

Smaran

Devices for the Elderly

Design Thinking & Innovation
Case Study

Section: C2, Week 2



D'source Project



Open Design School



MoE's Innovation Cell



**THINK!
DESIGN**

Design Thinking & Innovation (DT&I)

Section: C2.0
Week 2



**THINK!
DESIGN**

Design Thinking & Innovation (DT&I)

Prof. Ravi Poovaiah
IDC School of Design, IIT Bombay



DT&I Case Study

C2 Smaran

Module C2:

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C2.1

Case Study Project for the Elderly

THINK!
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Comprehending the Elderly

C2.1-004

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DESIGN



C2.1-005

Team



Prabhat Mahapatra
PD 2004
B.E (Electronics)

Mooshir Vahanvati
VC 2004
B.E (Computer Science)

Parul Bande
PD 2004
B.Arch

THINK!
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C2.1-006

Problem Definition



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Elderly

Why ?

- Closest to heart, as we could easily relate to them
- Are deprived of new technological advances

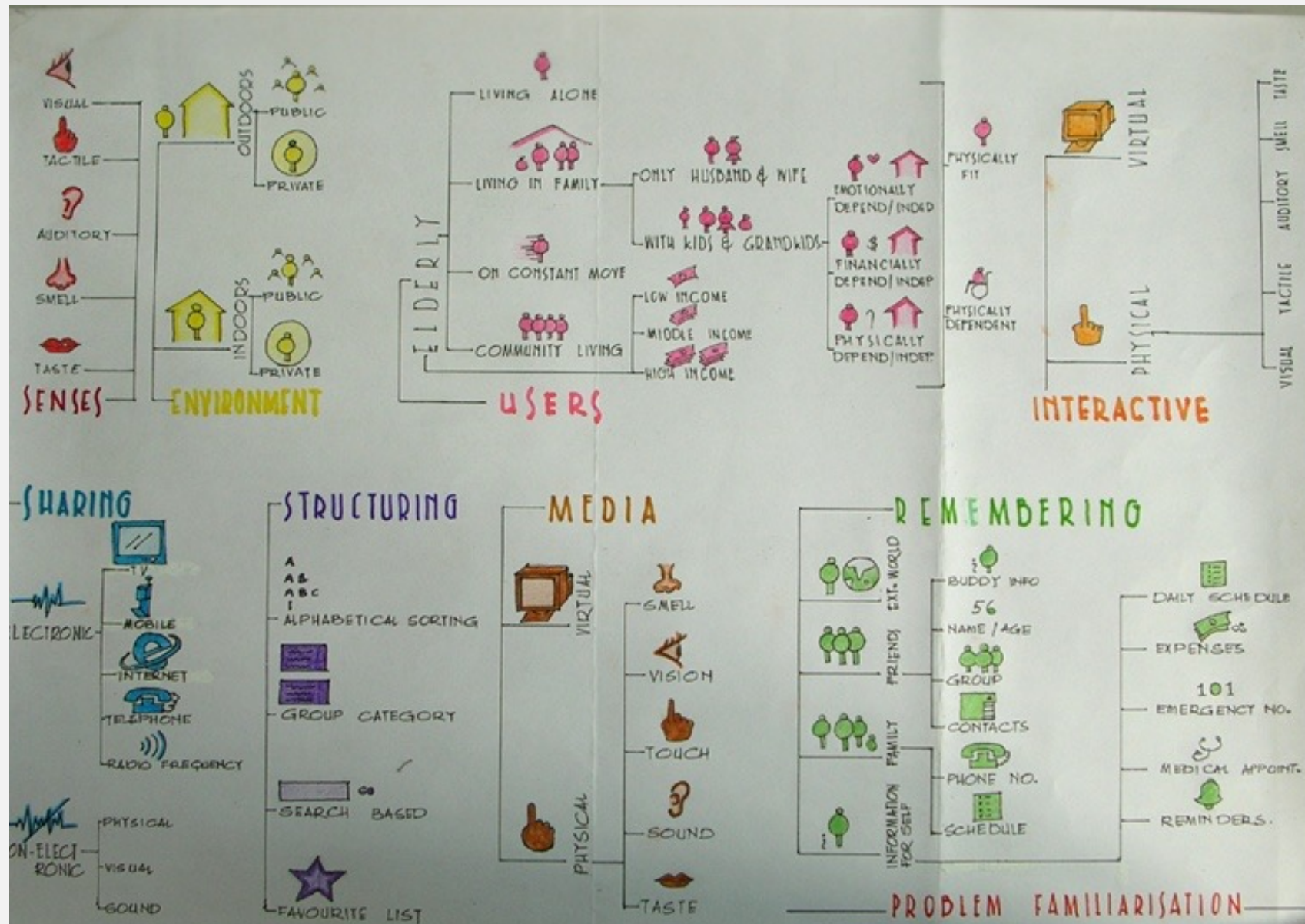


THINK!
DESIGN

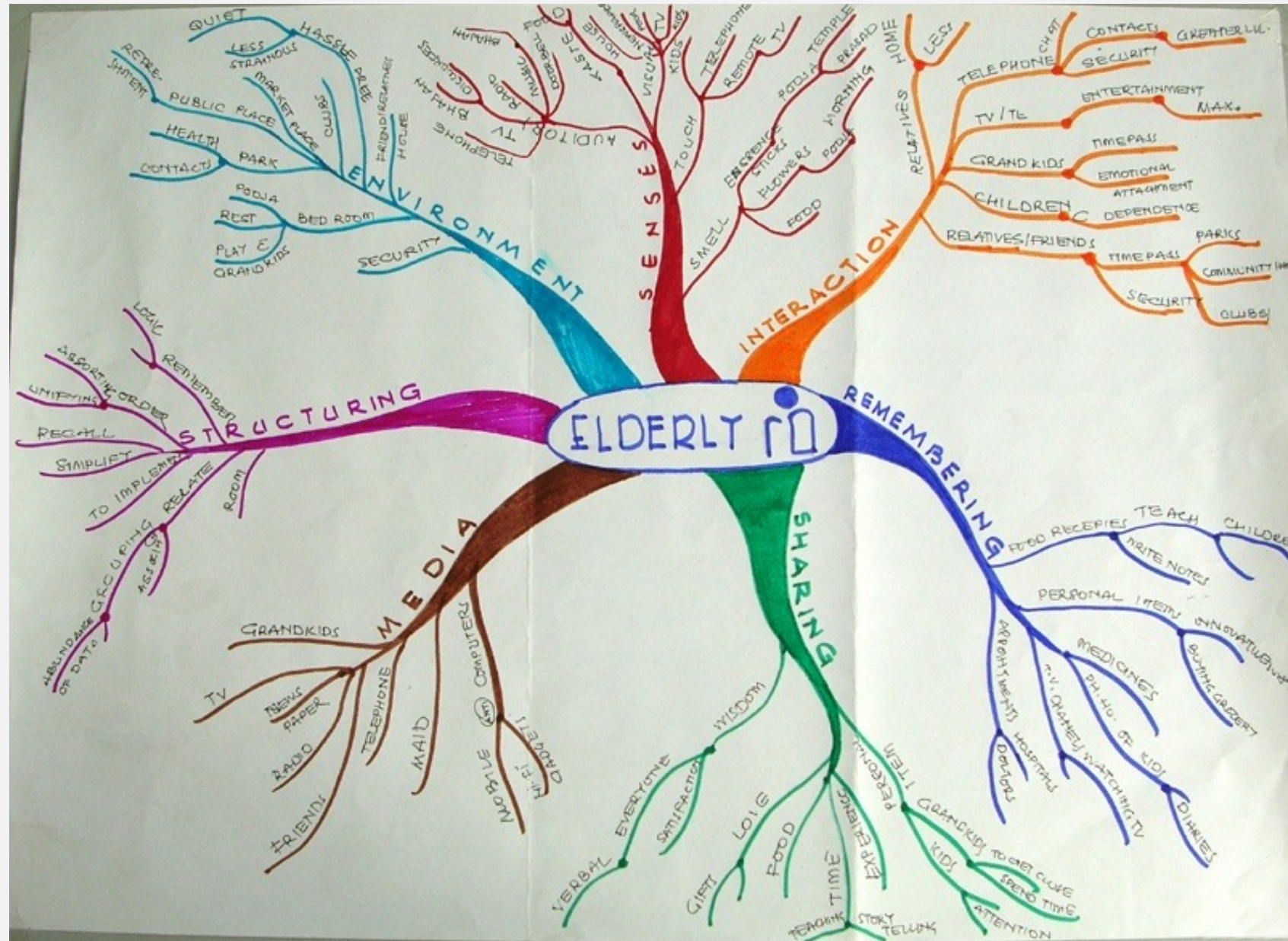


Information Categorization:

Aspects that are
important for the
Elderly



Mindmap of 'Elderly' shown with categories

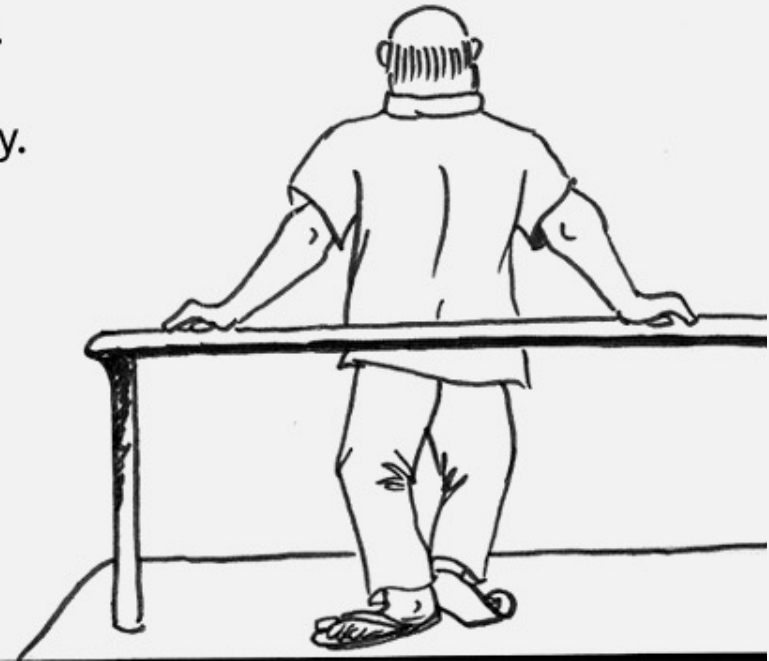


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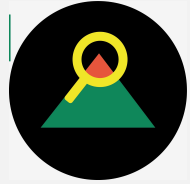


Focus Group

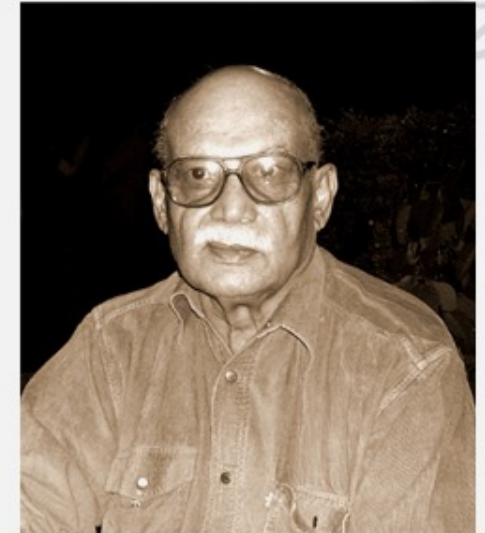
- Elderly people in the age group of 60+.
- Middle class family.
- Physical functionality low but mentally active.
- May or may not be with their children.
- Reasonably conversant with technology.



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User Study



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Inferences from user Study

- Communication with family members is of utmost importance.
- Like to share their experiences.
- Looking for ways to utilise time effectively.
- Often look for common and like minded people.
- Have an urge to help out others.
- Familiar with technology like TV, mobiles etc.
- Find learning computers difficult.



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User Environment

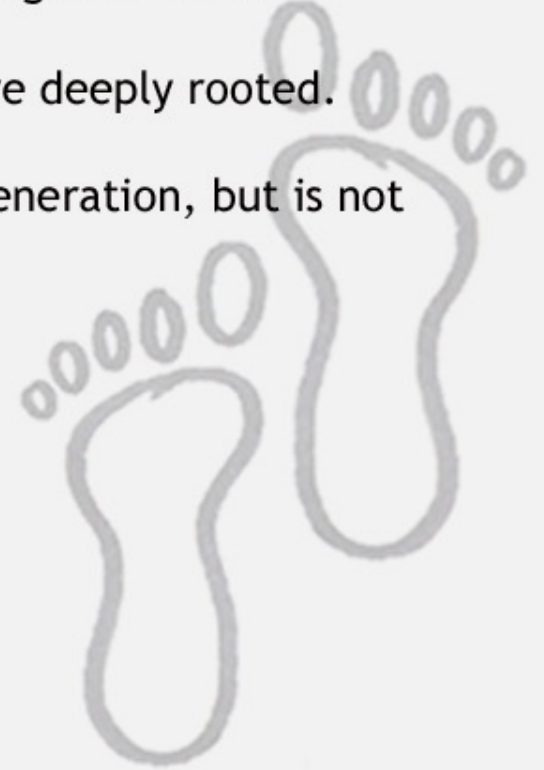


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Cultural Contextualisation

- Elders in Indian context are looked upon for wisdom, knowledge and sharing experiences.
- Respect towards elders is shown by touching their feet.
- Family bonds are strong and obligations are deeply rooted.
- Frankness is expected from the younger generation, but is not true visa versa.
- Elders look forward to growing old.

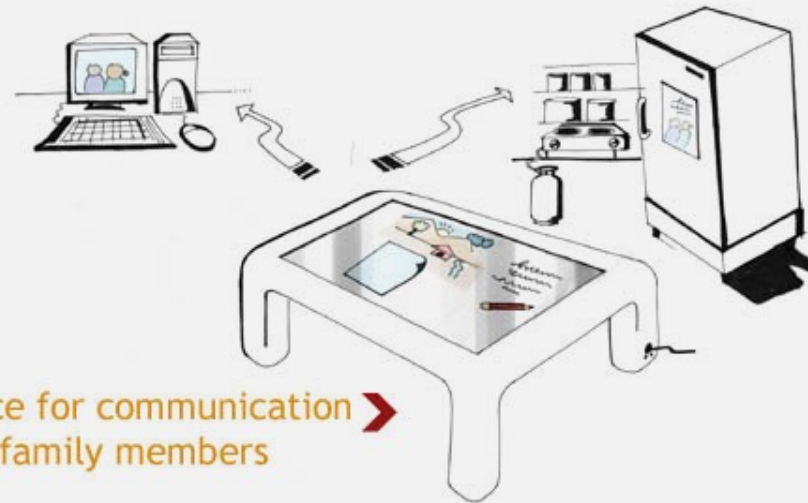


Initial Concepts

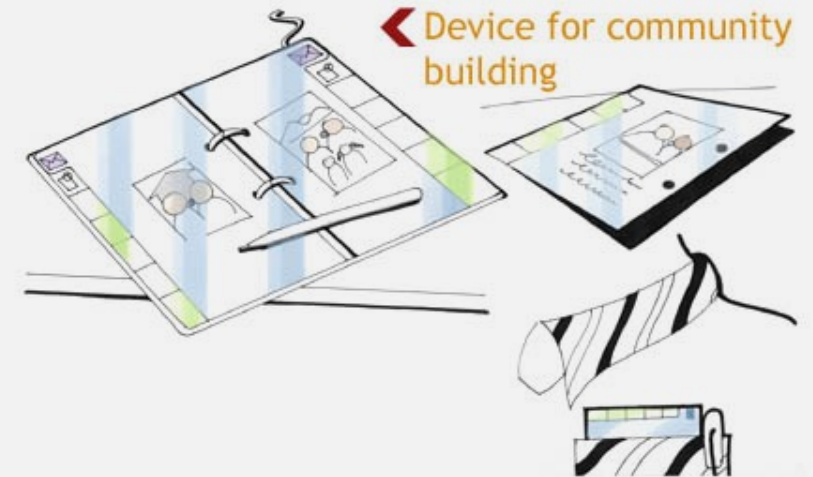
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Device for remembering



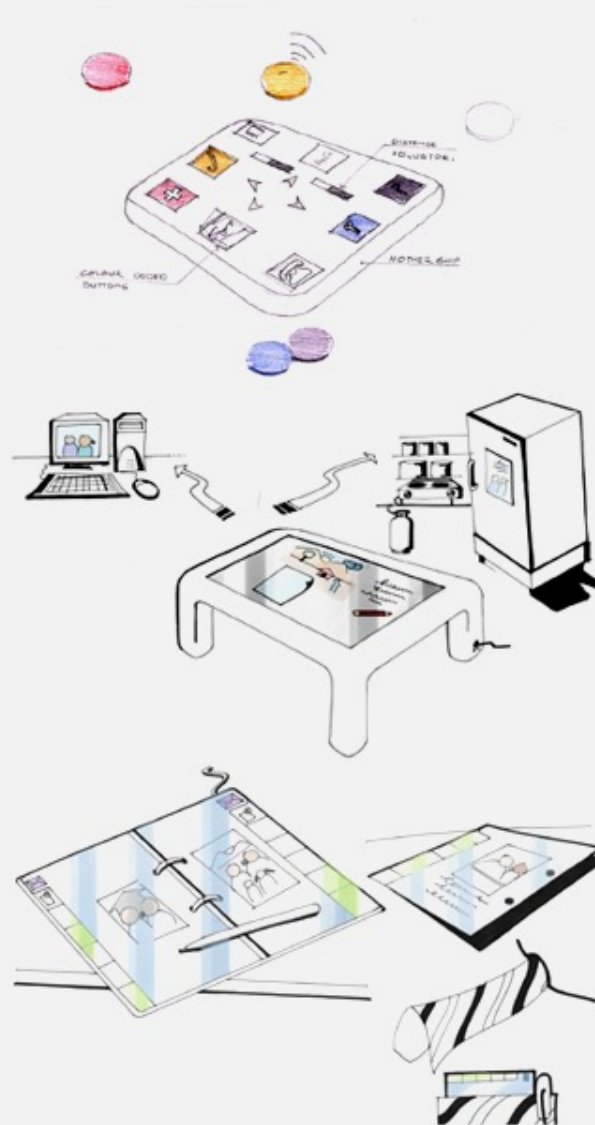
Device for communication
with family members



Device for community
building



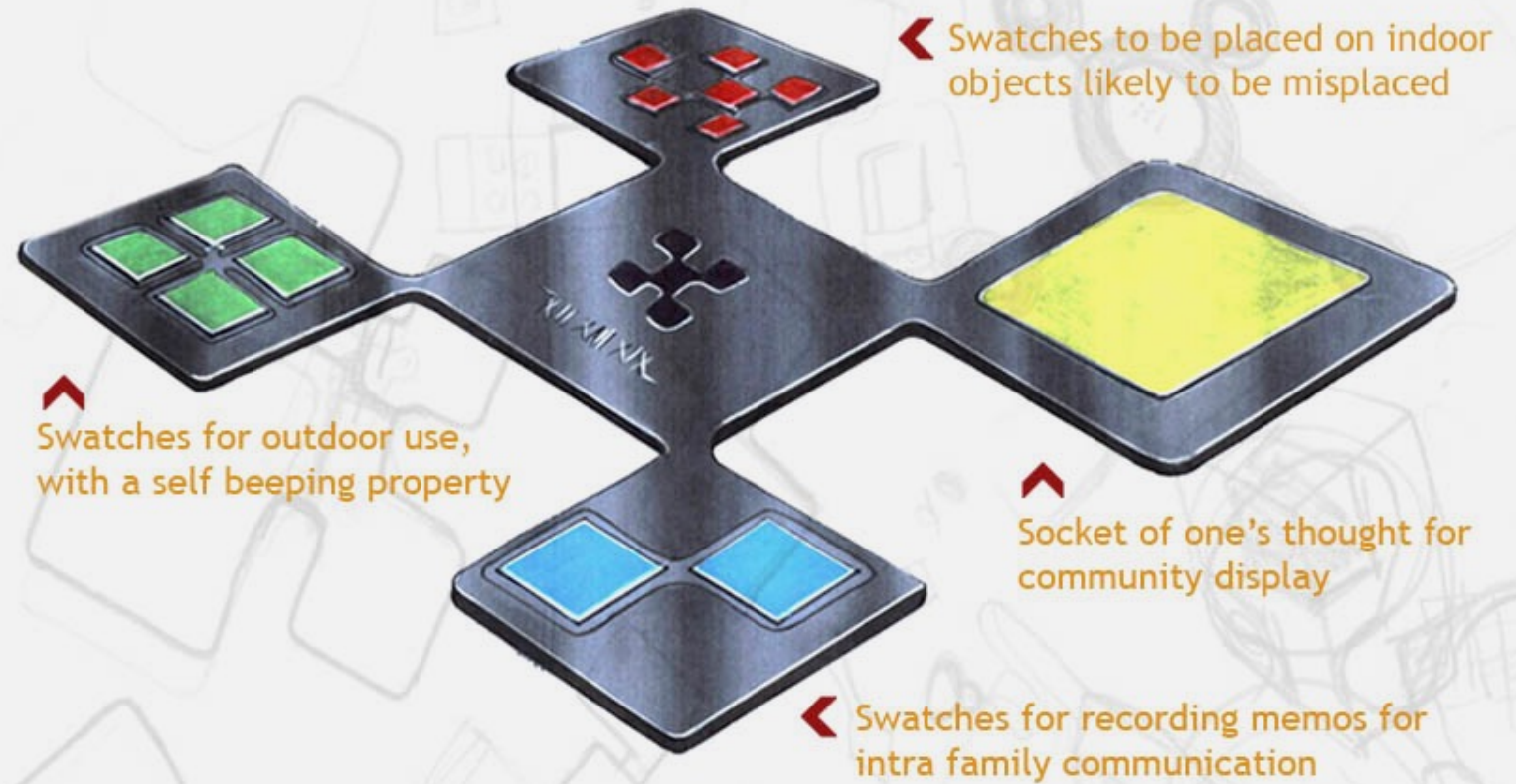
Feedback



Concept

Finalisation (Function)

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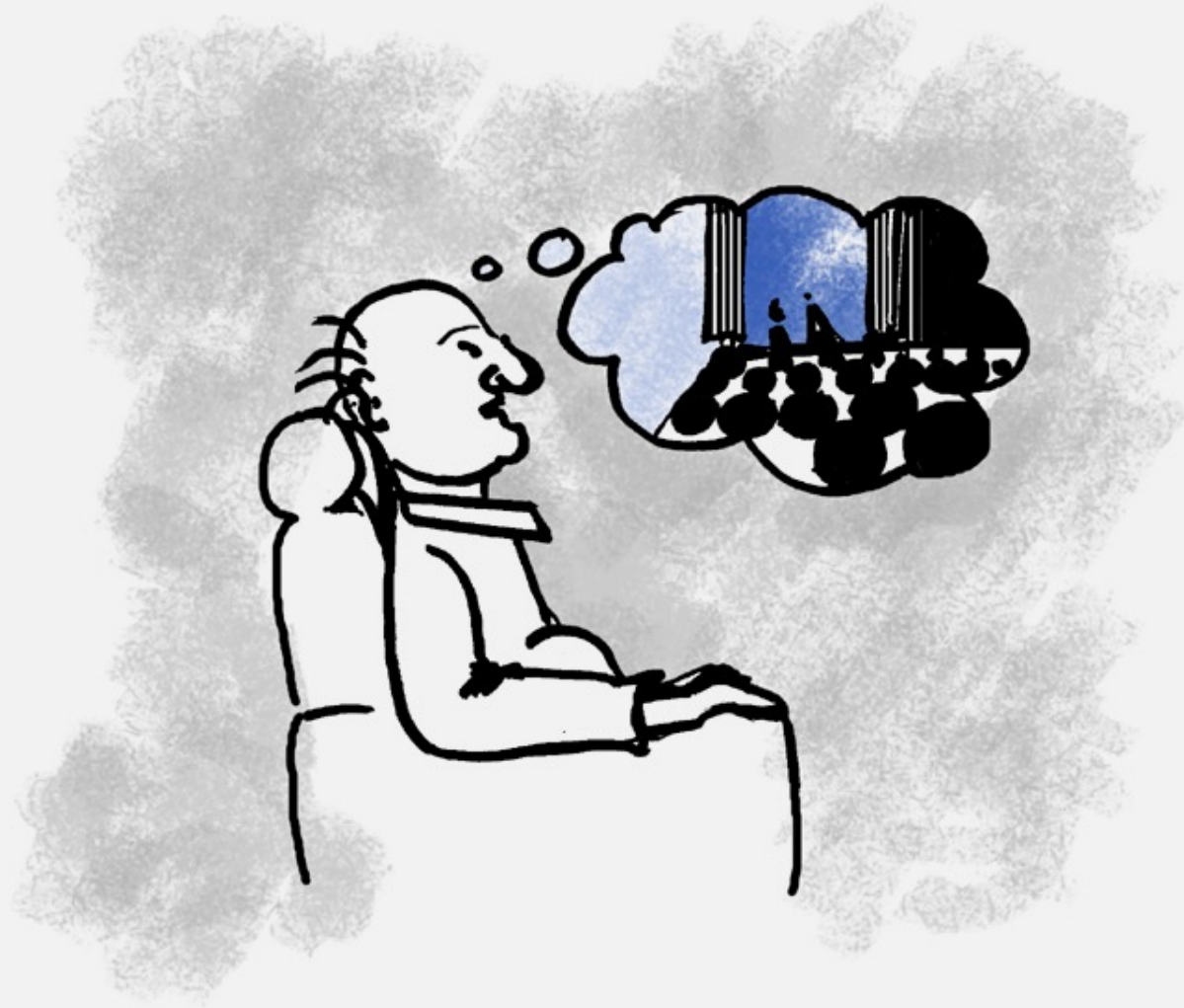




SCENARIO



Following Mr. Prabhakar's footsteps

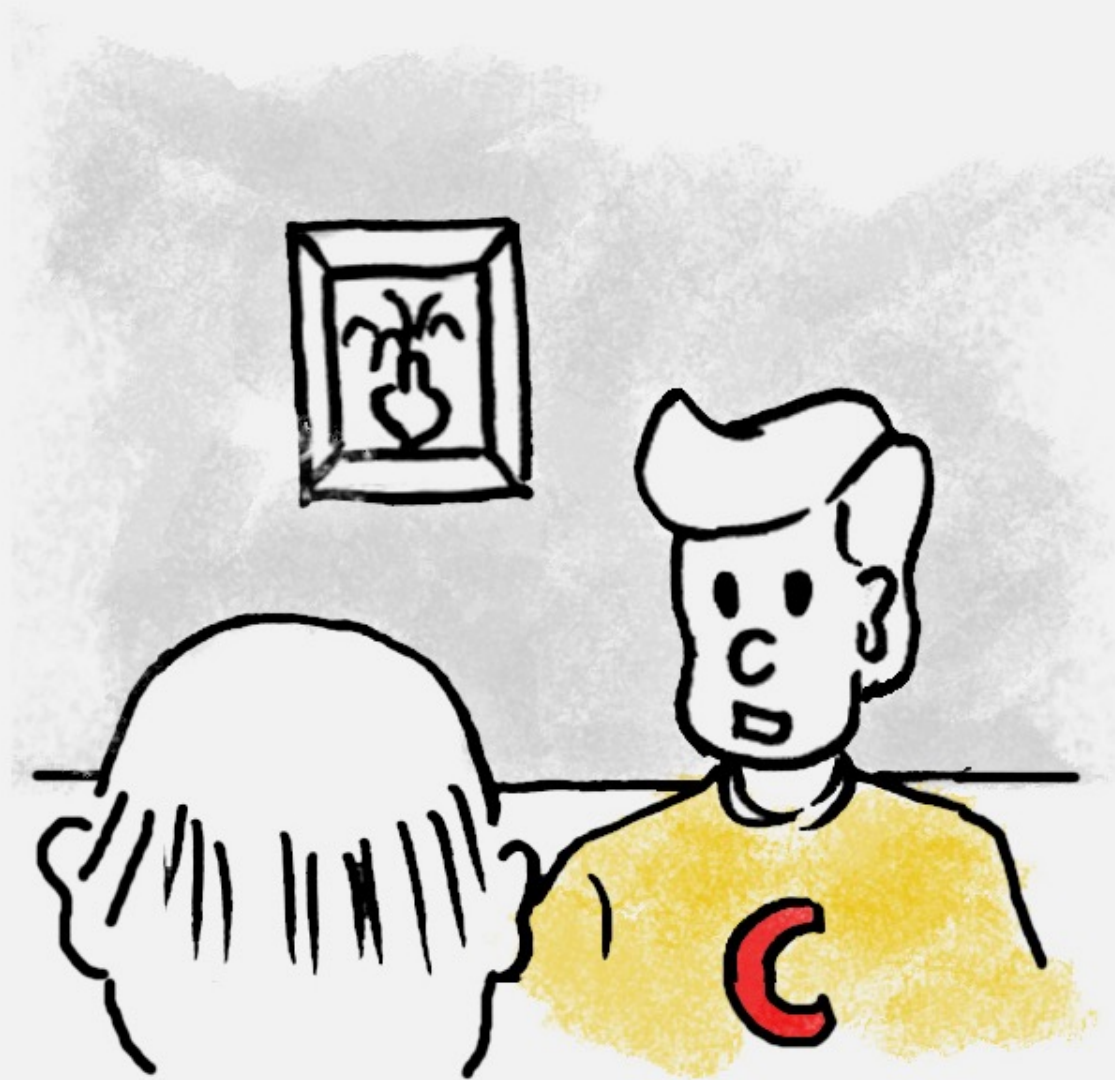


"Ah! Let's see what's playing at Natya mandir tonight??"



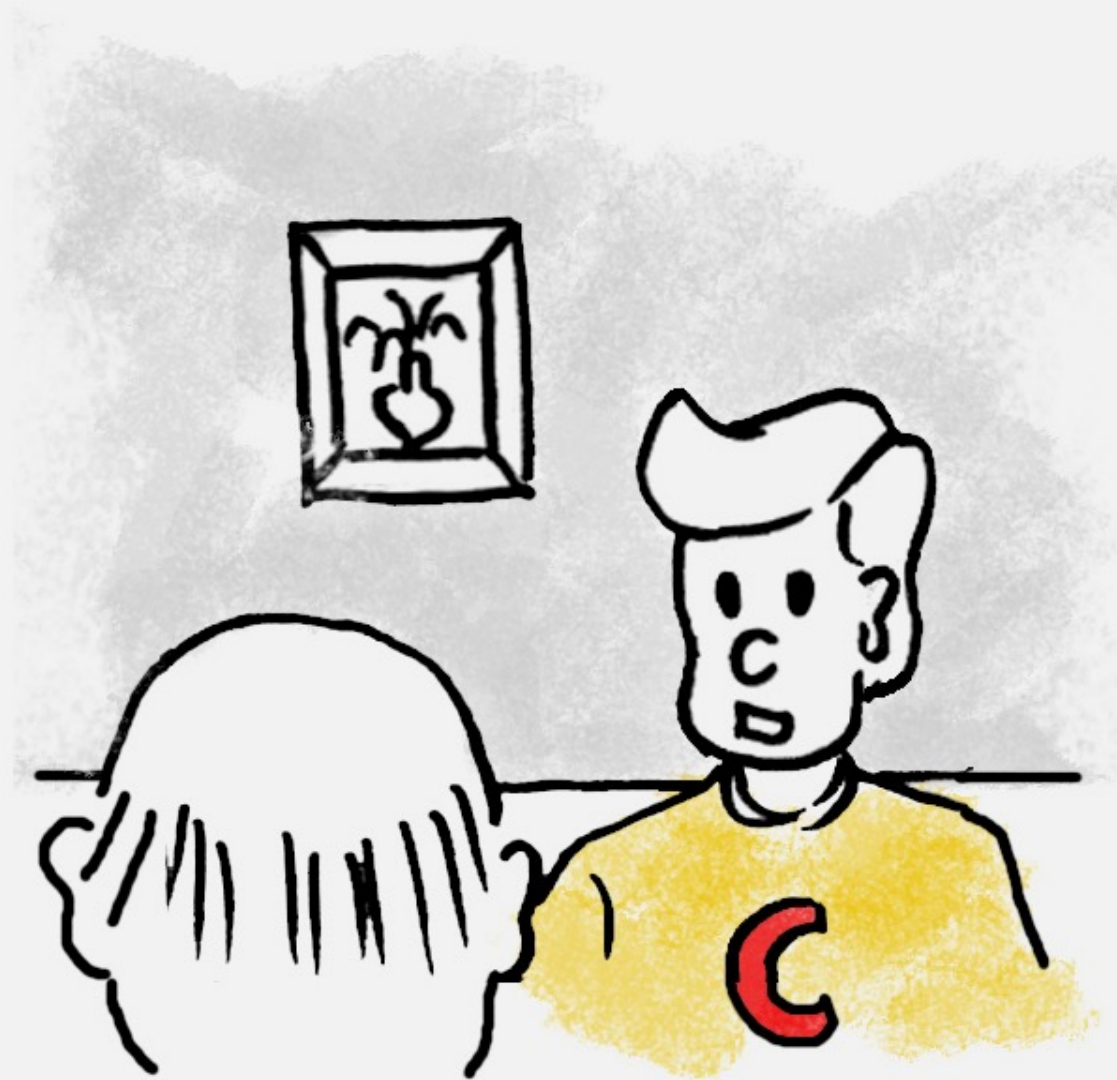
"Oh! I have again misplaced my glasses today. I need them to read the news paper."

THINK!
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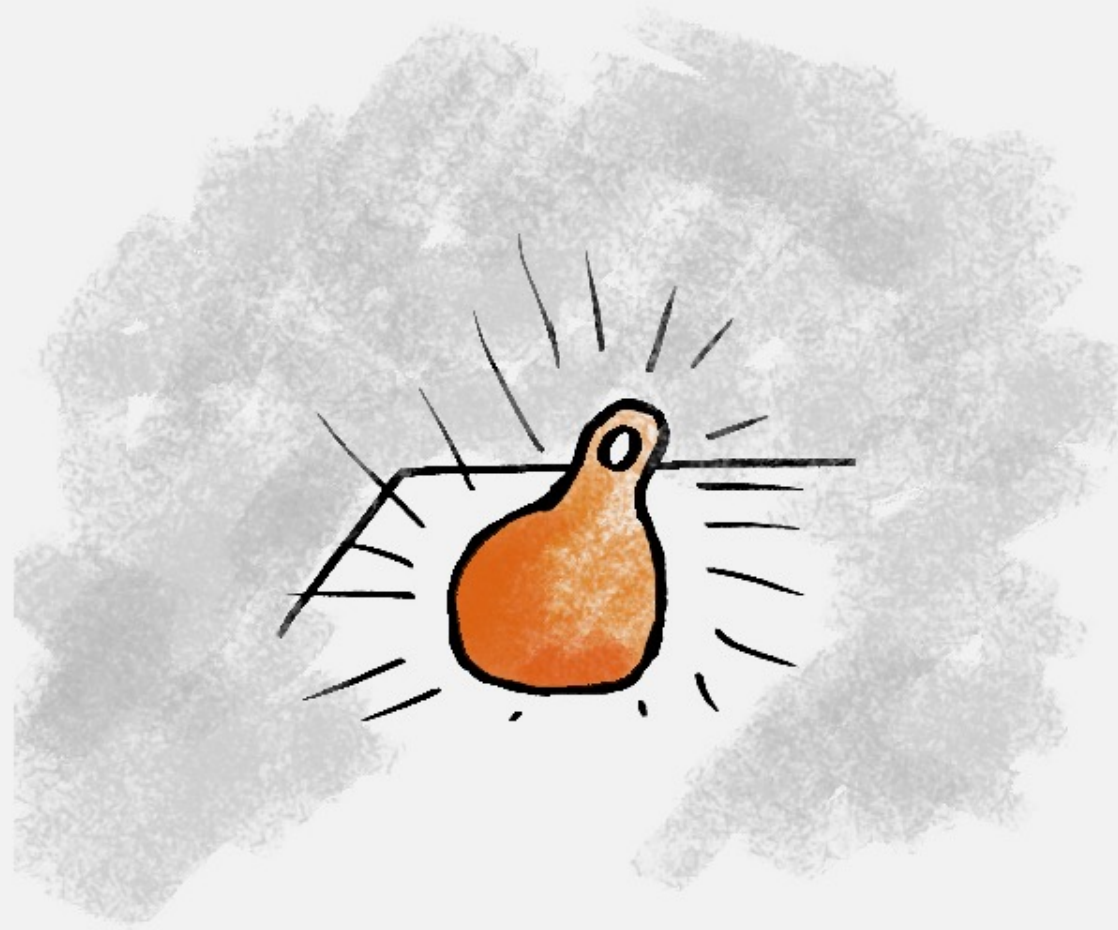


"Grandpa, you misplaced your glasses again, didn't you??"

THINK!
DESIGN

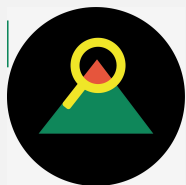


"Don't worry Chintu, you won't have to look for them today. "



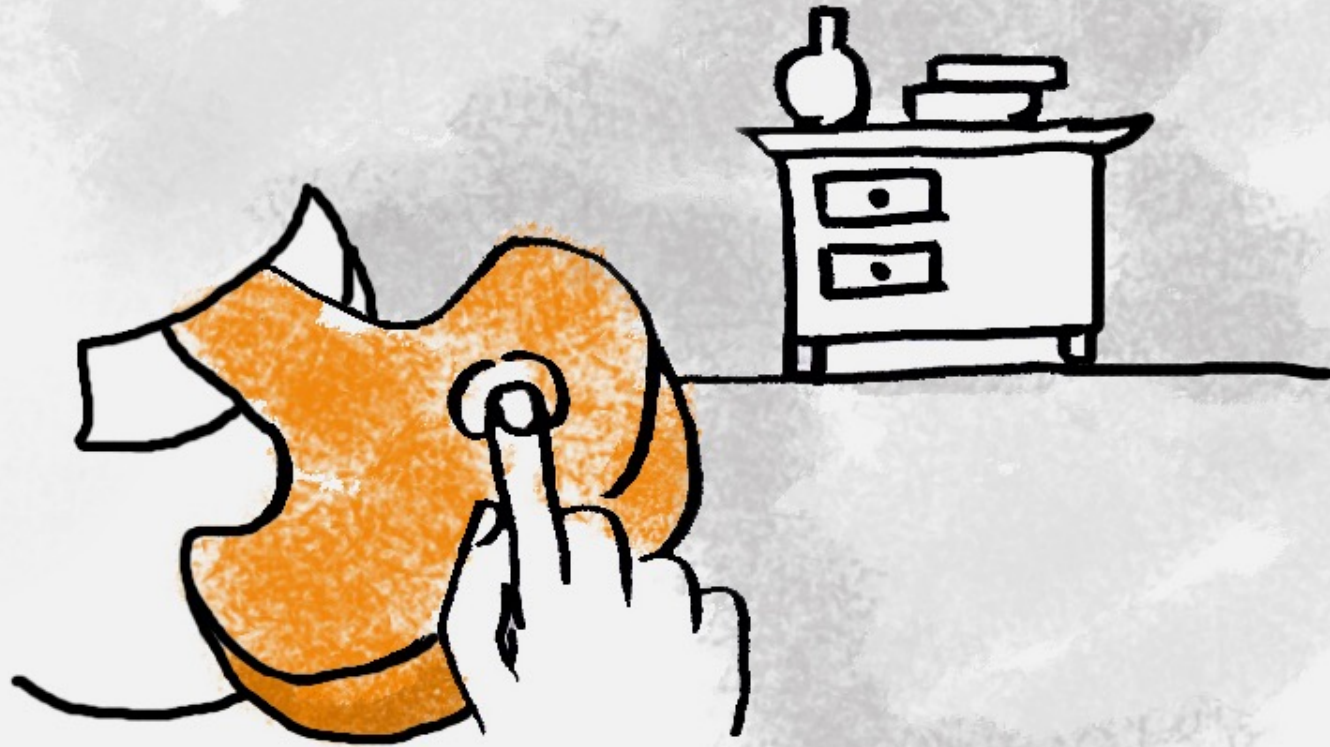
"See what I have got here!!"

(Mr. Prabhakar takes out his 'Smaran')



"What is this cool thing grandpa??"

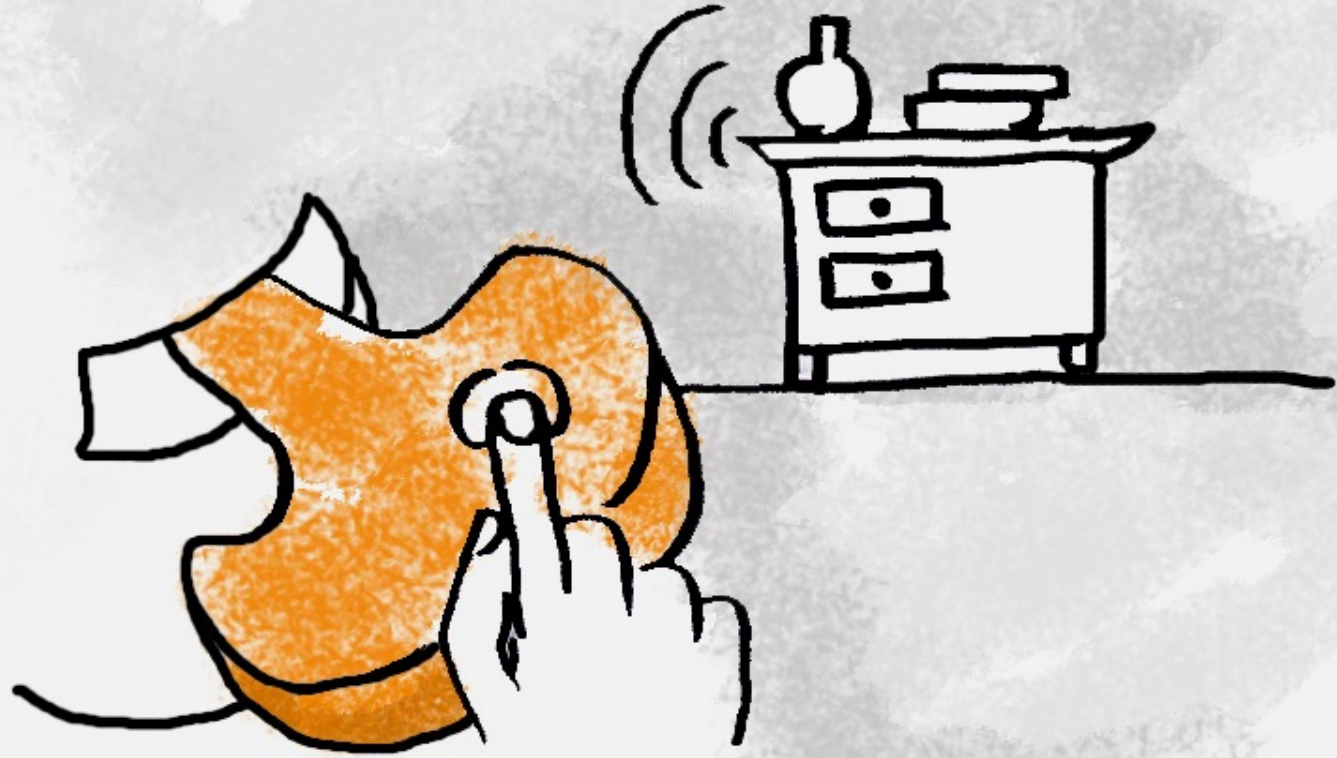
THINK!
DESIGN



"This is Smaran Chintu, Its gonna help me remember things."

(Mr. Prabhakar presses a button on the smaran)

THINK!
DESIGN



(Chintu hears the beep and runs to find the glasses)



"Now I will never have to go hunting for my misplaced items"

THINK!
DESIGN



(Mr Prabhakar finds out that "Natrajan" is playing at natya mandir)

"But who will go out with me for the play ??"

THINK!
DESIGN



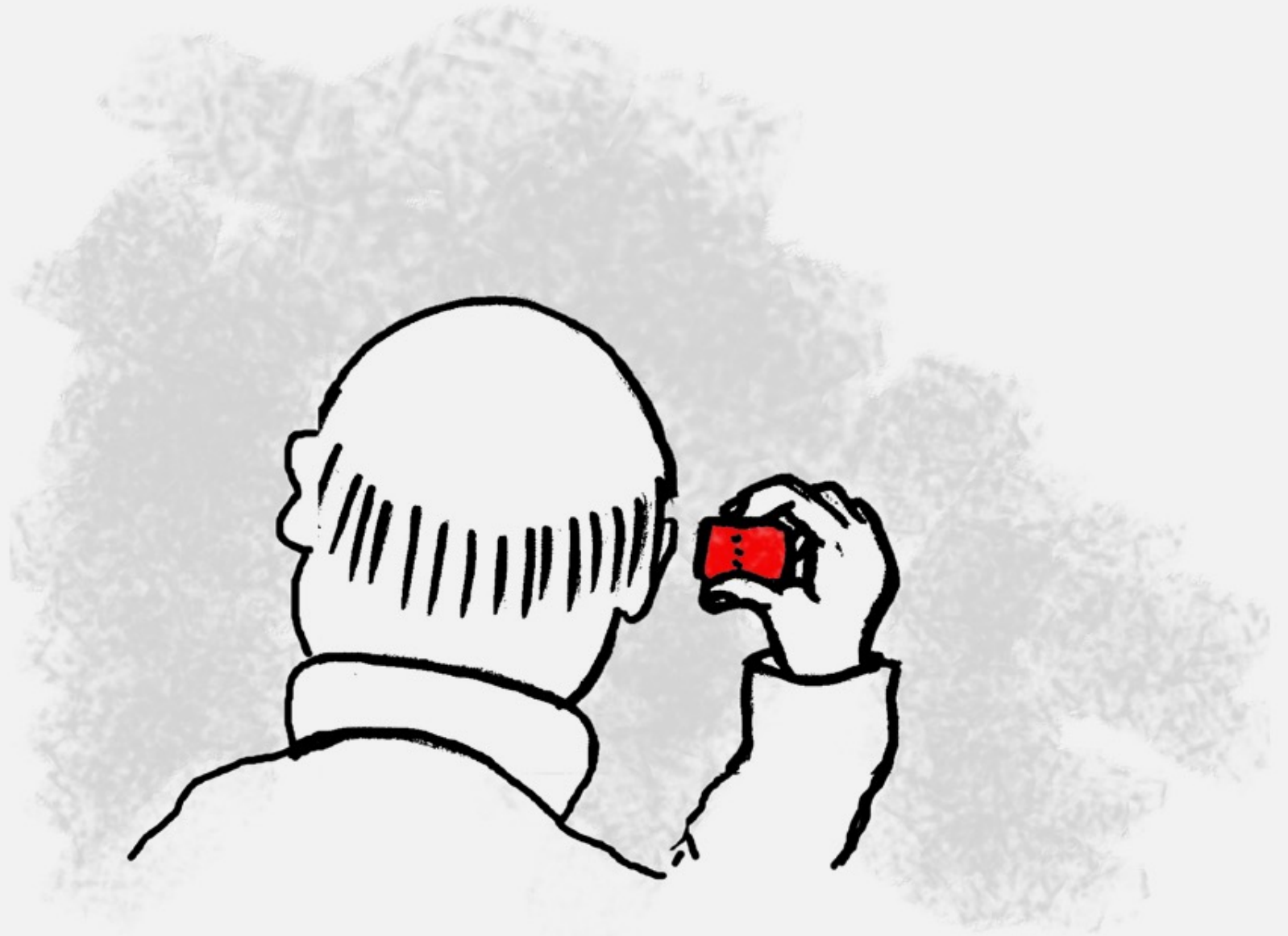
(It's noon and time for Chintu to go to the School)

THINK!
DESIGN



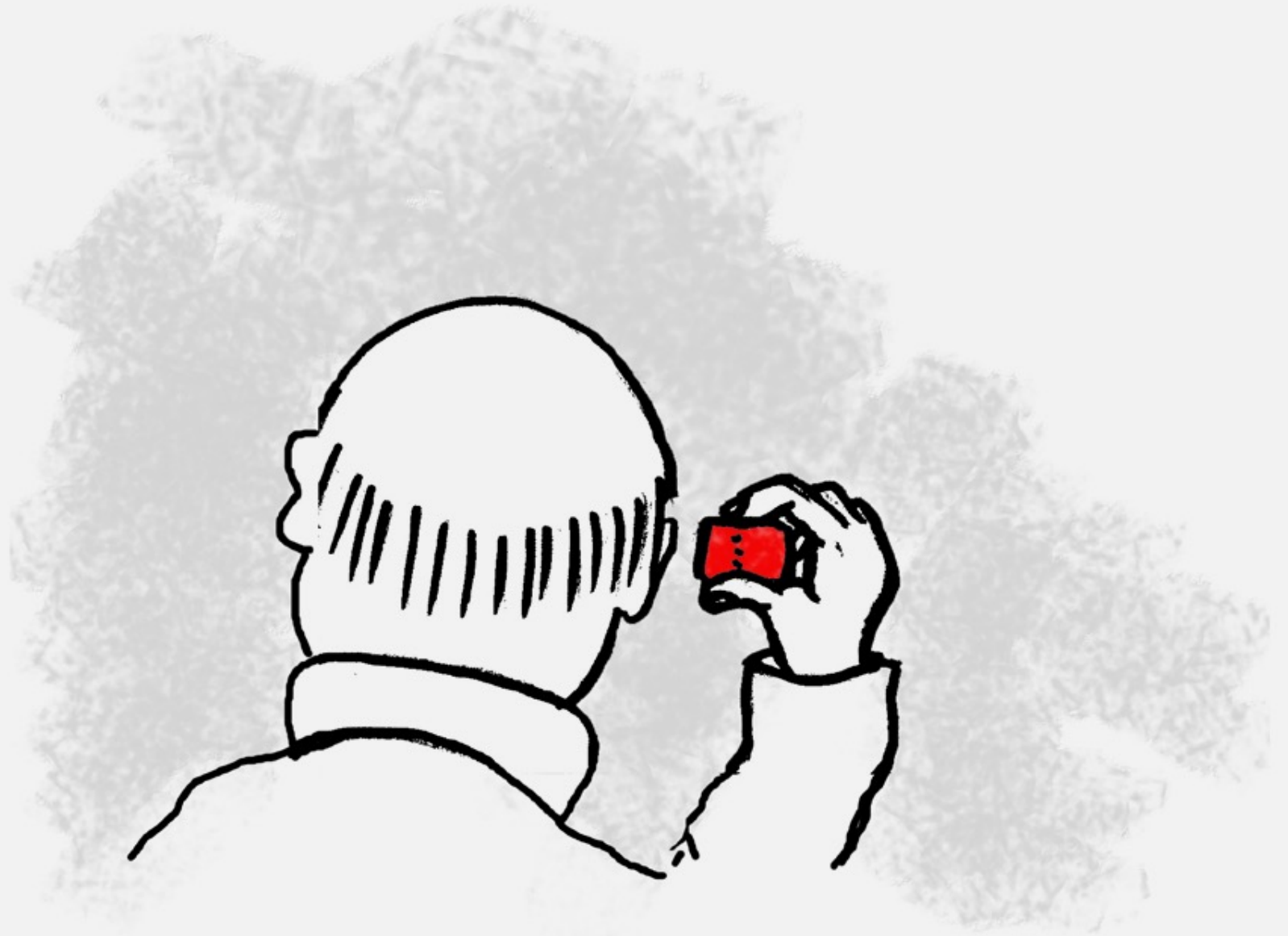
"Sure Chintu, I also have to leave a message on the community board."

THINK!
DESIGN



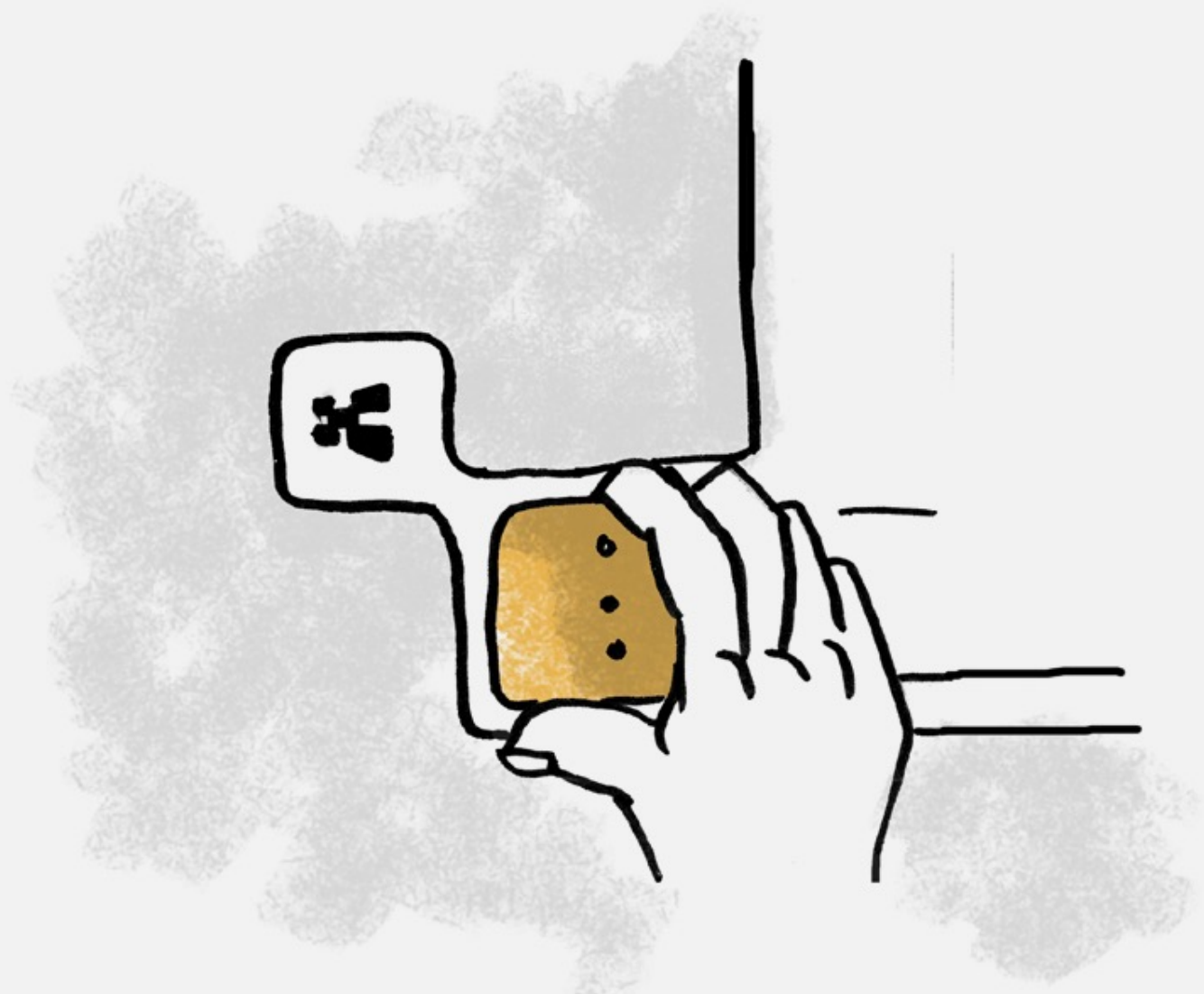
(On the way to the bus stop, they stop at the 'smaran' community board and to Chintu's surprise Mr Prabhakar takes out an object from his pocket and starts speaking into it)

THINK!
DESIGN



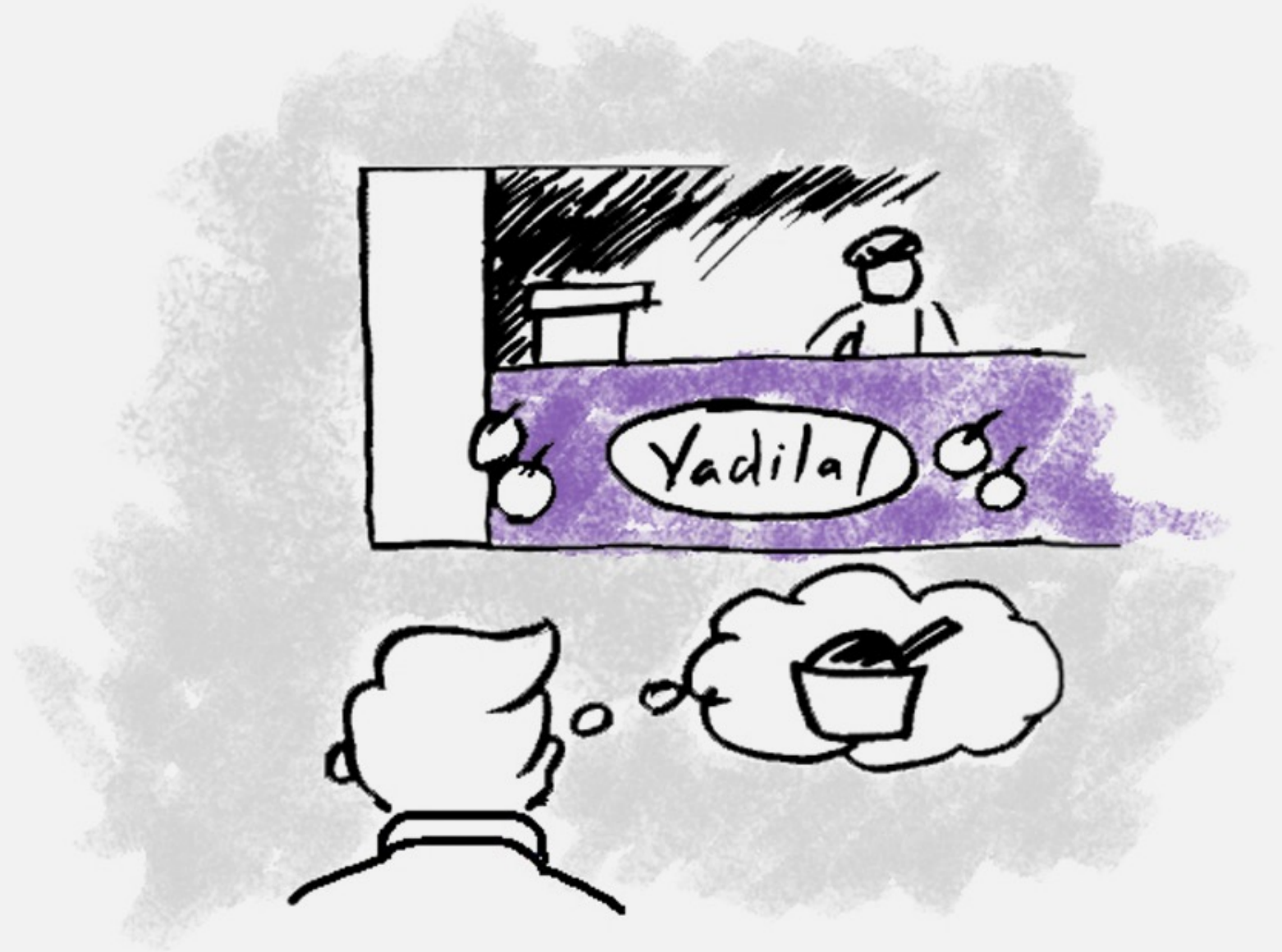
"Looking for someone to accompany me to the play at Natya Mandir tonight.
You can call me on 9892011223 - Mr. Prabhakar"

THINK!
DESIGN



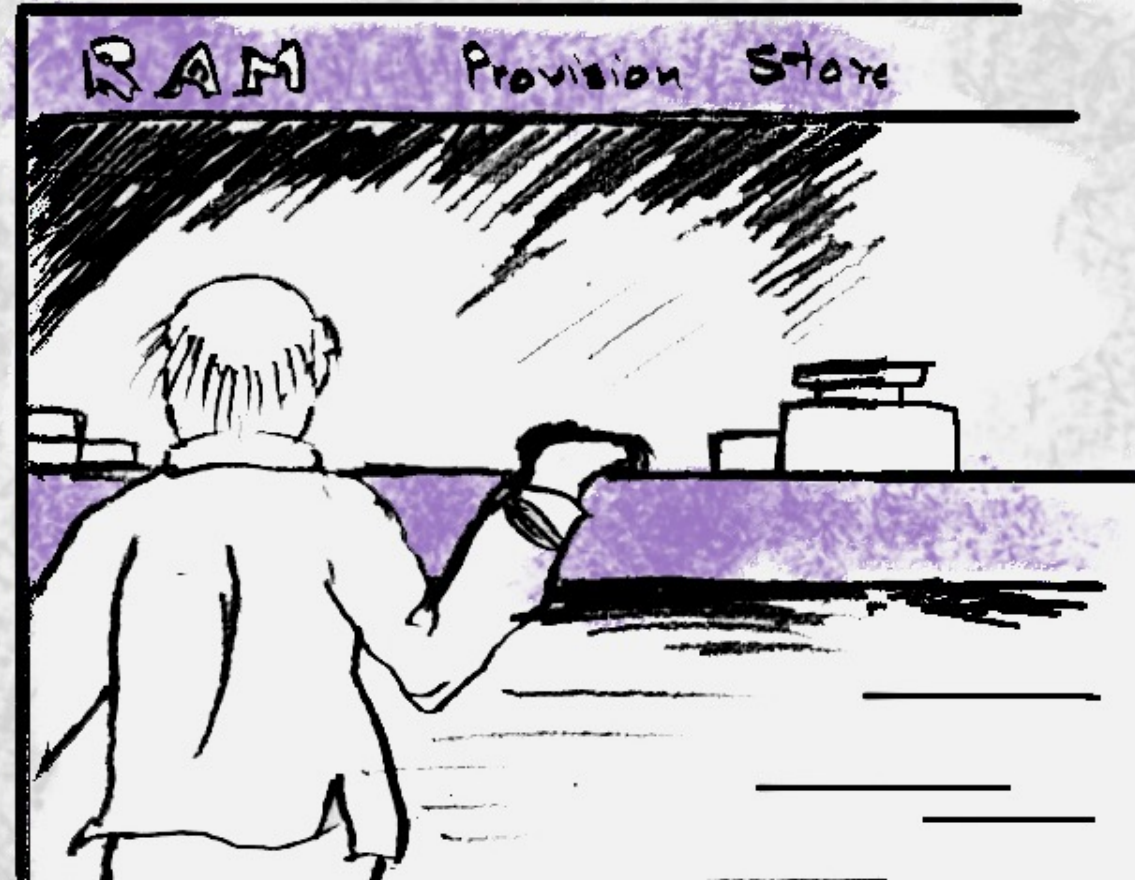
(He plugs it into the slot in the message board, Transfers his message on the board as an icon and puts it back in his pocket.)

THINK!
DESIGN



"Grandpa, could I please have an ice-cream?? I promise I wont ask for it again"

THINK!
DESIGN



"Sure Chintu, I could have one myself."



"Greetings Grandpa! How are you and little Chintu??"

"I am not little anymore"

THINK!
DESIGN

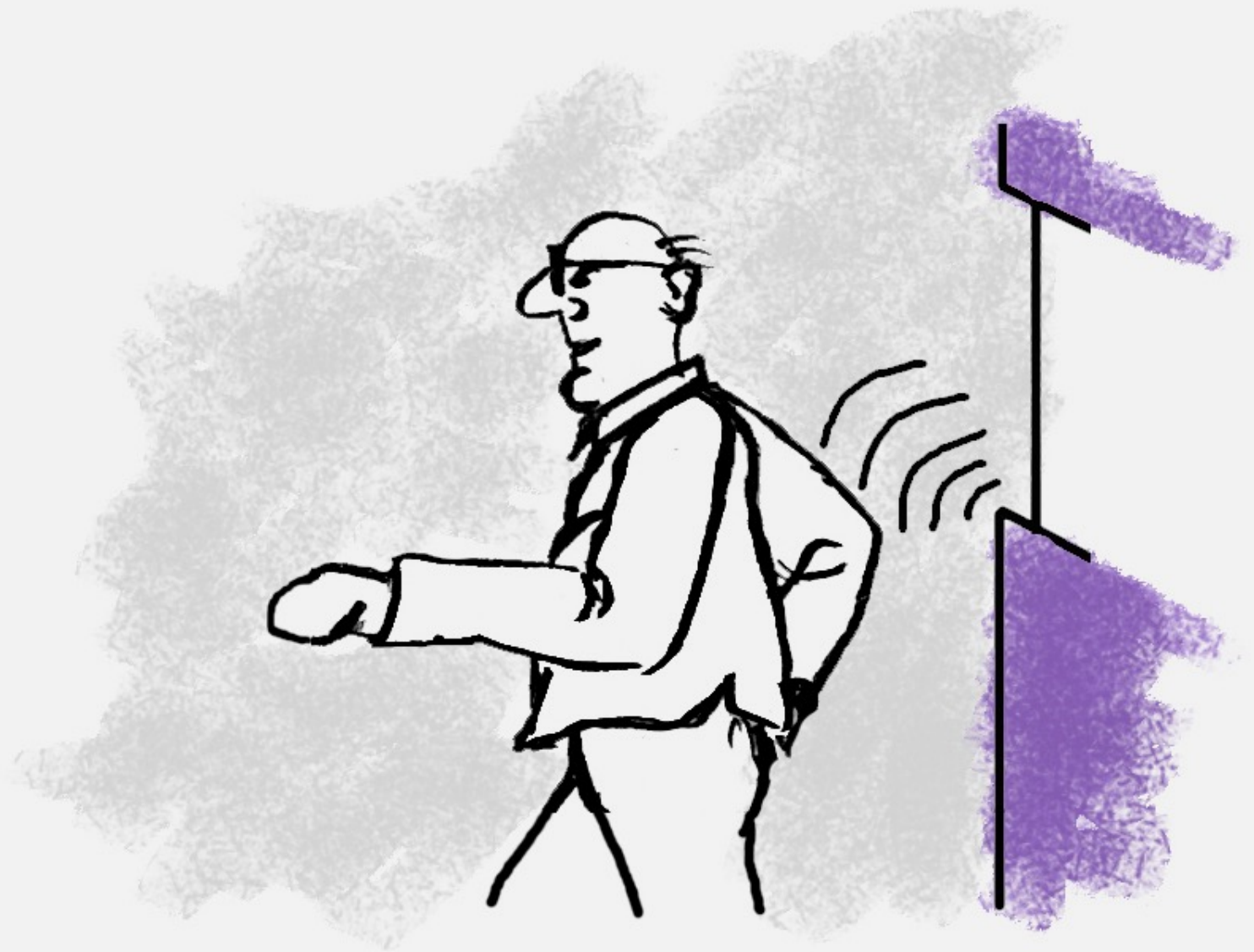


"yeah yeah you're not , so, what flavours will it be?"

"One Vanila & one chocolate"

"why chocolate, I want a strawberry....."

THINK!
DESIGN



(as soon as Mr.Prabhakar steps out of the shop, there's a buzzing sound at the counter)

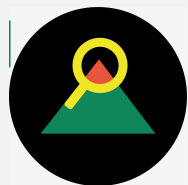


"Granpa, your wallets ringing. Is there a phone in it???"

THINK!
DESIGN



"No son, This sound is coming from my wallet. Smaran never lets me forget my wallet anywhere"



"You are cool Grandpa, I wish I had something like that."

THINK!
DESIGN



(Grandpa and Chintu move to the bus stop)

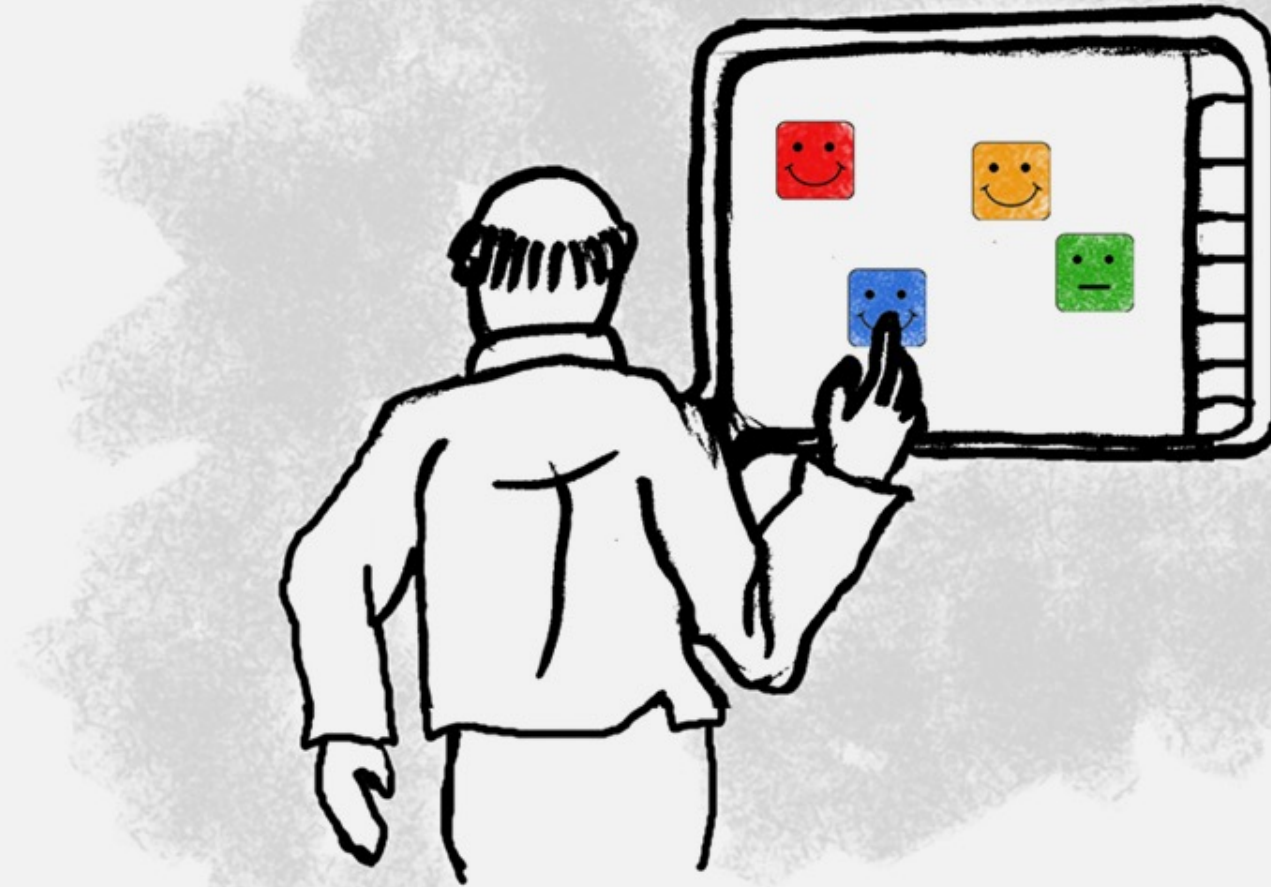
"I'll see you in the evening grandpa, you're the best"

THINK!
DESIGN



(While passing by the community board, he glances at it to find a response to his message. And voila, Mrs. Pramila from the neighboring township has agreed to accompany him to the play.)

THINK!
DESIGN



"God bless the kids from IDC who installed this community board here
its so much easier to find friends now"

THINK!
DESIGN



(He goes back to the house smiling & finds the phone ringing)



"Hello, Mr.Prabhakar, Pramila here, when do we start for the play?

Will you meet me at the Community Park or at the venue directly?"

THINK!
DESIGN



"I think we'll meet at the park, will meet you there at 4 pm"

THINK!
DESIGN



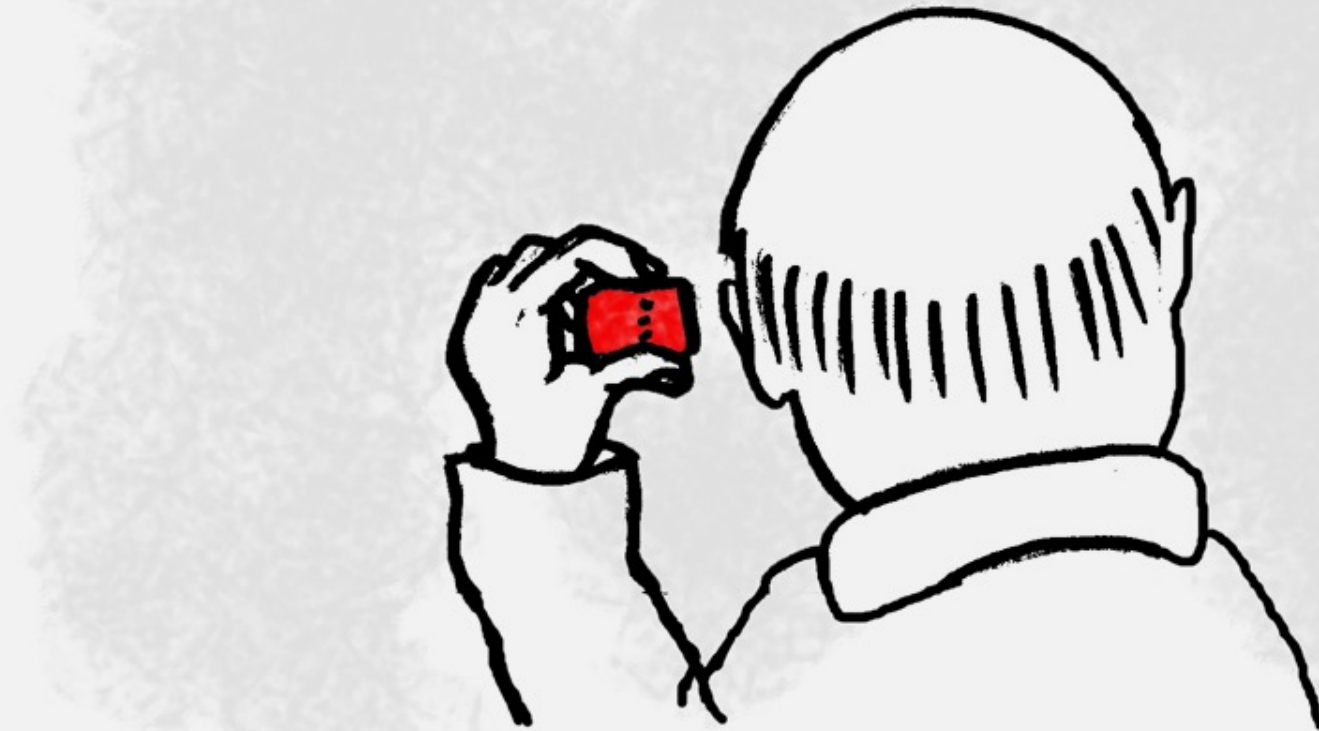
"I should call and inform my son that I would be late for dinner tonight"

THINK!
DESIGN



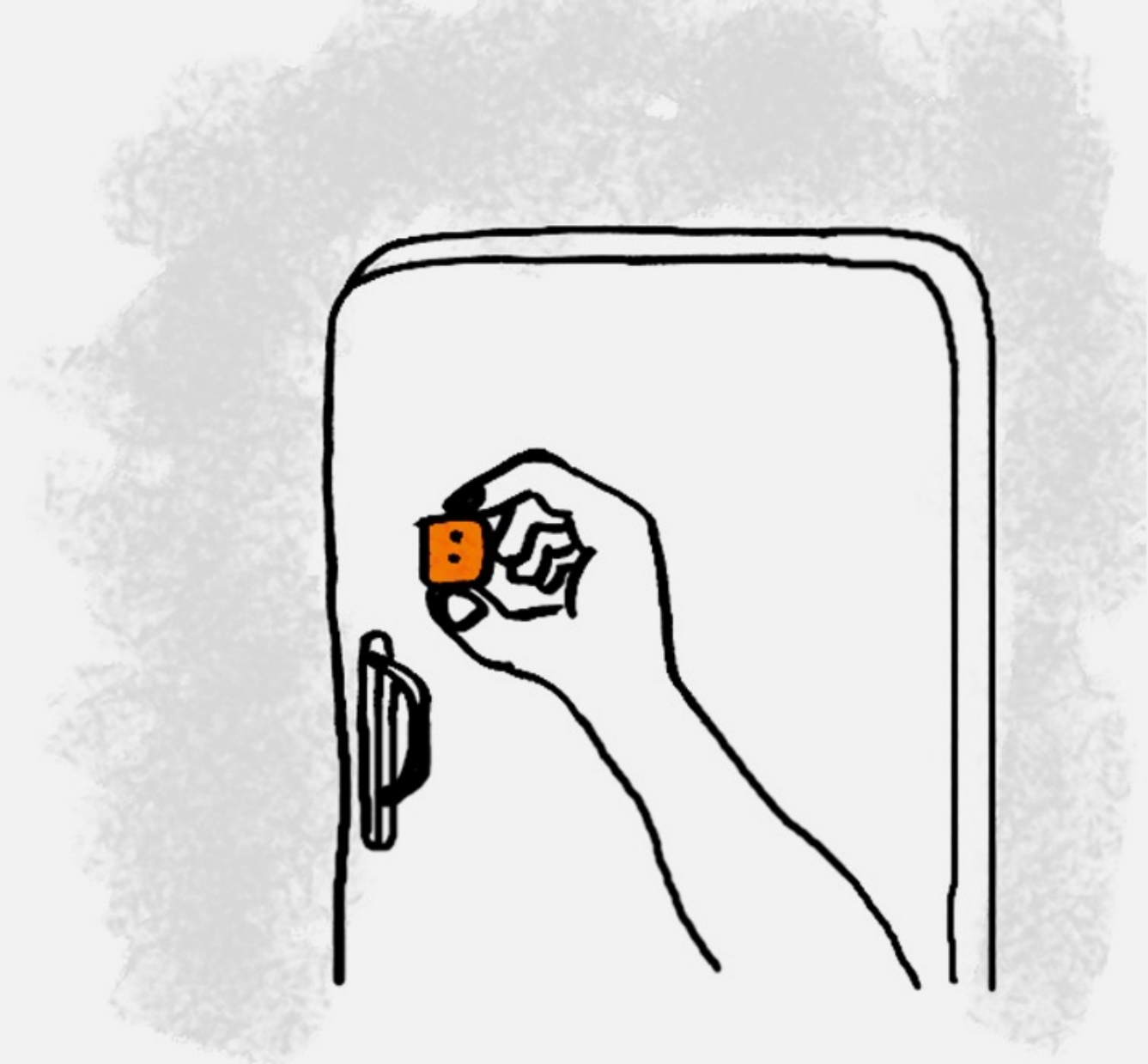
(Tries calling his son but sanjay has left for a site visit and is not reachable.)

THINK!
DESIGN



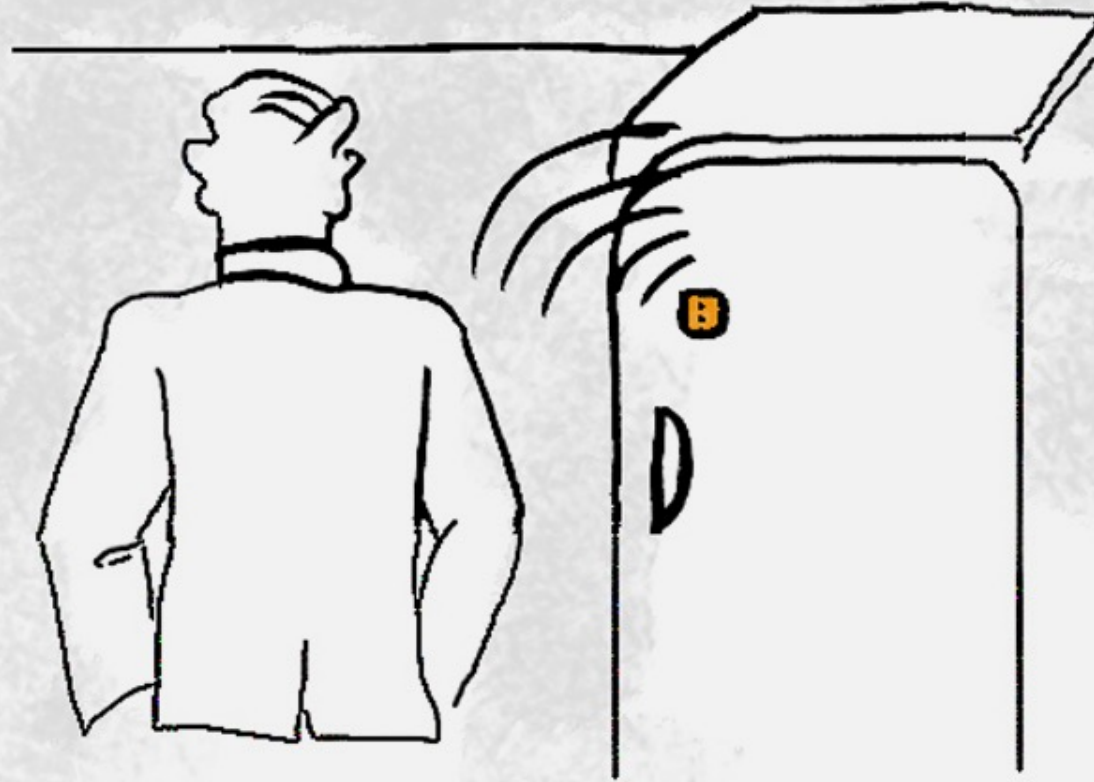
"Hey, I almost forgot, I can leave a message on smaran"

THINK!
DESIGN



(He speaks into an object and sticks it to the refrigerator door, where it is clearly visible.)

THINK!
DESIGN



(Sanjay returns home in the evening with his wife and son and does not find grandpa at home. As he enters the kitchen he notices the smaran on the fridge and presses it gently)

THINK!
DESIGN



"Son, I am going for the play at Natya Mandir with Mrs.Pramila, and would be back at nine o'clock"

"I'm so relieved papa has smaran"

THINK!
DESIGN

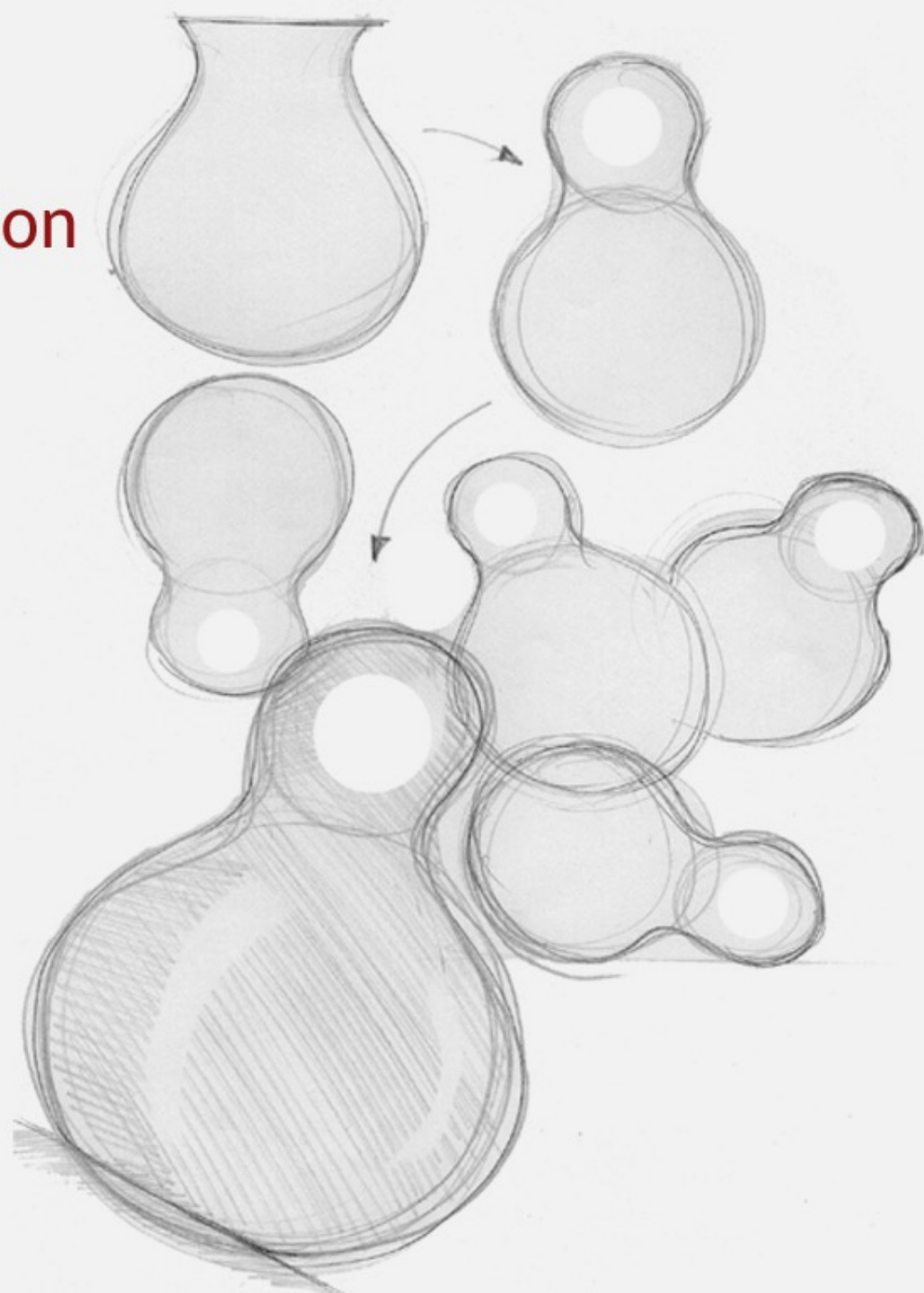


C2.1-053



Form

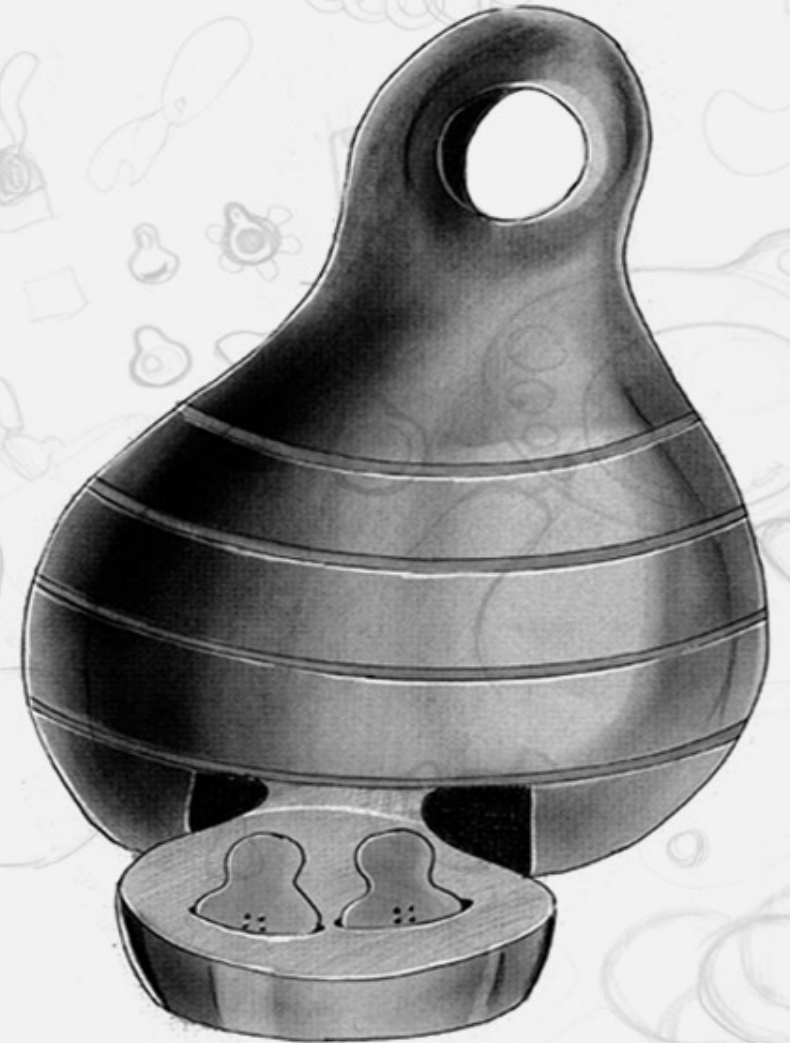
Finalisation





Final Concept

Smar**on**

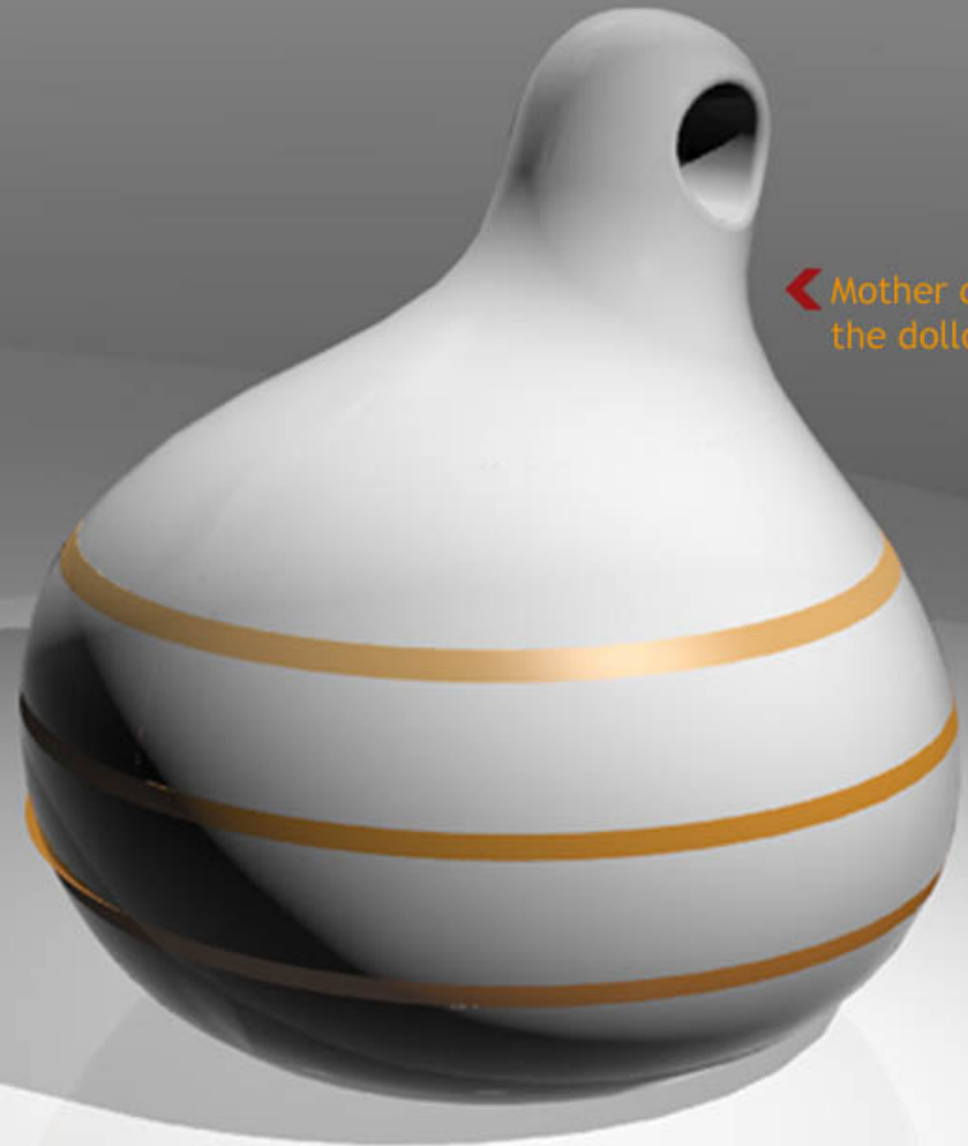
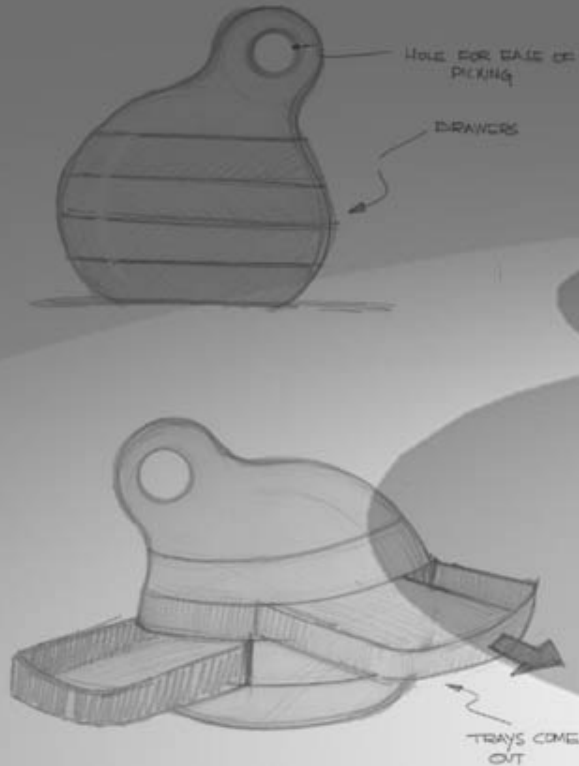


THINK!
DESIGN



Final Concept

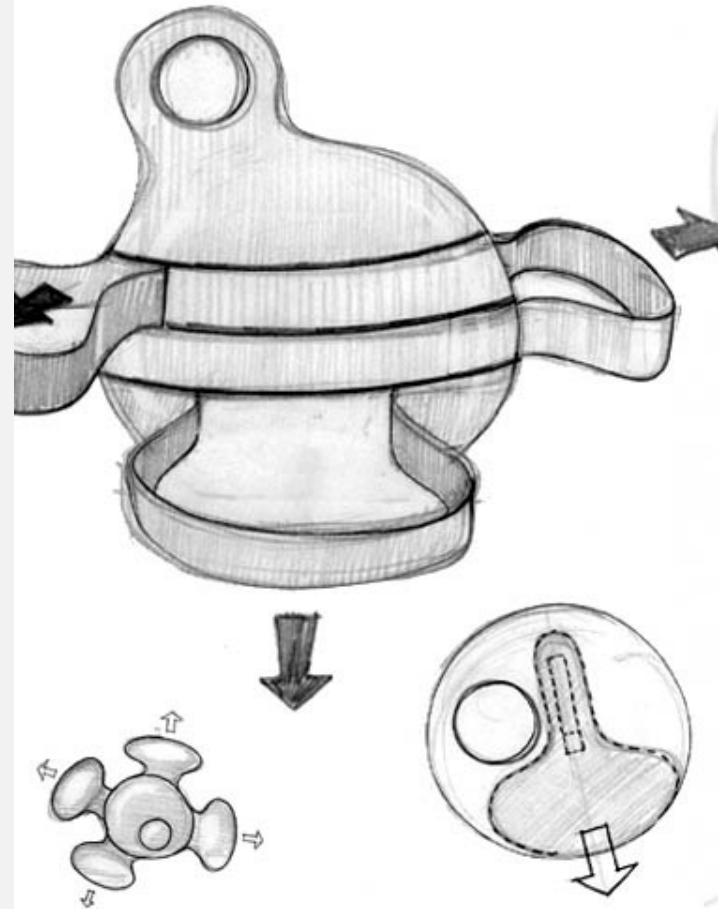
◀ Mother device to hold
the dollops



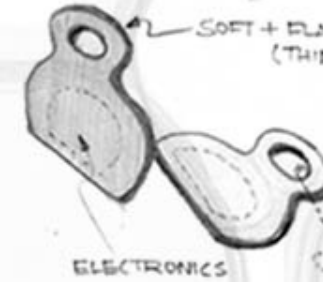
THINK!
DESIGN



Final Concept (With Form)



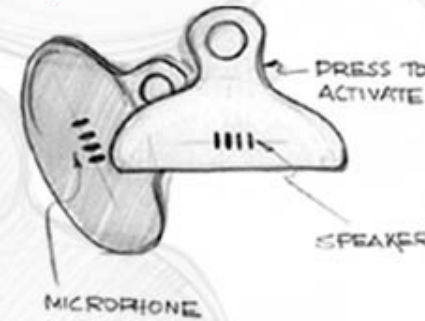
Dollop 1 : For proximity detection when outside the house
▼



Dollop 2 : For finding objects within the house
▼



Dollop 3 : For intra family communication
▼



Dollop 4 : For the community board
▼



THINK!
DESIGN



Final Concept

'Messengers' : ➤
For intra family
communication

⬅ 'Forget me not' :
To find things
around the house

'Proximity sensors' : ➤
To keep track of objects
outside the house

'Community connectors' : ➤
For building community

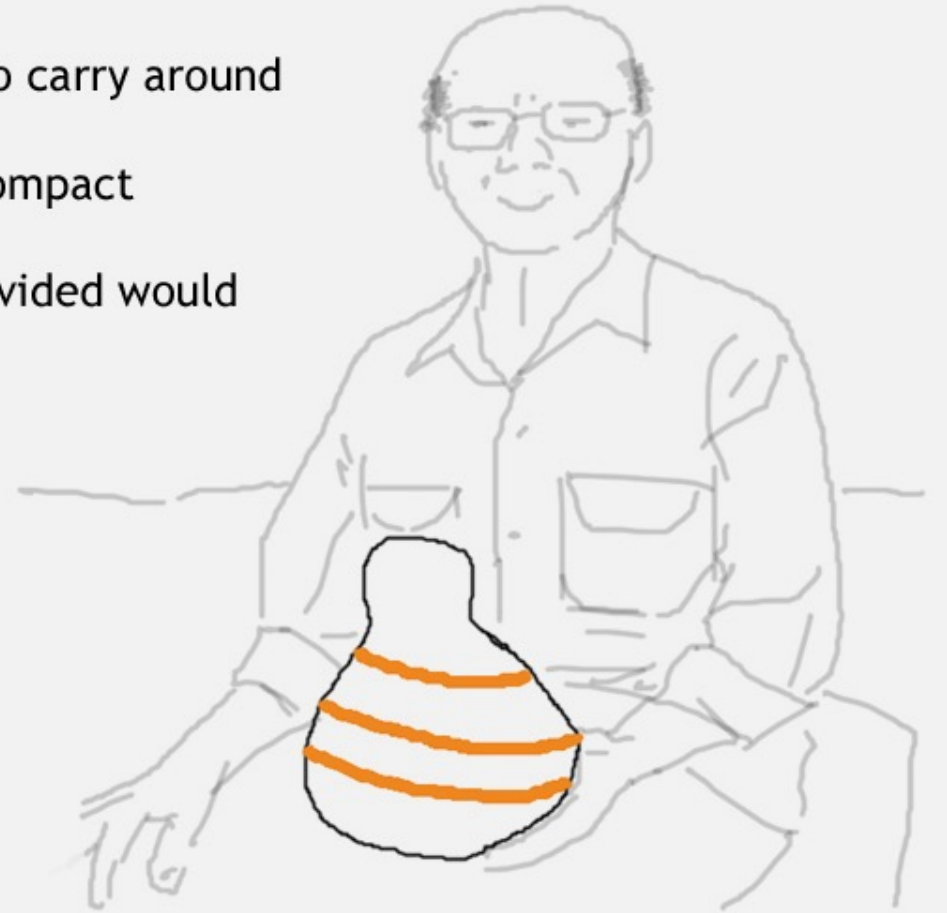


THINK!
DESIGN



Feedback

- Form a little difficult to carry around
- Could be made more compact
- Personal security if provided would be appreciated





Future Prospects

- Can be extended for other user groups
- Could be made more compact
- Can create a new community interaction
- Different forms could be explored for differing user groups





Thank
You

Prof. Ravi Poovaiah
Dr. Ajanta Sen

IDC School of Design
IIT Bombay

Workshop staff

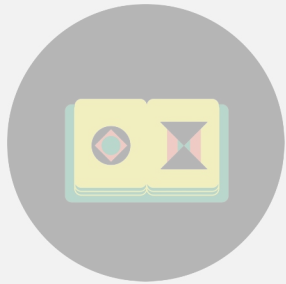


**Thanks for
Listening**

DT&I Case Study
Section: C2
Week 2

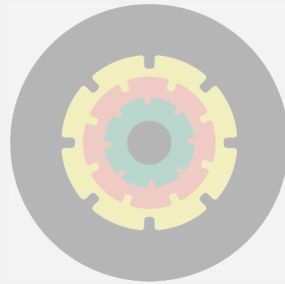


DT&I Course – Week 2:



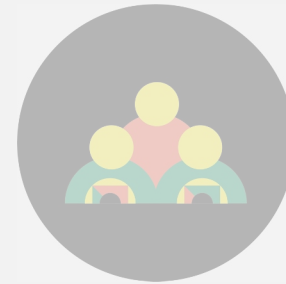
DT&I
Process
(20%)

- > What, Who, How
- > Models of DT&I



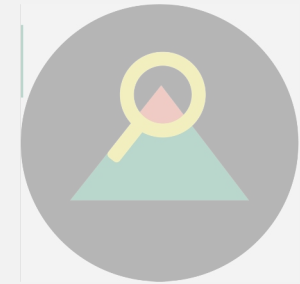
DT&I
Tools
(20%)

- > Mind-Maps +
Affinity Links



DT&I
Project
(50%)

- > Finalize Topic
for DT&I project +
Do Mind-Mapping



DT&I
Case Study
(10%)

- > Case Study
Project Smaran

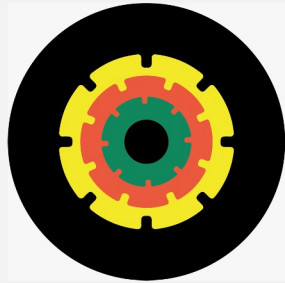


DT&I Course – Week 3:



DT&I
Process
(20%)

- > Secondary Research
- > Info Gathering
- > Referencing



DT&I
Tools
(20%)

- > 5W + H
- > 5W + H Table



DT&I
Project
(50%)

- > Secondary Research
- > User Mappings



DT&I
Case Study
(10%)

- > Case Study
Project



Supporting Organizations:



D'source Project



Open Design School



MoE's Innovation Cell



Credits:

Presented by:
Prof. Ravi Poovaiah



D'source Project



Open Design School



MoE's Innovation Cell



Credits:

Mentors for Case Study Project:

Prof. Ravi Poovaiah

Dr. Ajanta Sen

Master of Design Students:

Prabhat Mahapatra

Mooshir Vahanvati

Parul Bandhe



D'source Project



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Credits:

Camera & Editing:
Santosh Sonawane



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Credits:

Think Design Animation:
Rajiv Sarkar



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Credits:

Graphic Icons:
Shweta Pathare



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Credits:

End Title Music:
C P Narayan



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