Delivery Of Essentials in 2020

Theme: Life In Lockdown

Pune



Team



Name : **Jatin Bamane** Email: <u>jatinbamane5@gmail.com</u>



Name : **Atharva Belsare** Email: <u>atharvabelsare0707@gmail.com</u>



Name : **Atharva Bhatambrekar** Email: <u>atharva.bhatambrekar@gmail.com</u>



Name : **Swaraj Bhagwat** Email: <u>swaraj.bhagwat.18@gmail.com</u>



Name : **Nimish Nerlekar** Email: <u>nimishnerlekar@gmail.com</u>

Lockdown Scenario

The restaurant owners want to provide service in this pandemic and the consumers are in need of their products provided through home delivery systems. Everyone is concerned about their safety and everyone would benefit from a safe food delivery system.



Problem Identified

How the packaging and delivery systems for restaurants can be as safe as possible in 2020?

This problem needs to be solved because many restaurant businesses won't be able to survive if people stop buying and consuming their food products. Conventional means of packaging and delivery of goods is highly unsafe for the people working for the restaurant as well as the concerned consumer because of highly contagious COVID-19.



Target User Persona 1

PROFILE

Job Title: Su Chef Gender: Male Family Setting: Source of income, married with 2 kids.

DEMOGRAPHICS

Income: average pre pandemic Education: bachelor of hotel management degree

FEELINGS

Values & Goals: wants to continue his restaurant business in 2020 safely. Worries: He is afraid he might catch and spread covid19 while working. He doesn't want his family to face major budget related problems. Influences: Pk Biryani , Dominos, Ola, Arogya Setu

OBJECTIONS Safety

Work

Fear



Target User Persona 2



PROFILE

Job Title: Consumer Gender: Male Family Setting: Retired, married, father of 1 daughter

DEMOGRAPHICS

Income: Above average pre pandemic Education: B.Com,Retired

FEELINGS

Values & Goals: In need of healthy food and medicine Worries:Safe delivery of essential goods, Not being able to buy essentials.

Influences:Zee Marathi,ABP Majha,Whatsapp,Arogya Setu

OBJECTIONS

Cost

Value

Fear

Target User Persona 3

PROFILE

Job Title: Delivery Man Gender: Male Family Setting:Single.

DEMOGRAPHICS

Income: Poor pre pandemic Education: B.Tech

FEELINGS

Values & Goals: want to deliver packages safely to consumers.

Worries: He is paid on daily wages. He is afraid he might catch and spread covid19 while delivering as his family depends on it. He is worried regarding the safety of his job. He is afraid that he might go bankrupt without his daily income.

Influences: KFC,Dominos,Amazon,Arogya Setu

OBJECTIONS

Work

Inspiration Board

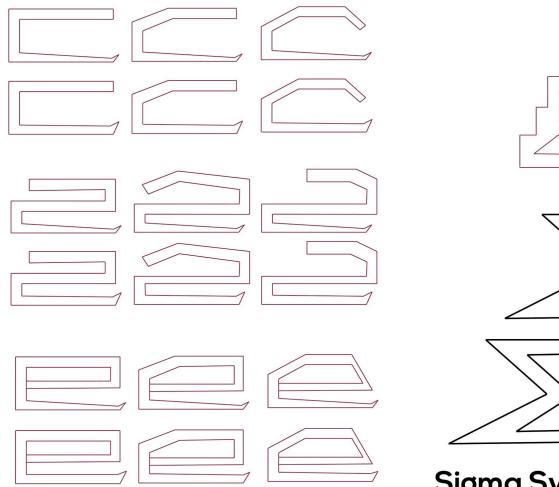


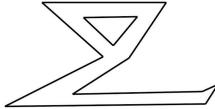
Explorations

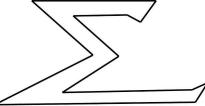
Contactless delivery is the safest delivery method during this crisis. Many food companies are trying to implement low budget minimal contact solutions.

We explored many solutions where we tried to eliminate the contact of the delivery person and the food package while maintaining our solution budget as low as possible.









Sigma Symbol Inspiration

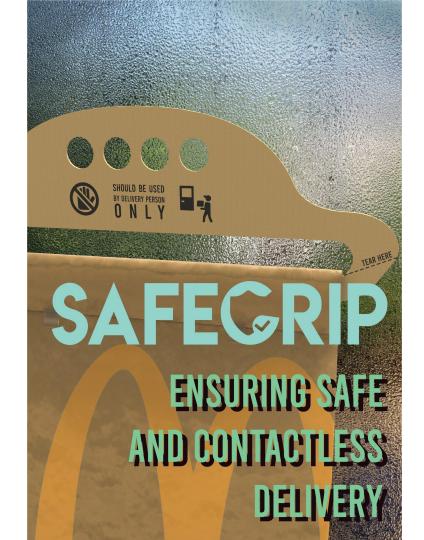
Solution: 1

Tearable cardboard handle for the delivery man with no contact to main parcel.

This Solution consists of four holes to hold and a slit where the paper bag is folded and stuck.

Then the delivery man uses the handle to pick the parcel for delivery and has zero contact with the parcel.

At the time of delivery the delivery man tears the handle off the parcel the the package is delivered following the no contact of delivery rule.





Solution: 2

Plastic tool for the delivery man to handle the parcel with no contact.

This Solution consists of a single plastic tool which in inspired from the letter **e** in which the delivery man holds it with the grip and the parcel is picked by inserting its open end with a wedge which keeps the parcel from sliding and falling. Partition between helps to restrict delivery man contact with the parcel.Its also easy to sanitize.





Solution 2 Future Scope

It is the same tool with a detachable grip made of metal which records the temperature of the delivery man whenever he touches it and feedbacks the data to the main operating office.

This makes the delivery even more safer as a delivery man delivers at least 5-6 parcels on each ride and their can be chance if he has high temperature before a delivery.

This Version of tool can stop any contact of infected delivery man to consumer by reporting to the office and delivery man himself.

This tool can be made more sustainable using **Generative Design**.

https://drive.google.com/file/d/1aVmAOU 22exc_lirq2OJv-_eVbANRn4Sh/view?usp=sh aring



User Experience

HOW DOES THE UX OF YOUR SOLUTION LOOK LIKE?

First solution

Kitchen Step 1. After the food is cooked, wrap the parcel opening from within the bigger loop and seal it.

Counter Step 2 : Pick up the parcel by holding the SafeGrip to keep in the bigger bag.

Customer door Step 3 : Tear the Safegrip from the side and slide it out

End of the day Step 4 : Collect them separately and dispose it off later.



Second solution

Kitchen Step 1 : Seal the parcel bag with a loop to insert the SafeGrip in.

Counter Step 2 : Insert the SafeGrip arm inside the loop to pick it up and put it inside the delivery bag.

Customer Gate Step 3 : Remove the parcel from the delivery bag using SafeGrip towards the Customer door.

Customer Door Step 4 : Keep the parcel on the ground and slide out the SafeGrip to complete the delivery.

Sanitize the SafeGrip after every delivery

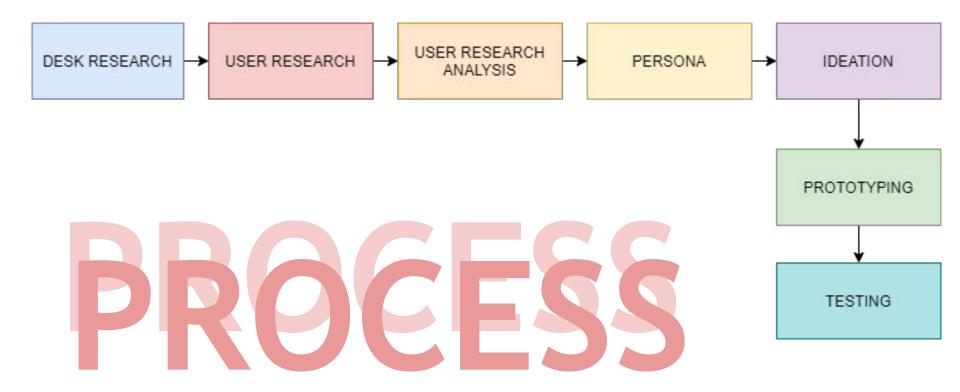


Process

DESIGN PROCESS

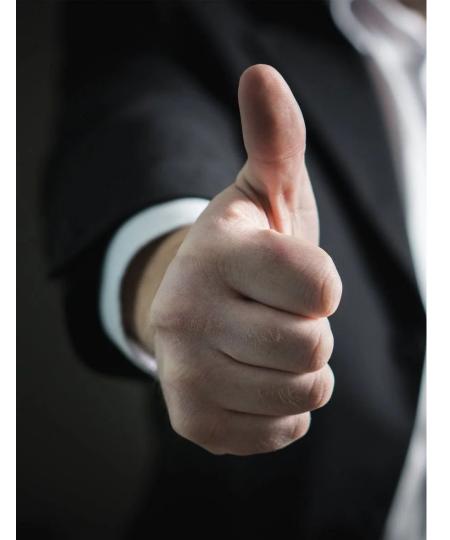
We started working on this project by doing desk research and user study. We made a questionnaire and asked multi chain and local restaurants, delivery person and the customers through online forms and calls. We came up with user persona and problem statement after the analysis of user research. We came up with various solutions after brainstorming and selected two final solutions.





Impact

Our Solution of delivery tool makes it easier and safe to delivery food packages from restaurant to peoples home without any contact of the delivery man making it safer for the consumer and delivery man himself and makes the restaurant owner less concerned about well being of his consumers and his employees.

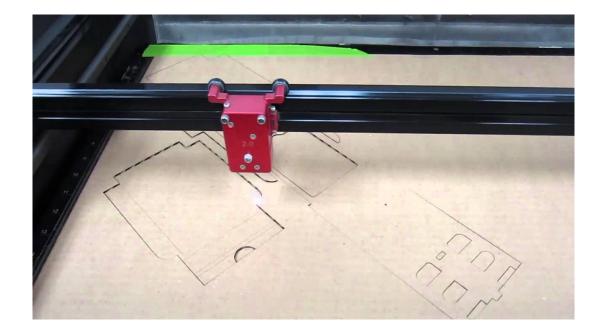


Execution & Viability

The following solution can be implemented in two formats.

Cardboard & Plastic

The Cardboard Handle can be manufactured by Laser Cutting . As, it is made by Cardboard it can be **recycled** immediately and made into new ones.



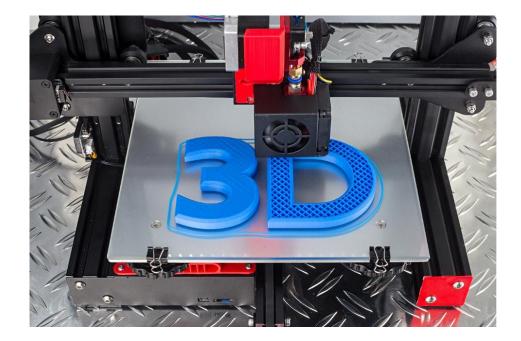
Plastic Alternative

The Plastic Solution will be Injection Molded in large quantities

and distributed among all delivery agents with a sanitization kit.



3D Printing is more efficient process in order to produce this tool as it has less amount of material waste.



Thank you!



THE GUYS SHE TOLD YOU NOT TO WORY ABOUT.