PES UNIVERSITY

DESIGN INNOVATION AND MANAGEMENT

Portfolio

UA17BD280

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CONTENTS

ASSIGNMENTS

- PRODUCT COMPARISON
- TEAM MANAGEMENT
- TRIZ MODEL
- DESIGN REGISTRATION

DESIGN PROJECT - TOASTER

ASSIGNMENTS

PRODUCT COMPARISON

Shoes

Nike MAG

Basic Features

- Cushioned
- Easy to clean
- Slip-on

Performance

- Length: 32 cm, fixed
- Weight: 800 g (per shoe)
- Battery life: 5 hours

Exciting features

- Self-lacing
- Glow-in-the-dark sole
- Same shoes used in Back to the Future (movie)

Vibram Five Fingers

Basic Features

- Cushioned
- Synthetic rubber and foam
- Slip-on

Performance

- Length:
  Sizes 25 cm - 42 cm
- Weight: 300 g (per shoe)

Exciting features

- Shaped like a foot
- Waterproof
- No stinky socks

Vans

Basic Features

- Cushioned
- Canvas
- Slip-on

Performance

- Length: Sizes
  25 cm - 42 cm
- Weight: 400 g (per shoe)

Exciting features

- Funky Tacos print

My Product

Basic Features

- Cushioned
- Synthetic rubber and foam
- Slip-on

Performance

- Length: 23 cm - 42 cm
- Weight: 400 g (per shoe)

Exciting features

- Glow-in-the-dark sole
- Bright and funky
- Dust and dirt repellant

TEAM MANAGEMENT

TOASTER

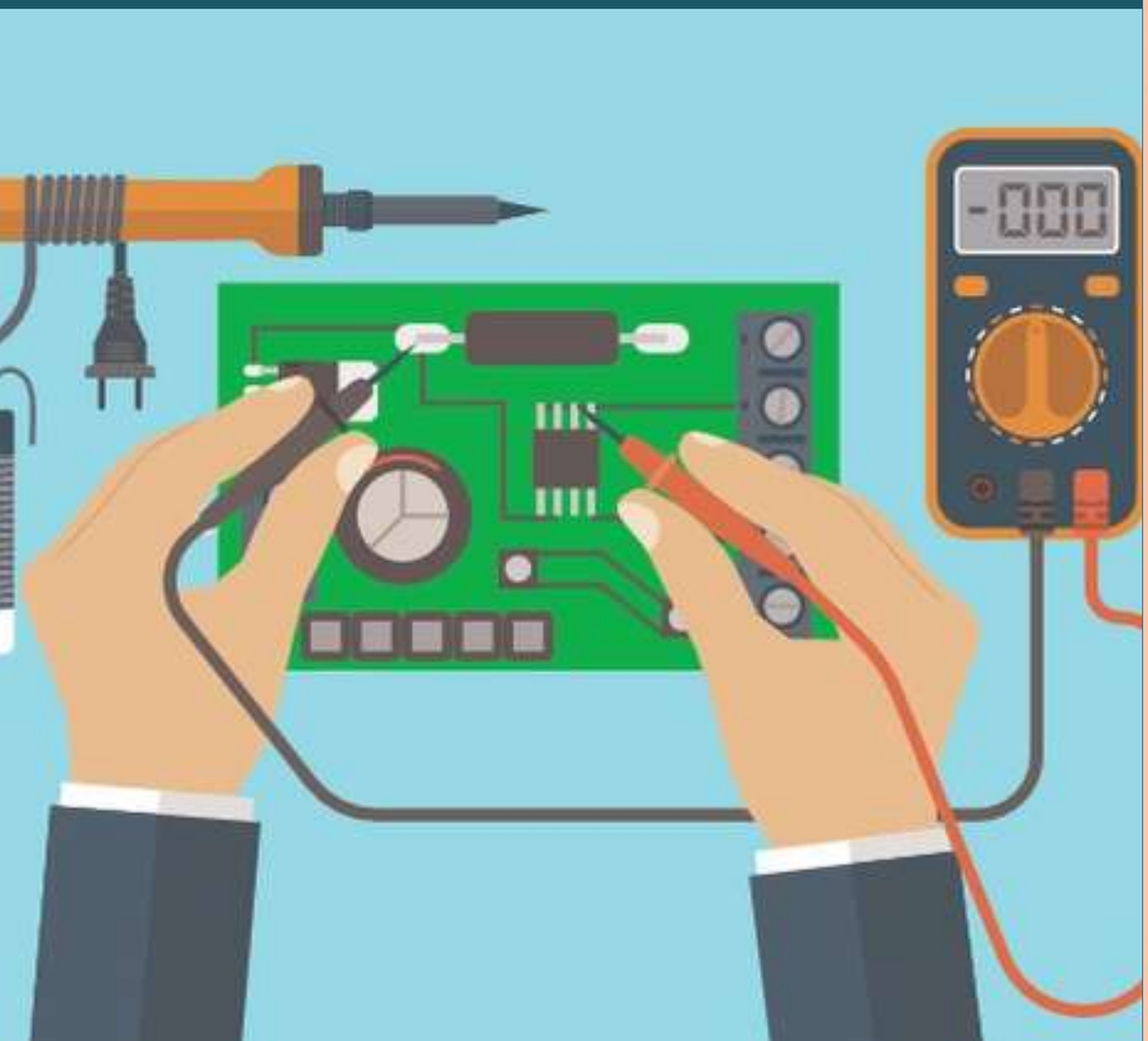
PROBLEM STATEMENT

A toaster has to be made. You are the team leader. Who are the people you are going to pick to be on your team and why?

PRODUCT DESIGNER

To come up with sketches, form and dimensions of the toaster.

ELECTRICAL ENGINEER



To design the circuits and connections.

MECHANICAL ENGINEER

To design the various mechanisms for spreading butter, heating bread and crumb disposal.

FOOD TASTER

Would be needed at the final stages to taste the toasted bread to make sure the toasting process doesn't affect the taste.

A professional opinion will help.

END USER

Would help in framing problems with current toasters, forming journey map in the design process and for constant feedback, so we can come up with solutions accordingly.

FINANCIAL ANALYST

To analyse economic conditions in the market, in line with company fundamentals, to make business related decisions like the release of the product

MARKETING AND ADVERTISING EXPERTS

To sell our toasters and make money. Creative advertising techniques and timely marketing helps.

TRIZ MODEL

WATCH

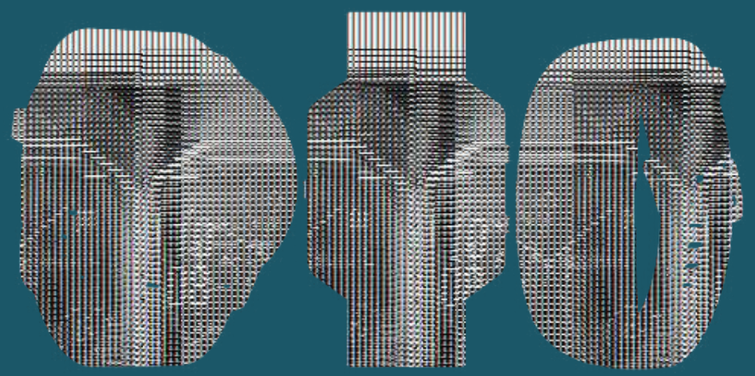
PAST

POCKET WATCHES

- Used in 1700s - 1900s
- Made of metal. Brass mostly
- Mechanical moving parts
- Had to wind key to make it work
- Winding energy stored as potential energy and released slowly
- Not water resistant
- Heavy and delicate

PRESENT

DIGITAL AND SMART WATCHES



- In fashion since 2000s
- Made of rubber and aluminium
- Lot of electronics and circuitry involved
- Battery operated
- Used as fitness trackers and health monitors
- Water resistant and handles rough usage
- Lightweight

FUTURE

HOLOGRAPHIC WATCHES

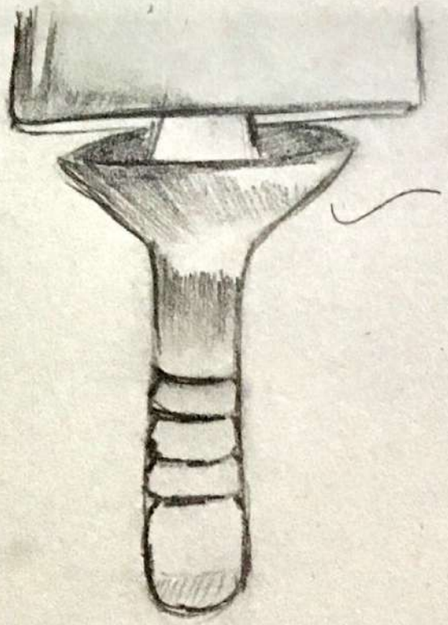
- 20 years down the line
- Motion and gesture controlled
- Microelectronics and dot projectors
- Display in thin air
- Live interface
- Increased capabilities like video conferencing
- Let’s see what the future holds for us!

	A century ago	Present day	20 years down the line
Scenario			
Product			
Features	**Brass. Mechanical parts.**	**Rubber and Aluminium. Lot of electronics.**	**Holographic display.**

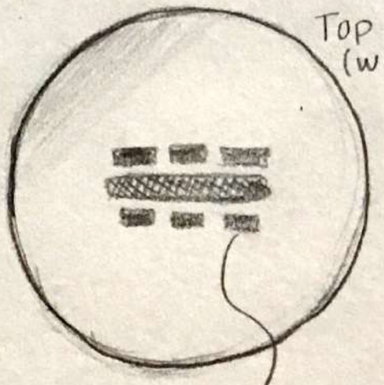
DESIGN REGISTRATION

NO-DRIP POPSICLE STICK

NO-DRIP POPSICLE STICK

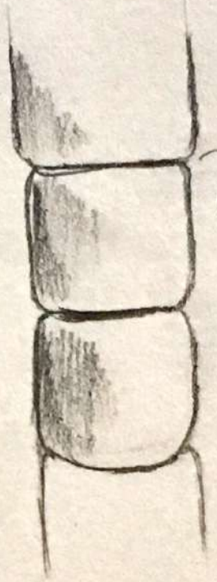


slope for collecting dripping candy

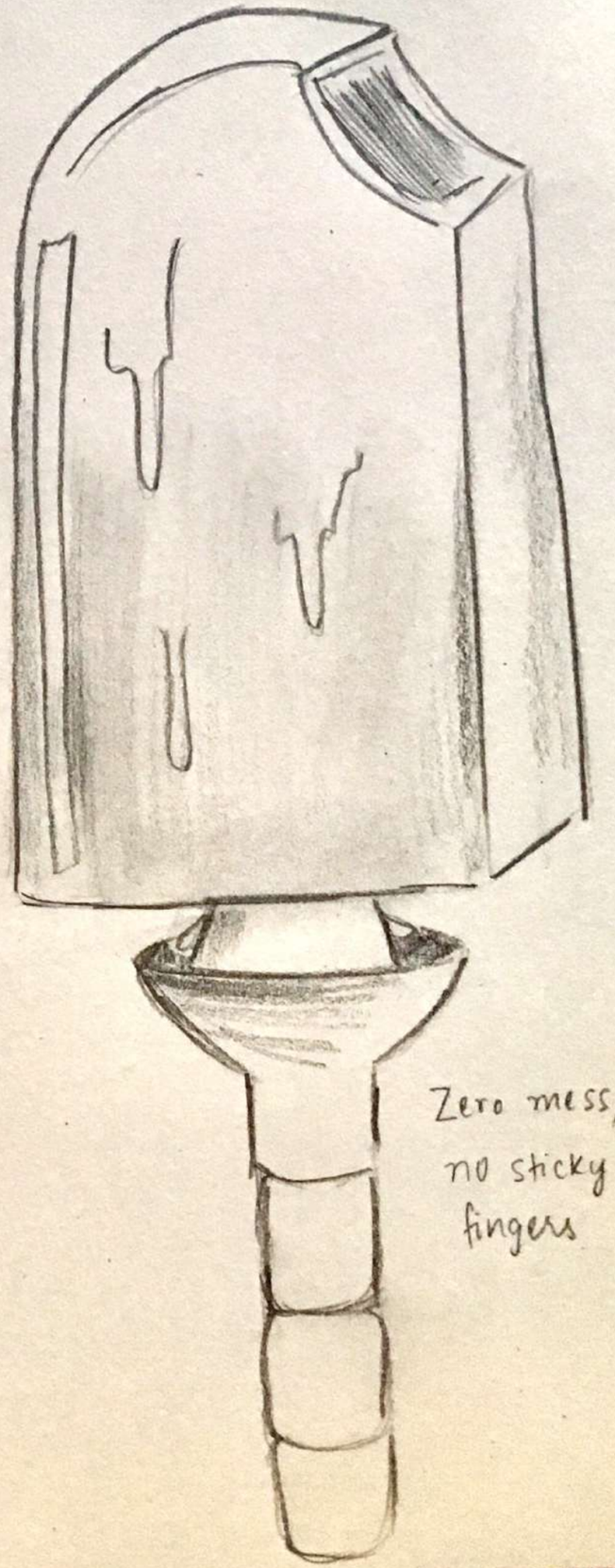


TOP VIEW (without candy)

holes to collect melted candy



better grip. No slip



Zero mess, no sticky fingers

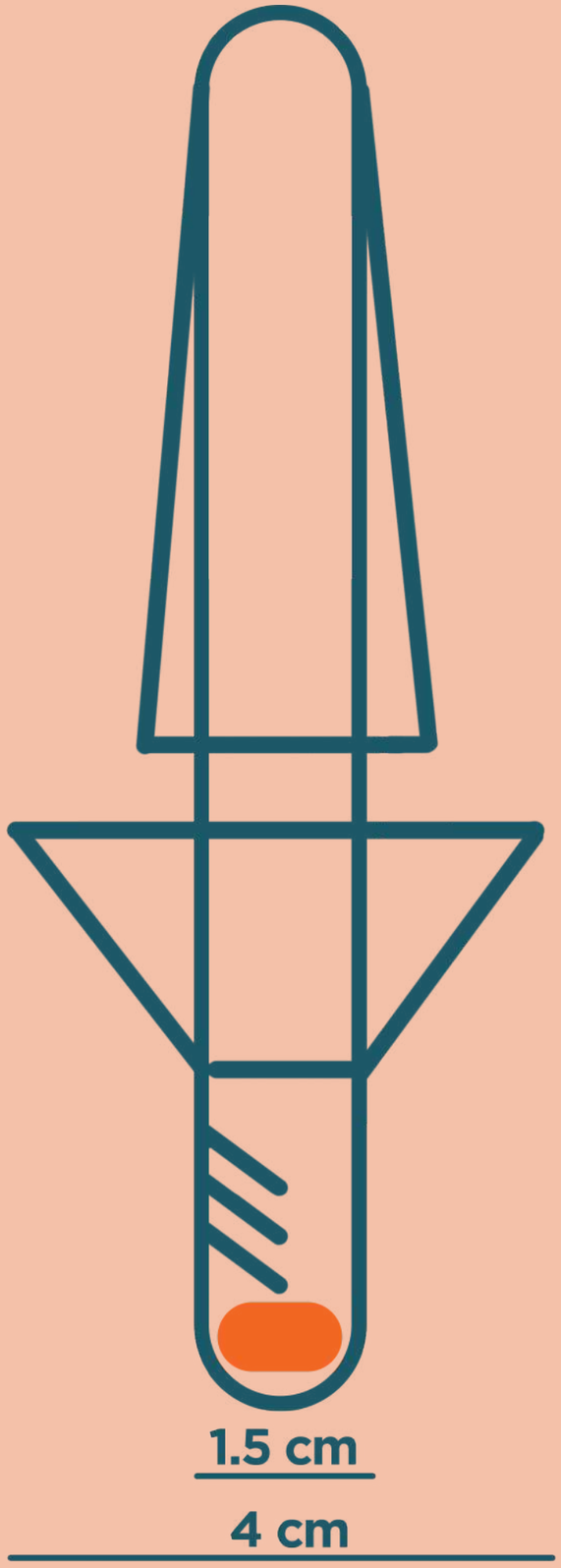
easy to drink melted candy.

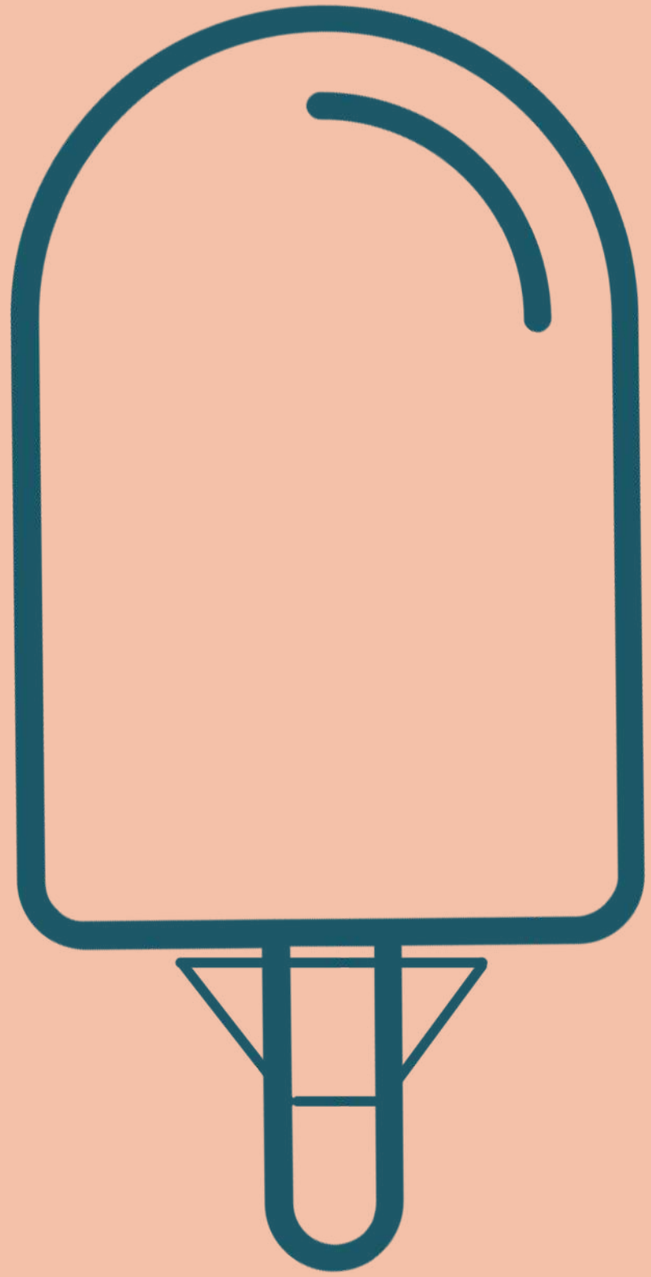
melted candy collected in hollow stick.

Shashank Prabhakar

DESCRIPTION

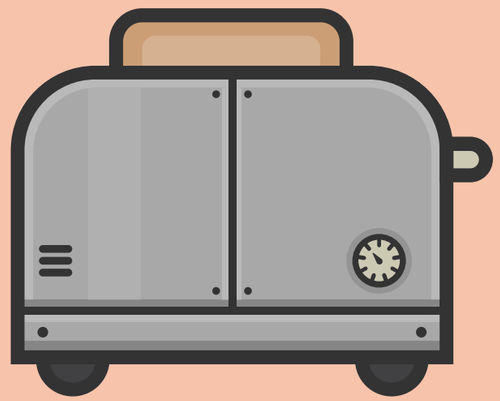
- This is a popsicle stick that does not let the melted candy drip.
- The melted candy pours through the holes in the stick handle top.
- It Is collected in the hollow handle and can be consumed after the candy is over.
- It is not messy and does not make your hands sticky.
- It is easy to manufacture with the help of moulds.
- Material: Food-grade plastic
- Dimensions:
  - Height: Handle - 5 cm, Candy support - 8 cm
  - Diameter: 1.5 cm, Cone - 4 cm
  - Weight: 5 grams


8 cm
5 cm
1.5 cm
4 cm



DESIGN PROJECT

TOASTER



NEED ANALYSIS

Bread is too hot to hold when it pops up

Knob wears out too soon

Cannot move toaster when it is hot

Crumb removal is difficult

Current toasters are not very visually appealing

Only 2 slices at a time

No indication when toast is ready

Spreading cold butter is difficult

PROBLEM STATEMENT

To design a toaster for a safe and improved toasting experience

MARKET STUDY

BAJAJ

Basic features

- Stainless steel body
- Instruction manual
- Crumb removal tray

Performance features

- 800 watts
- 6 Level Control
- 2 Slice capacity

Exciting features

- None

Rs. 1500

USHA

Basic features

- Thermoplastic body
- Dust cover
- Instruction manual
- Crumb removal tray

Performance features

- 800 watts
- 6 Level Control
- 2 Slice capacity

Exciting features

- None

Rs. 1795

MORPHY RICHARDS

Basic features

- Thermoplastic body
- Dust cover
- Instruction manual
- Crumb removal tray

Performance features

- 800 watts
- 6 Level Control
- 2 Slice capacity

Exciting features

- None

Rs. 1900

PRODUCT DESCRIPTION

Basic

Heating levels

Crumb bin

Dust lid

Performance

5 levels

3 slots

Power

Dimensions

WOW

Butter spread

Sleek and elegant

Nature-inspired

TARGET AUDIENCE

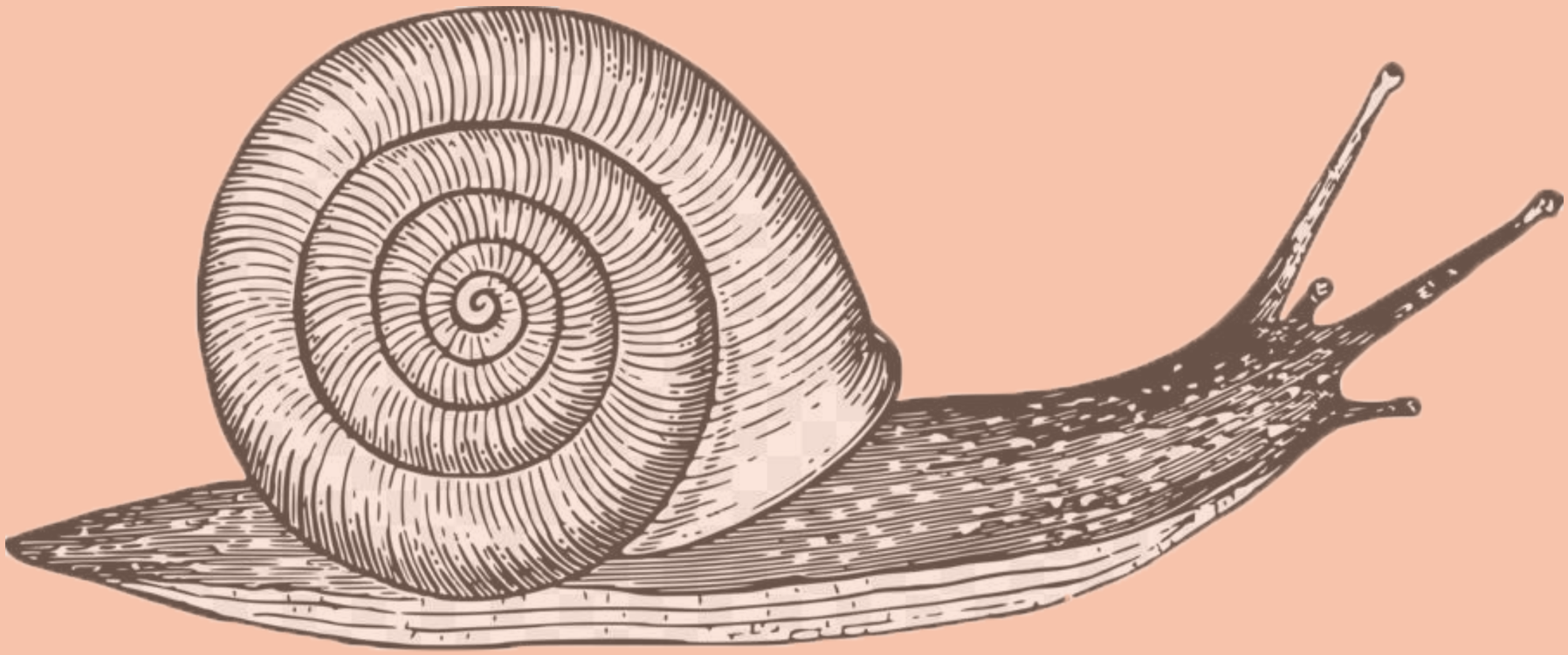
14-65 year-olds

IDEATION

CONCEPTS

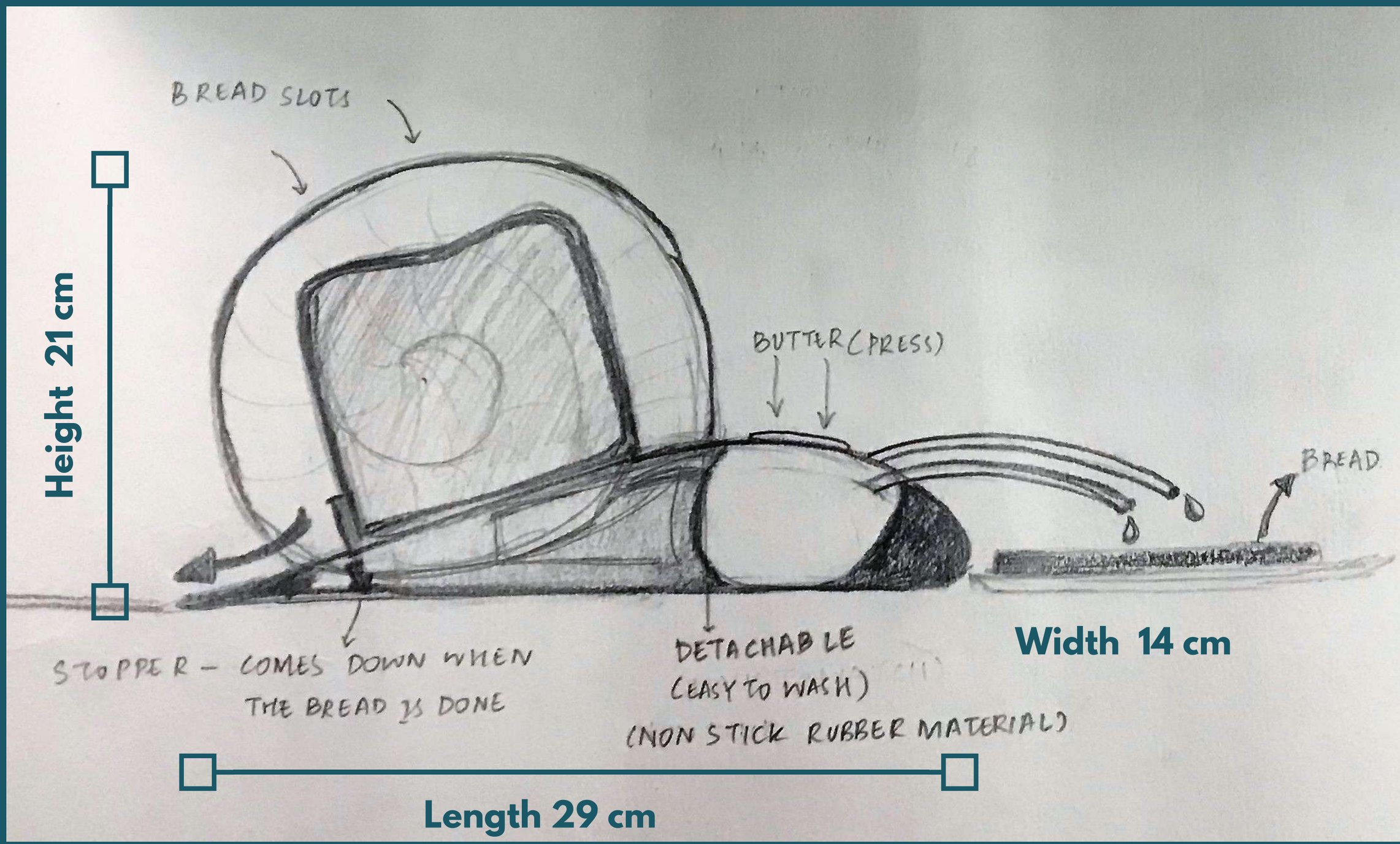
	TOASTING	APPLYING BUTTER	DISPENSER	HEATING LEVELS
C1	Rollers	Rollers	Drop down	Numbered Buttons
C2	Grills/coils	Spatula	Conveyor Belt	Slider
C3	Hot Press	Brush	Pop up	Shaded Buttons
C4	Blow Torch	Temperature Controlled Dispenser	Slide-out Tray	Touch screen LCD

METAPHOR

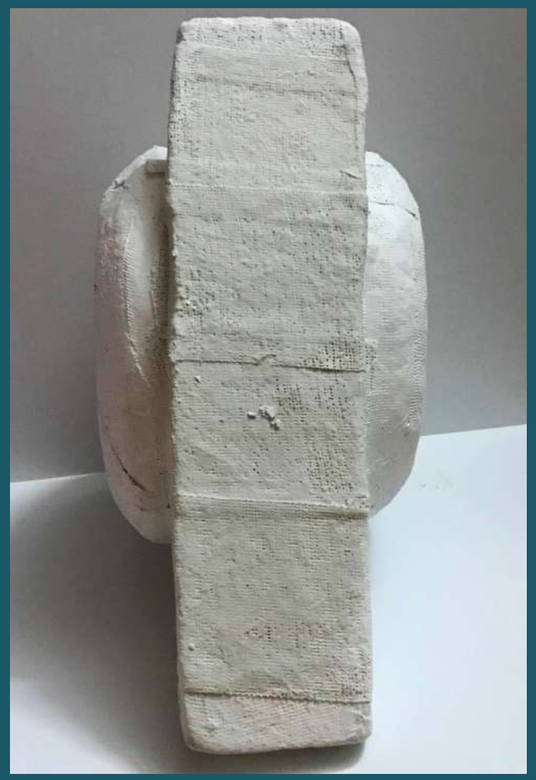


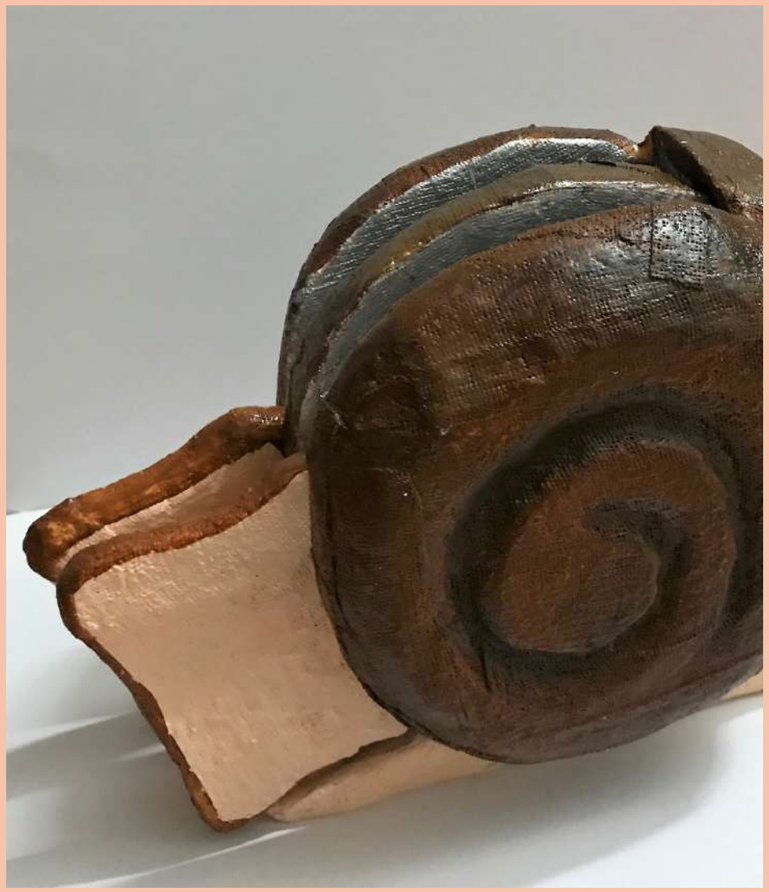
SNAIL

DETAILED DESIGN


BREAD SLOTS
BUTTER (PRESS)
BREAD
Height 21 cm
STOPPER - COMES DOWN WHEN THE BREAD IS DONE
DETACHABLE (EASY TO WASH) (NON STICK RUBBER MATERIAL)
Width 14 cm
Length 29 cm

PROTOTYPE





THANK YOU