

# MAN Shopping Cart Simulation Test

## OBJECTIVE

Design a unit tested frontend application to:

- Display a list of selectable products on a page
- Keep a running total sum of products in the cart using the price information sent from the ShoppingCart API
- Add on shipping costs based on the following rules:

Cart Value	Shipping Cost
Less than 20	7
Less than 40	5
Greater than 40	FREE

- Verify and apply only **one** of the following discount rules:

COUPON CODE	DISCOUNT
freeShipping!	Free shipping regardless of total costs
APPL10	10% off all Apple products
AUDIO15	15% off all Audio products
ELEC25	25% off all Electronic products

Supported Categories are:

- Electronic
- Accessory
- Audio

## EXPECTED FUNCTIONALITY

- Maintain a live running total of the shopping cart including any discounts already applied
- Must have the ability to edit the shopping cart to remove or add more of existing items already in the cart
- Ability to filter product list based on *category*
- Sort products based on different criteria, for example:
  - o Alphabetically
  - o Prices

## NOTES

- **SOLUTION**
  - o Please try to complete this test in 2 hours
  - o We expect to see a well-designed, well-structured, and unit tested solution. You can use either Vue, React, or Angular. Angular is preferred.
  - o Please include a README explaining your thoughts on certain functionalities implemented and what you would have done if you had more time on the solution
  - o The Coupons are structured as following:

```
[
  {
    "Code": "freeShipping!",
    "Description": "Free Shipping",
    "Type": 1
  },
  {
    "Code": "APPL10",
    "Description": "10% on all Apple Products",
    "Type": 2,
    "Discount": 0.1,
    "SupplierId": 1
  },
  {
    "Code": "AUDIO15",
    "Description": "15% on all Audio Products",
    "Type": 3,
    "Discount": 0.15,
    "Category": "audio"
  },
  {
    "Code": "ELEC25",
    "Description": "25% on all Electronic Products",
    "Type": 3,
    "Discount": 0.25,
    "Category": "electronic"
  }
]
```

- **API**
  - o ShoppingCart API can be found at <https://man-shopping-cart-test.azurewebsites.net/swagger/index.html>
  - o In the case that the API is unavailable, use the dockerised ShoppingCart API locally by using *docker-compose up*

## USE CASE

Given a cart that contains:

- 2 headphones from Apple, at 10 per unit
- 1 USB cable from Apple, at 4 per unit
- 1 monitor from HP, at 100 per unit
- 1 laptop from Dell, at 1000 per unit

Product types:

- Headphones: Electronic, Accessory, Audio
- USB cable: Accessory
- Monitor: Electronic
- Laptop: Electronic

Scenario:

- If a discount code of "AUDIO15" is applied, all headphones would have a 15% discount applied
- If a discount code of "APPL10" is applied, all Apple products in the cart, i.e, the headphones and USB cable, would each have a 10% discount applied