Sygns Java Task

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1 Sygns store

In our online shop we have four products: Neons, Letters, LED and Lightboxes. We want to validate orders from our configurator and calculate prices based on the product parameters. In the configurator, users can change the size, content, and color of the product. Each product has assigned a size, user content, color of the illumination, and mounting type. Also we have object-type data stored in the attribute named 'productFamily', which is assigned to every product. For the LED there will be an additional RGB color option, that is not available for the neons.

Create Spring Boot application which will get data from front-end app, validate users' designs and then calculate the price for each product. Assume that we are going to add new product families next month so, your solution should be flexible and allow it.

1.1 Validation rules

For the Neon and LED should be assigned color of the neon, size, and user content. In case of lack of this data use default values: RED, 18cm, "Customize me". For the Lightboxes and Letters: RED, 30cm, "Customize me". RGB color option can be applied only to the LED.

1.2 Price calculation

The Neon and LED price calculation is based on color/size price.
RGB - 150 Euro/m
RED - 100 Euro/m
BLUE - 110 Euro/m
WHITE - 110 Euro/m
PINK - 110 Euro/m
RGB - 110 Euro/m

For the Letters and Lightboxes price calculation is based on the user content and size prices sum.
Each letter - 10 Euro
1m of every color - 50 Euro
For the letters we also need to add 20 Euro to the each order

1.3   Example data

```
{
  "id": "1",
  "size": "25",
  "productColor": "RED",
  "userContent": "test data",
  "productFamily": "neon"
}

{
  "id": "1",
  "size": "25",
  "productColor": "RGB",
  "userContent": "test data",
  "productFamily": "led"
}

{
  "id": "3",
  "size": "80",
  "productColor": "BLUE",
  "userContent": "test data",
    "productFamily": "lightbox"
}

{
  "id": "4",
  "size": "40",
  "productColor": "WHITE",
  "userContent": "test data",
    "productFamily": "letter"
}
```