

# Therese JOSEPH

## Problem Solving Template: Unpacking a Challenge

1. Restate: What am I being asked to do?

What are the verbs?

order, click, write

2. Visualize

Workflow: Inputs - Process - Outputs

Inputs

3 of more  
Flavours  
toppings  
container

Process

calculate  
Price Flavour  
container  
toppings

get price Total

Outputs

price on  
screen

Prototypes (only as many screens as you need)

Flavours

Price Price Price Price

container

Price Price Price

toppings

Price

out

confirmation

Hi you selected  
Ice cream  
combo  
will cost  
R 16.30

cancel

confirm

Happy Ice cream

Address

Payment option

inst. number

card

credit

confirm OTP sent

Thanks for your purchase

What happens in each part of the screen?

first you choose  
you combo with  
each prices display  
you cancel and start  
over

The picture  
of you combo is  
shown with price  
once satisfied  
you may proceed  
to pay

you enter delivery de  
card payment OTP  
Thank you message  
Time of delivery

## 1. Capture

What are the inputs? What are the different kinds of data?	to Flavours prices topping price combo CO
What do you need to capture?	A Factory Function to process. But a database to store each of comb
What validation do you need?	different sizes, specials

## 2. Process:

What data gets sent back to the server?	prices: it need For each combo selected with price
What happens to it to create the Output? What are the verbs?	Select this combo Based on selection By user → Bring Back price
What limits do you need to take into consideration?	Run out of stock is it still all the same thing in flavours
What else might be tricky?	quantity, how you calculate Ice cream do you use baby machines to fill it up how is quantity if it finished how can each tub give you,

## 4. How to make it work?

What technical components do you need?	SQL, HTML, javascript
Which technical elements do you know already?	
What technical elements do you not know yet?	Filling a data based on tabs is hard, how to get quantity control will be hard

## 3. Display:

What data gets re Turned? How many kinds of data?	PRICE For each combo
Does anything else happen?	you need to confirm if you happy with your combo, And Buy

# The ice cream widget

price

Create a widget that can calculate the price of an ice cream. The widget should allow users to select a flavour, the type of container to use and the toppings to add to the ice cream. Once users selected all the options they want - they can click on the 'Get price' button to get the total cost of the ice cream displayed on the screen. (You could also display the price in real-time if you want as the user selection changes.)

The widget

- should calculate the price of the ice cream based on the options that the user selected
- should allow for three or more flavours, three or more different containers and five or more toppings.

Possible flavours are:

- Vanilla, Chocolate and Strawberry.
- Containers could be Plain Cone, Sugar Cone & a paper cup
- Toppings could include
  - Crumbed peanuts,
  - Caramel dip,
  - Chocolate dip,
  - Smarties,
  - Oreos
  - Astros

Each flavour, container and topping should have a different price.

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ice cream widget.mxd