

## Mini E-commerce App (React)

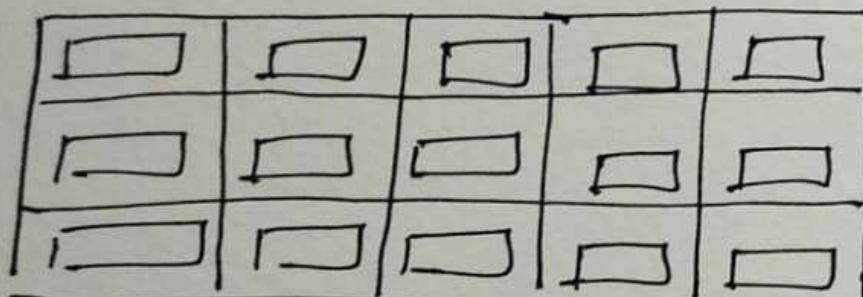
objective - Build an E-commerce using React.

### APIs

1. [dummyjson.com/products](https://dummyjson.com/products)
2. [fakestoreapi.com/products](https://fakestoreapi.com/products)

### Product Listing :

Product Grid : 15-20 items



- Name
- Price
- Category
- Stock (in/out)
- Add to cart

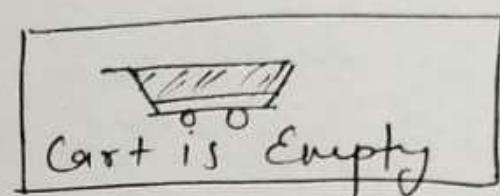
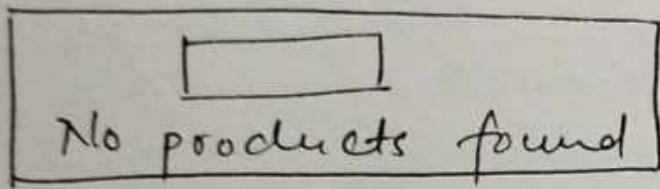
### Cart features

- Total Items
- Total price
- Quantity Control.

$$\boxed{\text{Item} \times \text{Qty}: 2 \square \geq \square +} \rightarrow \text{Remove}$$

## → Rules

1. Qty ≤ Available stock
2. Cart updates instantly

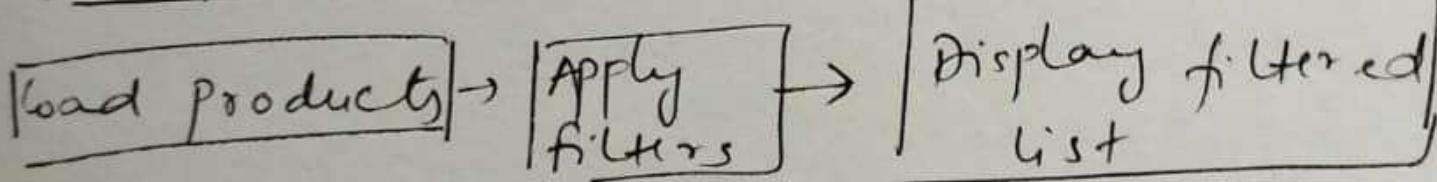


## → filter and Search

### Filters :

- Search by Name
- filter by category
- sort by price
  - ↳ low → high
  - ↳ high → low

## → logic flow



## → Tech Notes :

- Use functional components
- No UI libraries.
- Mocked Data only
- Basic CSS/styled.

## State management ; constraints Evaluation

- state management plan
  - product state → fetched once
  - filters state → Search, Category, sort
  - cart state - separate from product list.
- Technical constraints
  - functional components only
  - No UI libraries (eg. material UI)
  - No backend
  - Basic CSS only
  - Mocked / API data only.

Question 4.

- Initially 250 males  
(1980) 250 females.
- By 2020,
  - 10 to less than 20 became 50 to less than 60 in 2020.
  - 20 less than 30 became 60 to less than 70. in 2020
- from 2020 data:
  - In 50-60 age, 140 male, 125 female.
  - In 60-70 age group, 100 male, 105 female.

$$\text{Total} = (140 + 125) + (100 + 105)$$

21 970 ✓

### Question 5

- Age shift + +

→ 20-30 in 1980

→ Age in 2000 → 40-50

" 2010 → 50-60

• Male aged 40-50 in 2000 = 205

• " " 50-60 in 2010 = 165

Death b/w 2000 and 2010

$$\Rightarrow 205 - 165 = \textcircled{40}$$

### Question 6

Age shift

• Age 30-40 in 1980

• " in 2010 = 60-70

• from 2010 graph ⇒

$$\text{Male } (60-70) = 90$$

$$\text{Female } (60-70) = 100$$

$$\left. \begin{array}{l} \text{Total} \\ = 90 + 100 \\ = \textcircled{190} \end{array} \right\}$$

### Question 7.

→ In 1980, Male = 1000  
Female = 120

} Dead in 2000  
= (initial in 1980)  
-(Alive in 2000)

→ In 2000, from green bars

$$\rightarrow 30-40 = 180$$

Total male alive in 2000  
= 645.

$$\rightarrow 40-50 = 205$$

Dead male in 2000  
= 355.

$$\rightarrow 50-60 = 160$$

$$\rightarrow 60-70 = 100$$

→ female alive in 2000 (purple bars)

$$\rightarrow 30-40 = 240$$

Total female alive in  
2000  
= 685

$$\rightarrow 40-50 = 175$$

$$\rightarrow 50-60 = 150$$

$$\rightarrow 60-70 = 120$$

Dead = 315.

Ratio  $\Rightarrow 355 : 315$ .

∴

71 : 63