## **Product.JSON Explained**

```
Object start.
  "productId": 1001,-
                                                                   Simple: integer.
  "productName": "Wireless Headphones",
                                                                   Simple: string.
  "description": "Noise-cancelling wireless headphones with
                                                                   Simple: string.
                  Bluetooth 5.0 and 20-hour battery life.",
  "brand": "SoundPro",
                                                                   Simple: string.
  "category": "Electronics", "price": 199.99,-----
                                                                   Simple: string.
                                                                   Simple: double.
  "currency": "USD",
  "stock": {-----
                                                                  Nested object of
    "available": true,
                                                                   boolean & integer
    "quantity": 50
                                                                   values.
  "images": [----
                                                                   Array of strings.
    "https://example.com/products/1001/main.jpg",
    "https://example.com/products/1001/side.jpg"
  ],
"variants": [-----
                                                                   Array of Objects.
                                                                   The objects
      "variantId": "1001 01",
                                                                   contain nested
      "color": "Black",
                                                                   string, double,
      "price": 199.99,
                                                                   and integer
      "stockQuantity": 20
                                                                   values.
      "variantId": "1001 02",
      "color": "White",
      "price": 199.99,
      "stockQuantity": 30
  ],
"dimensions": {-----
5kg",
                                                                  Nested object of
    "weight": "0.5kg",
"width": "18cm",
                                                                   string values.
    "height": "20cm",
    "depth": "8cm"
  "ratings": {-----
                                                                  Nested object of
    "averageRating": 4.7,
                                                                   double and
    "numberOfReviews": 120
                                                                   integer values.
  },
"reviews": [-----
                                                                   Array of Objects
                                                                   of mixed value
    {
      "reviewId": 501,
                                                                   types.
      "userId": 101,
      "username": "techquy123",
      "comment": "Amazing sound quality and battery life!"
      "reviewId": 502,
      "userId": 102,
      "username": "jane_doe",
"rating": 4,
      "comment": "Great headphones but a bit pricey."
  ]
},
  "productId": 1002-----
                                                                  Start New Product
```

## **Product.JSON Summary**

JSON Path	Structure Type	Contains
productId	Simple value	Integer
productName	Simple value	String
price	Simple value	Number (double)
stock	Nested object	Boolean + Integer values
images	Array of strings	String values
variants	Array of objects	Objects with mixed value types
dimensions	Nested object	String values
ratings	Nested object	Number values (double + integer)
reviews	Array of objects	Objects with mixed value types

## **Key JSON Terminology:**

- Object = { } Collection of key-value pairs (like a Delphi record or class)
- Array = [ ] Ordered list of items (like a Delphi dynamic array)
- Nested Object = An object inside another object
- Array of Objects = An array where each element is an object
- Simple Value = String, Number, Boolean, or Null