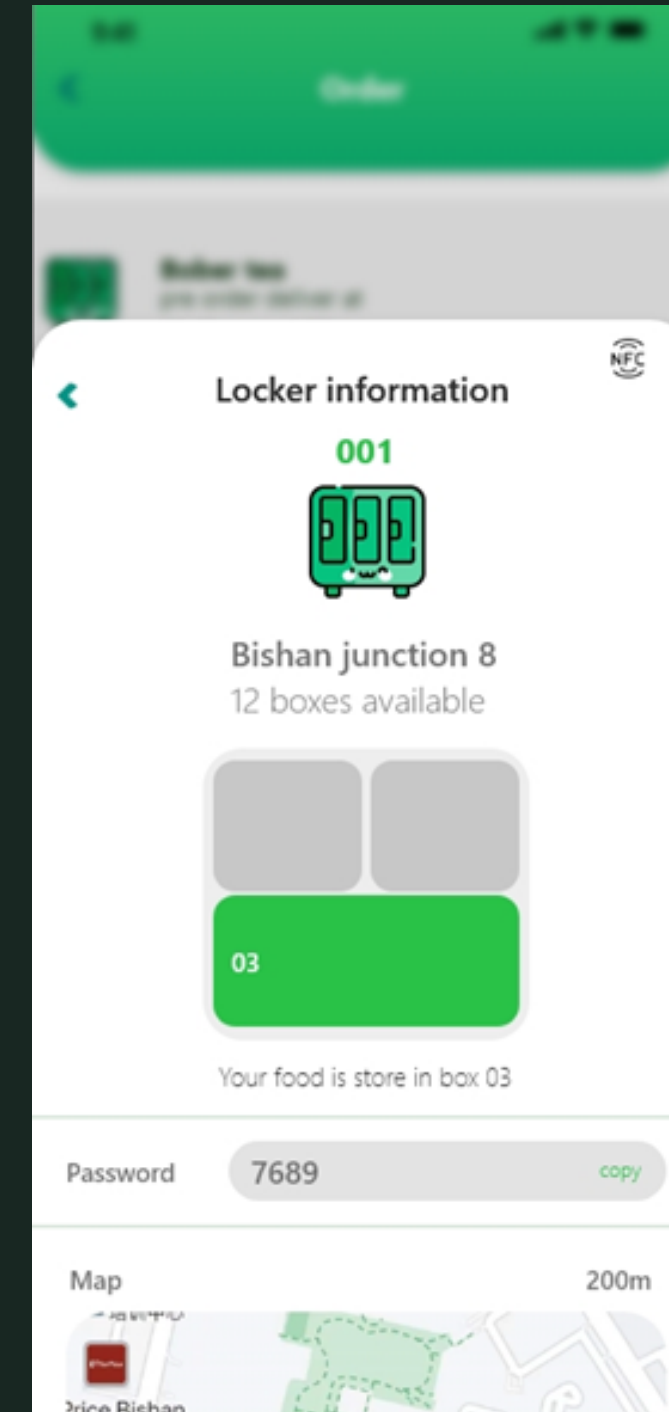
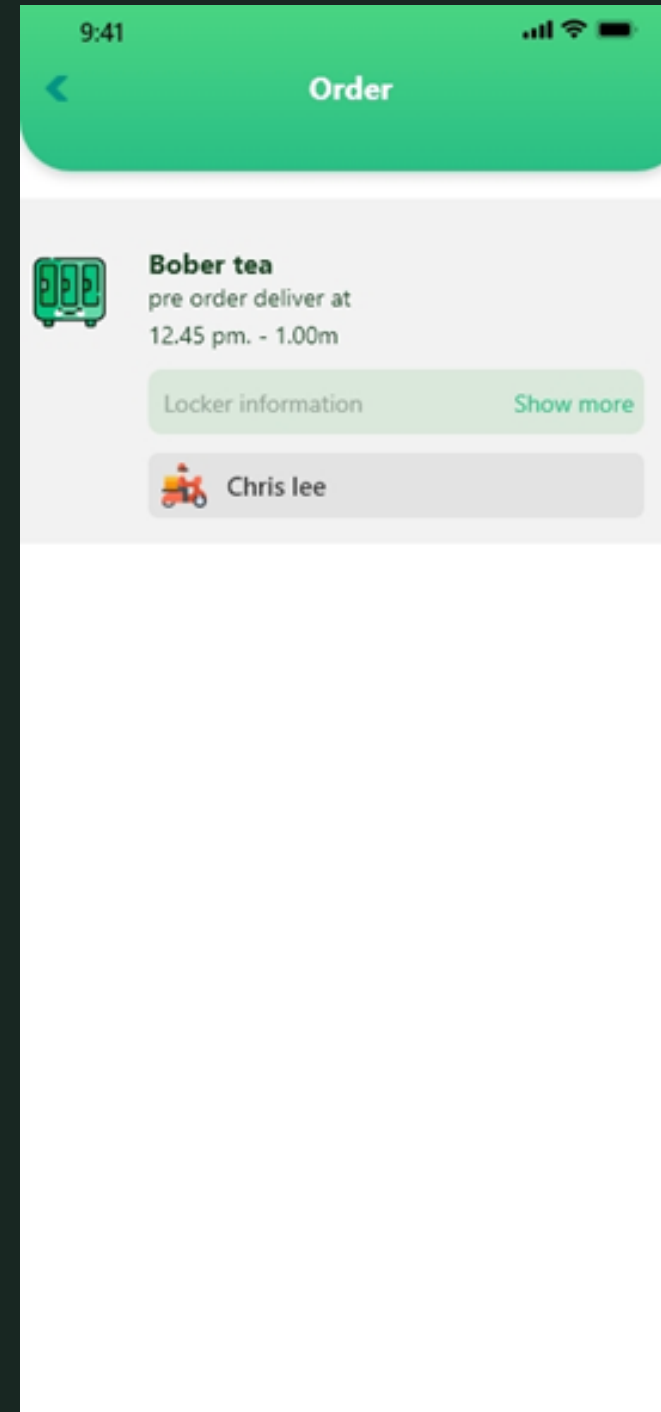
get 20% discount off  
delivery



# CUSTOMER



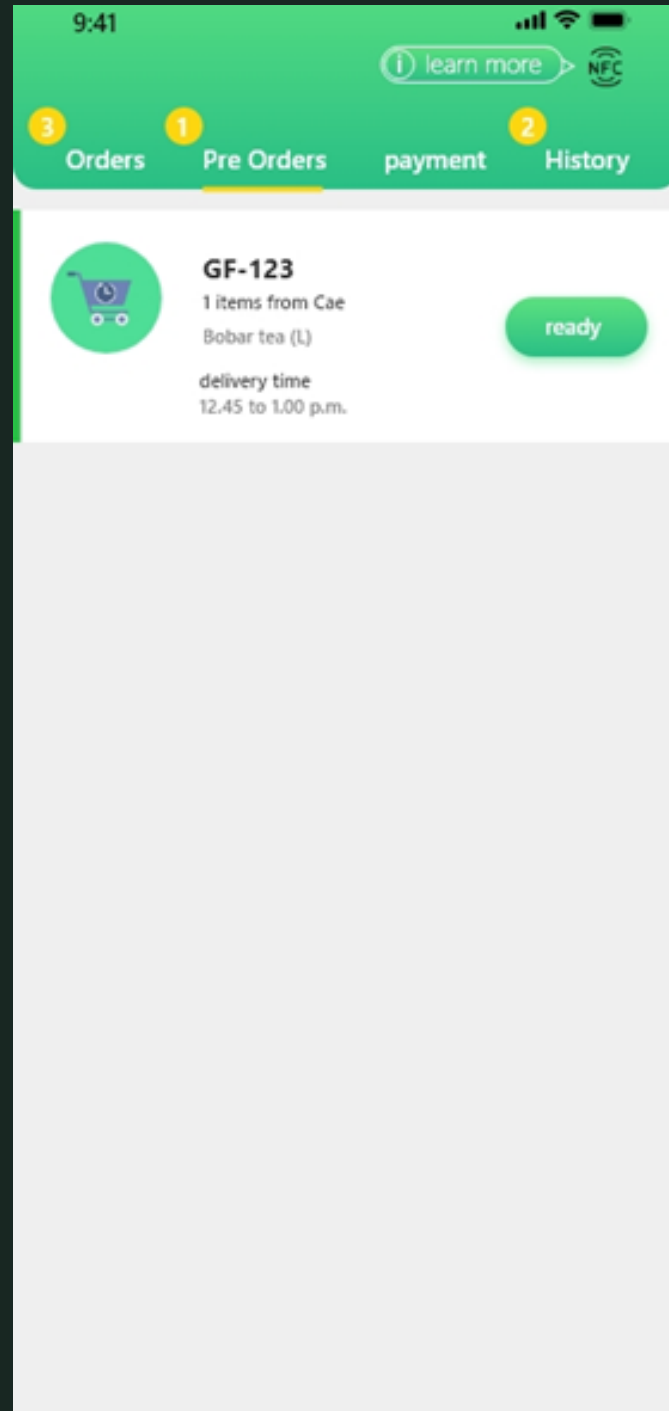
be notified for the  
state of delivery



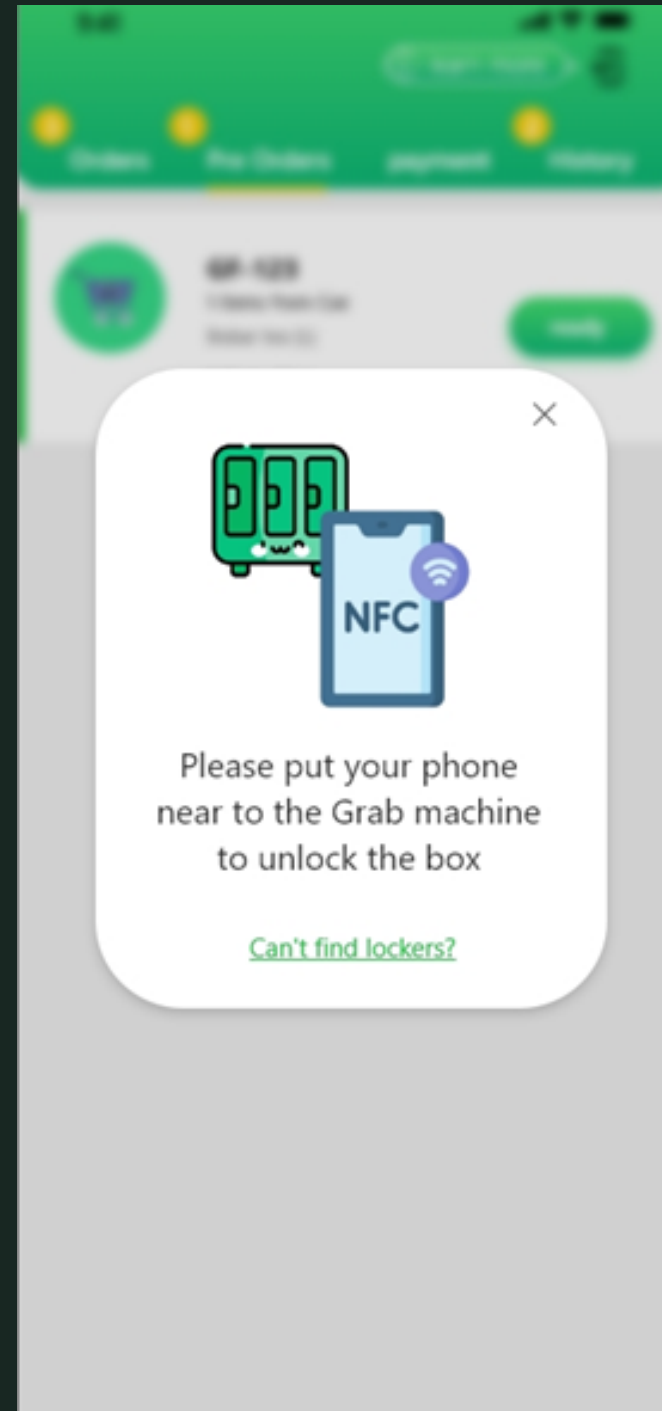
check information of the  
lockers (venue, password  
and allocation)

# RESTAURANT

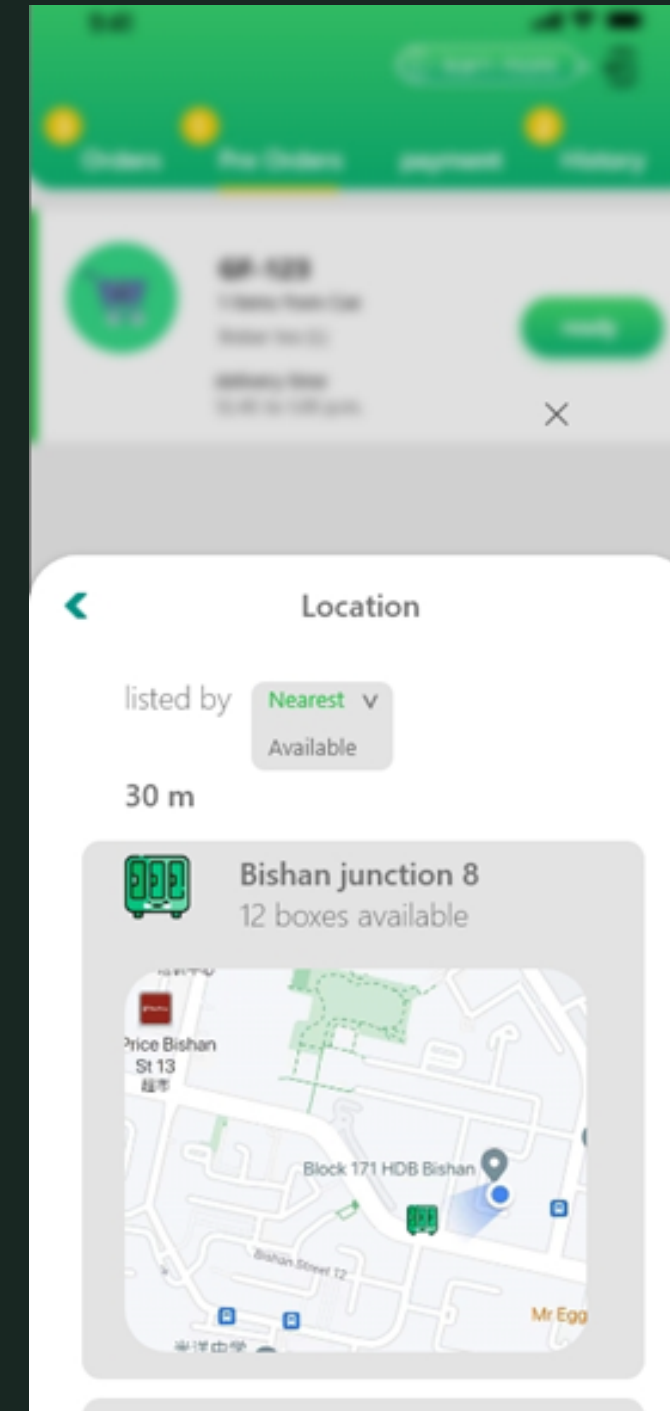
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receive and prepare  
pre-order food

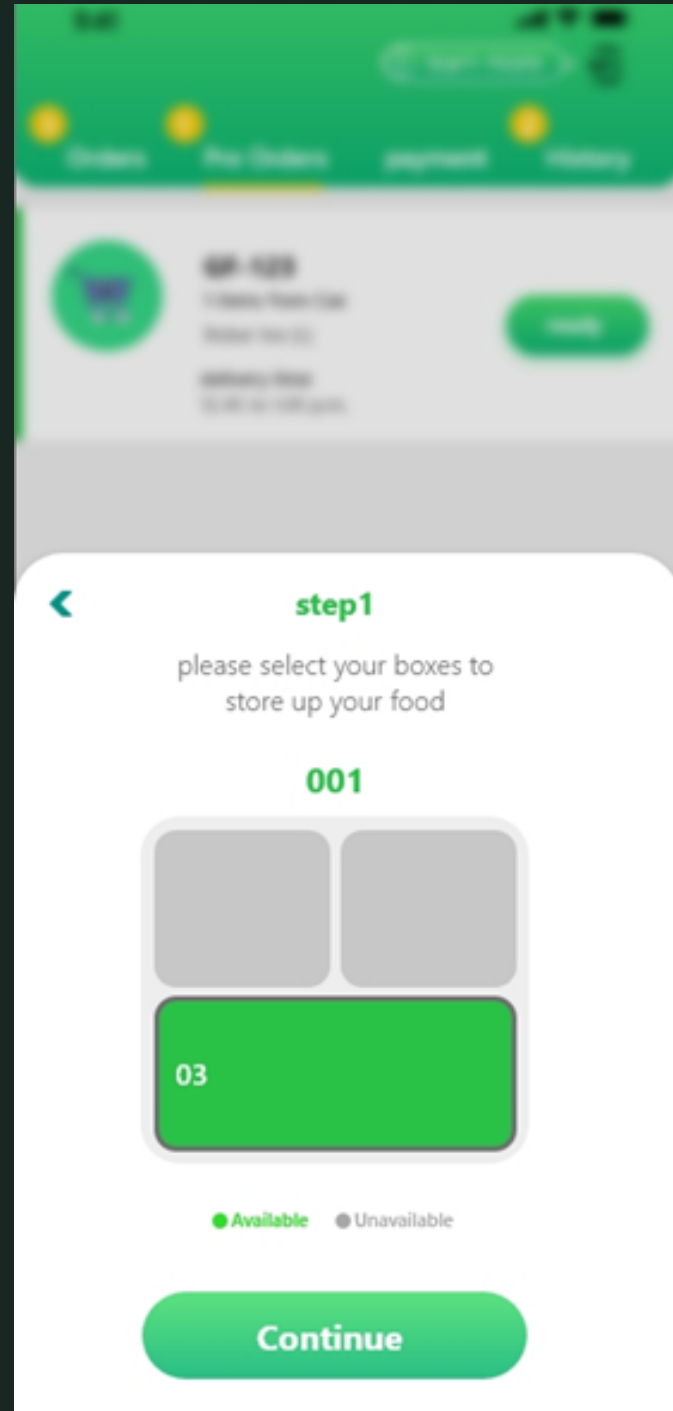


Guiding of NFC

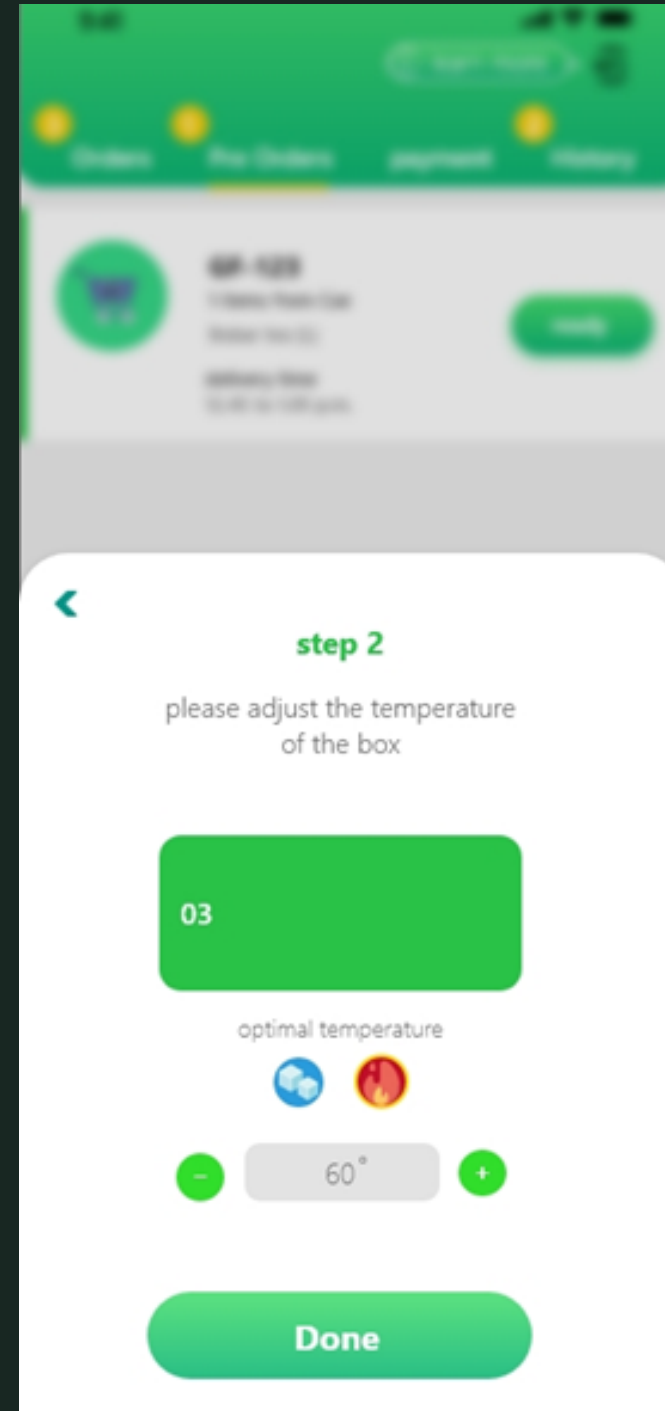


location of the  
collection point

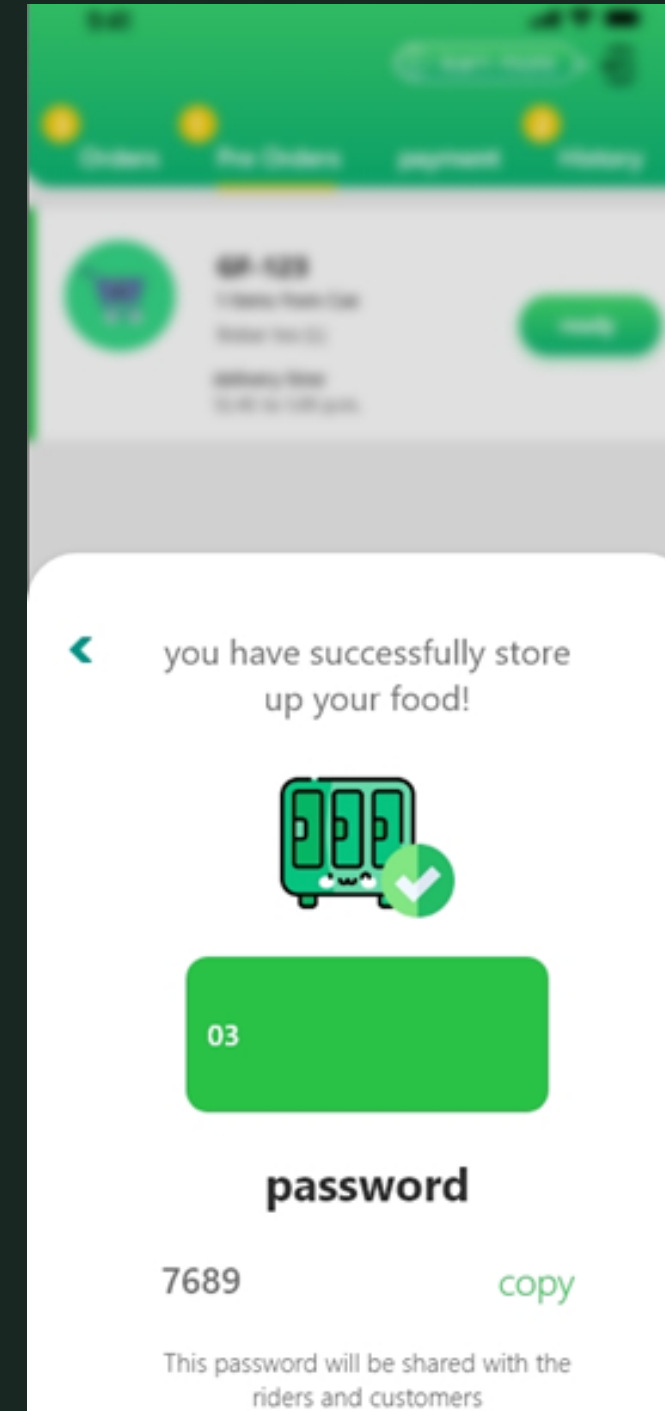
# RESTAURANT



connect locker and  
select box(es)



Adjust temperature of  
the box (es)



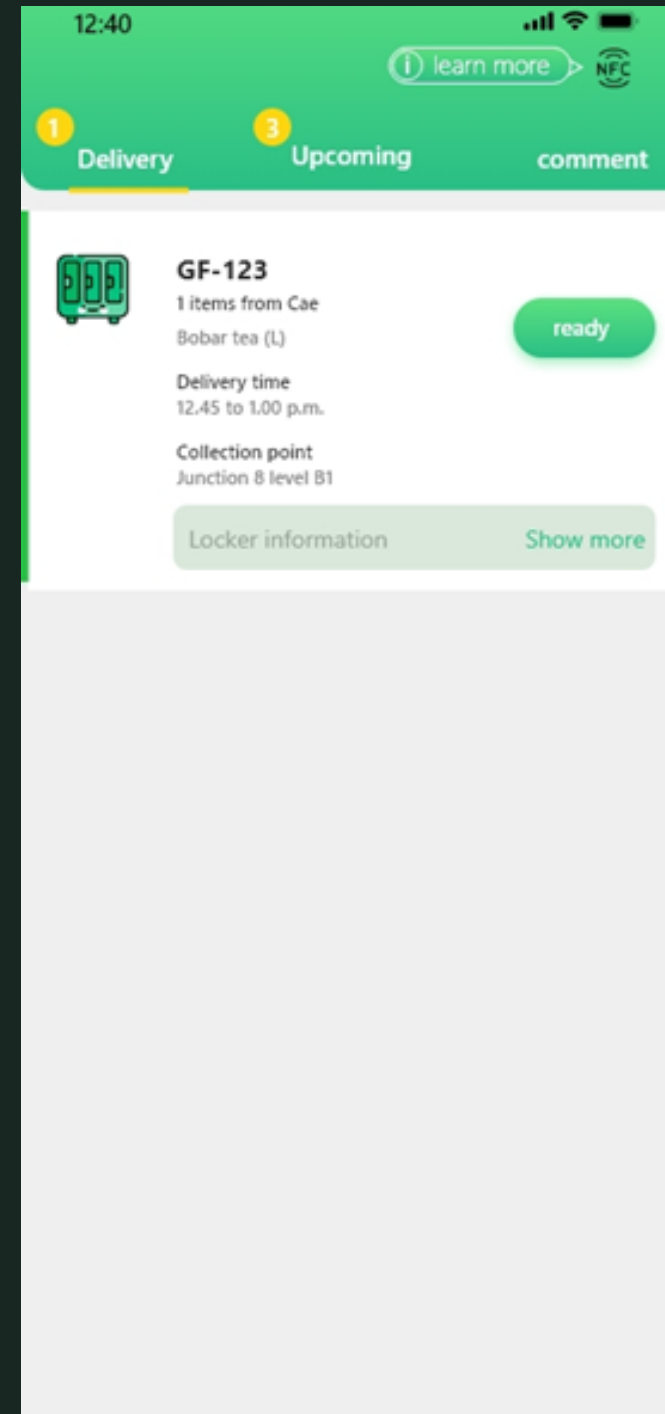
A password will be shared  
with rider and customer  
after food is stored

# RIDER

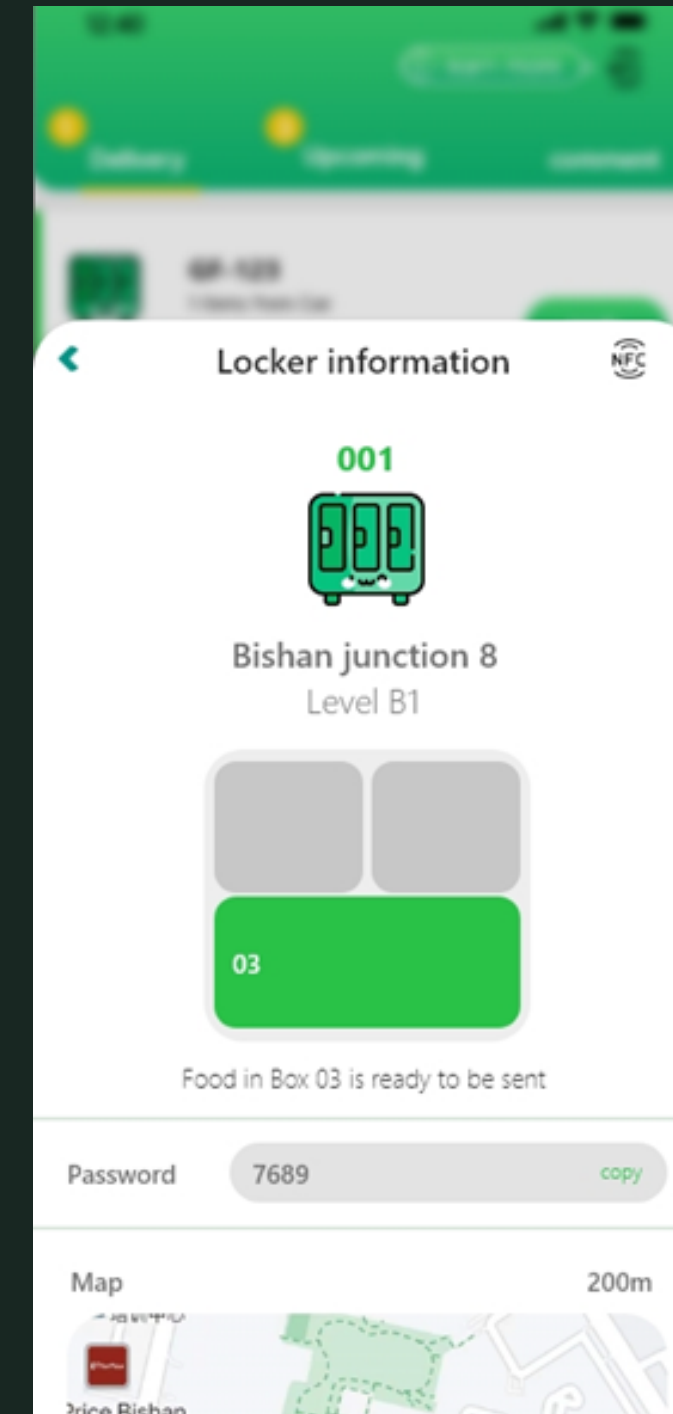
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Be notified to pick up food from the collection point nearby

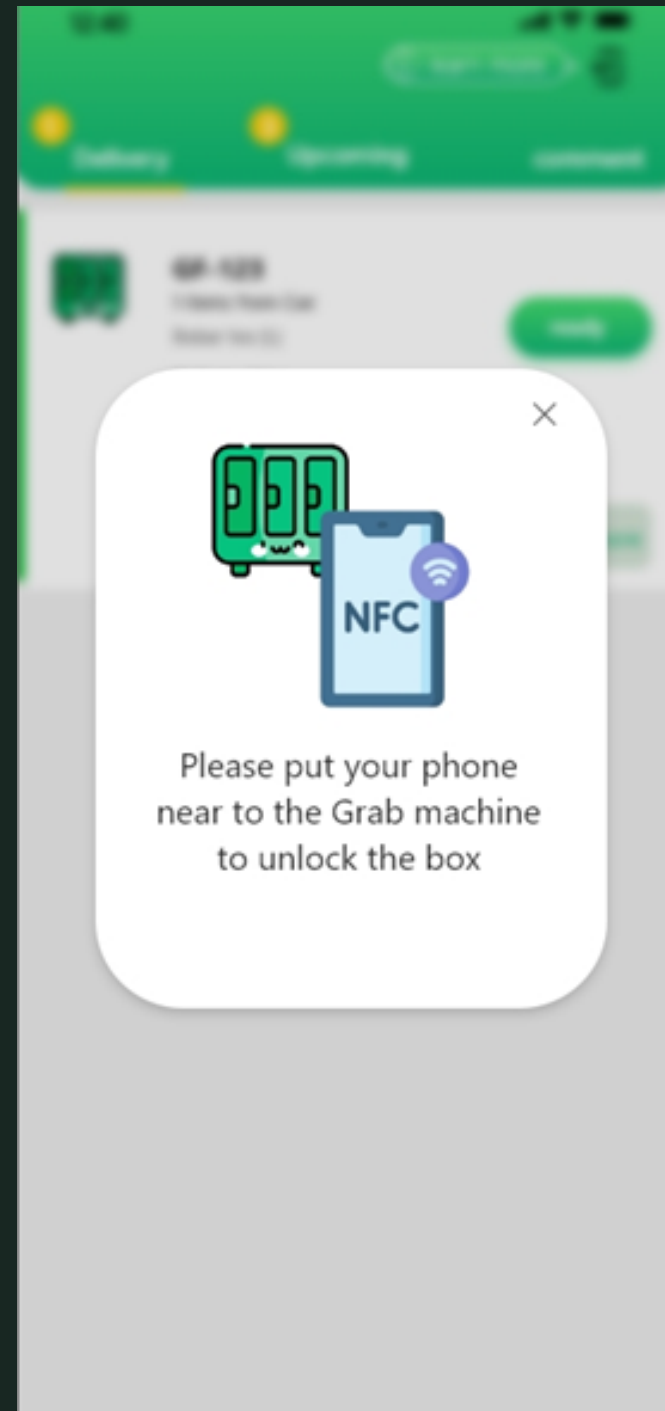


receive delivery detail

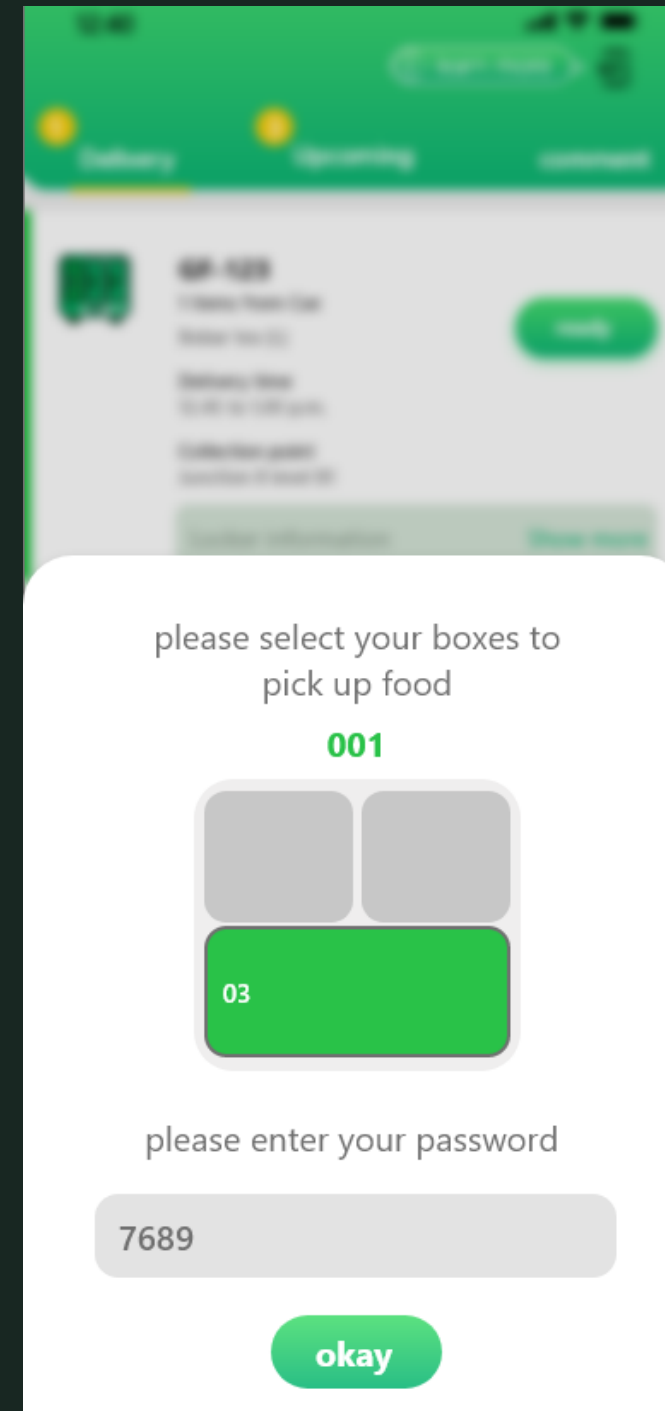


detail information of the lockers (venue, password and allocation)

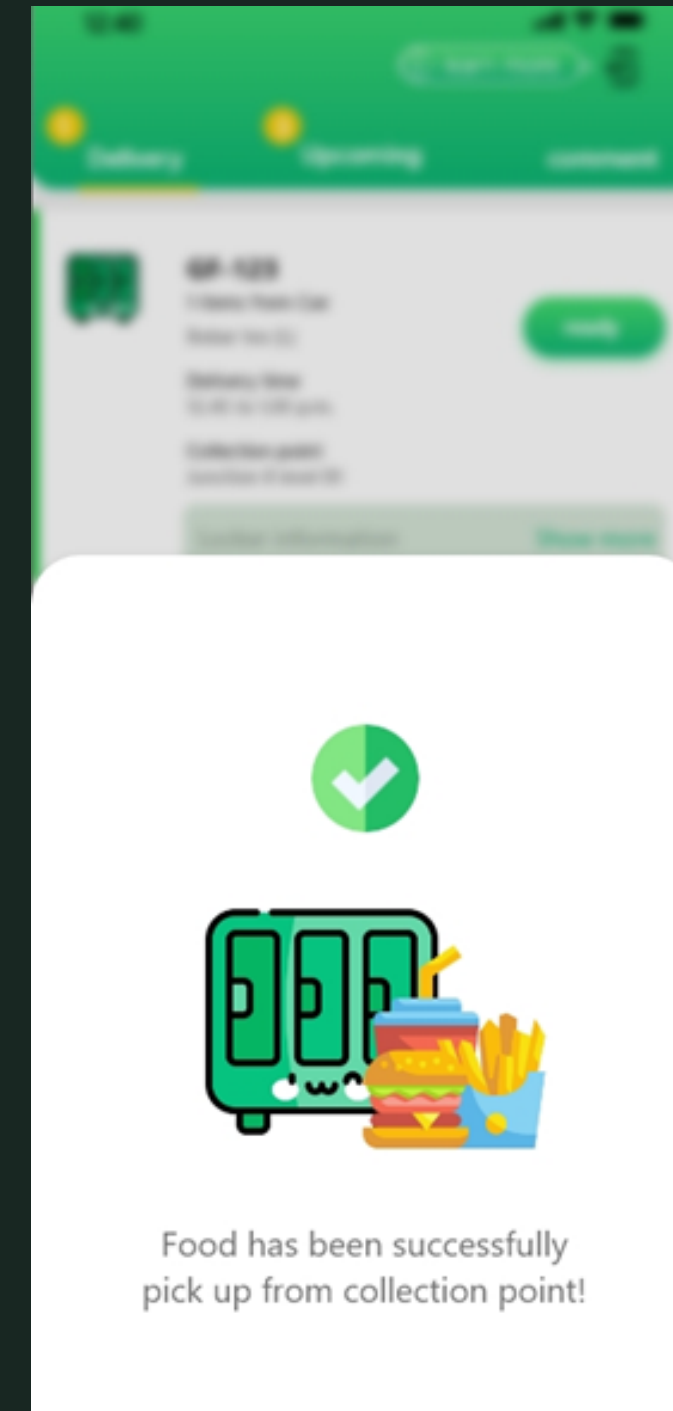
# RIDER



Guiding of NFC



using the shared password to unlock the selected locker



food is picked up



# FOODCLOUD

FOOD RAINS TO YOUR DOORSTEP



TASTE THE BEST IS ON TIME