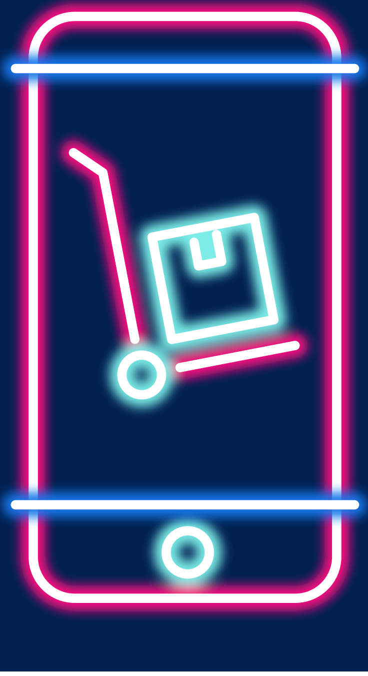
HYPERTEST

SOLUTION BRIEF

HYPERTEST FOR ECOMMERCE



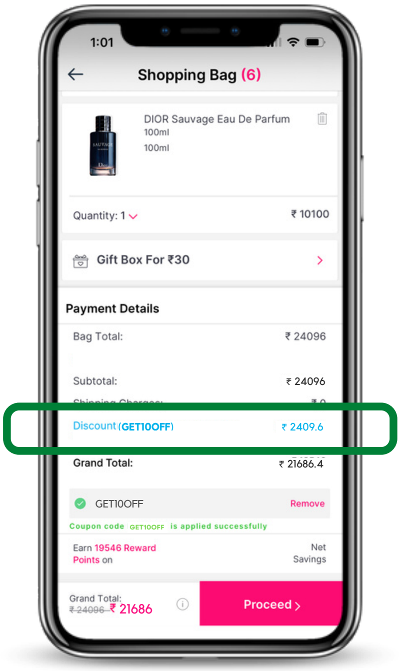
eCommerce apps have taken the market by storm. There are over 2.5 million eCommerce stores in the world! What has made this industry so lucrative is the high footfall and sales volume. To lure in more buyers, these eCommerce companies offer discounts from time to time that help them scale up their revenue even further.

Given that there are often thousands of products sold on an eCommerce platform, often by multiple vendors, in different combinations and quantities, it is imperative that users get the best deals. But there could be cases where due to inefficient testing, or insufficient coverage, teams release broken discounting feature which could lead to either to bad user experience or business loss.

Consider this scenario:

On an eCommerce app, a user browses the catalogue and adds few items to their cart. Then they click on the **ADD DISCOUNT** button and enter a coupon code **GET10OFF** in order to avail a 10% discount.

They would see something like this



1:01

Shopping Bag (6)

DIOR Sauvage Eau De Parfum
100ml
100ml

Quantity: 1 ₹ 10100

Gift Box For ₹30

Payment Details

Bag Total:	₹ 24096
Subtotal:	₹ 24096
Shipping Charges:	₹ 0
Discount (GET10OFF)	₹ 2409.6
Grand Total:	₹ 21686.4

GET10OFF Remove

Coupon code GET10OFF is applied successfully

Earn 19546 Reward Points on Net Savings

Grand Total: ~~₹ 24096~~ ₹ 21686

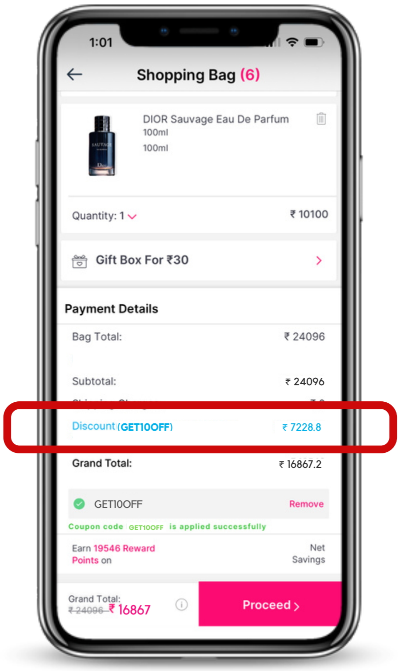
Proceed >

Expected Output:

The user added the items to their cart, and applied **GET10OFF** on total cart price of ₹24,096 and total discount of ₹2,409 (10% of X).

Actual Output with Error:

When the user applied **GET10OFF** on his cart, a discount of 30% instead of 10% was applied due to an error in the app, discounting an unapproved amount of ₹7,228 (additional 4,819)



1:01

Shopping Bag (6)

DIOR Sauvage Eau De Parfum
100ml
100ml

Quantity: 1 ₹ 10100

Gift Box For ₹30

Payment Details

Bag Total:	₹ 24096
Subtotal:	₹ 24096
Shipping Charges:	₹ 0
Discount (GET10OFF)	₹ 7228.8
Grand Total:	₹ 16867.2

GET10OFF Remove

Coupon code GET10OFF is applied successfully

Earn 19546 Reward Points on Net Savings

Grand Total: ~~₹ 24096~~ ₹ 16867

Proceed >

HyperTest caught this error for a leading eCommerce application and prevented them from deducting the incorrect amount, thereby saving several hundred thousand dollars in revenue on broken discounts.

What type of error is this?

VALUE MODIFIED ERROR

Check out the table below to know more about the Value Modified error type

SEVERITY	**Very High**
WHAT DOES THIS ERROR MEAN?	Contract schema remains similar, but data changes
EXAMPLE	The old version calculates discount 10% discount on an item as Rs1000, new version calculates the discount as Rs3000+ for the exact same case
WHY DOES THIS USUALLY HAPPEN?	1. Current timestamp dependent data (autoignored by HyperTest in omst cases, can be ignored safely) 2. Bug in new implementation 3. Data type changes in schema
POSSIBLE NEGATIVE IMPACTS	1. Incorrect data would be reported to upstream/client app due to flawed business logic 2. Upstream/client app can also crash if modified data is out of bounds
SUGGESTED ACTIONS FOR WARRANTED CHANGE	1. Verify new business logic 2. Check if upstream/client app is handling new data types properly. Eg: If float point numbers are sent to a client which earlier catered to integers, client would crash or drop some data leading to data issues

WHAT KIND OF API ERRORS CAN HYPERTEST CATCH ?

List of high severity errors HyperTest will never miss

CONTENT TYPE CHANGES

Content type header has changed in the new version

KEY REMOVED

Contract failure with removal of Key in the response object

DATA TYPE CHANGE

Contract schema remains similar, but data type changes i.e. integer to string etc

ARRAY ORDER CHANGE

Order of data received is different

VALUE MODIFIED

Contract schema remains similar, but data changes

SLOWENESS IN APIs

Change in Latency or Bandwidth wrt stable app

SENSITIVE DATA EXPOSURE

Leakage of critical user details in APIs that shouldn't

STATUS CODE CHANGE

Fatal crashes with status code failures 400s, 500s etc

SCAN TO SCHEDULE A DEMO WITH OUR TEAM