

Milestone 2

Task 3:

Black box Testing

Test Suite 1: Decision Table Testing

- Test Case 1: Add a Valid Product
Description: Add a product with a valid Product ID, Stock Level and Price.
- Test Case 2: Update an Existing Product
Description: Update the Stock Level and the Price of an existing product
- Test Case 3: Add a Product with negative stock
Description: Add a Product with a negative Stock Level

Condition	Stock Level ≥ 0	Price ≥ 0	Product Exists	Expected Action
Add a Valid Product	Yes	Yes	No	Add
Update an Existing Product	Yes	Yes	Yes	Update
Add a Product with a negative Stock Level	No	Yes	No	Decline

Test Suite 2: Equivalence Partitioning

- Test Case 1: Negative Stock Level for AddProduct
Description: Try to add a product that has a negative stock level
Steps: -3 for the Stock Level
Output: Product not added due to invalid Stock Level
- Test Case 2: Invalid ProductID for the AddProduct
Description: Attempt to add a Product with an empty ProductID
Steps: ProductID left empty “ ”.
Output: Product not added due to invalid ProductID, presents an error message.
- Test Case 3: Valid Input for AddProduct
Description: Add a Product with a valid ProductID, Name, positive StockLevel and a positive Price.
Steps: (“309”, “E-Bike”, 28, 89.00m)
Output: The product “E-Bike” was added successfully.

Test Suite 3: Boundary Value Analysis

- Test Case 1: Stock Level exactly at Boundary 5

Description: Add a product with a Stock Level exactly at the low stock boundary (5). This case tests if a product with a stock level equal to 5 is considered a low stock level.

Steps: ("589", "Teddy Bear", 5, 95.00m)

Output: No low stock level alert should be triggered because the stock level is not less than 5.

- Test Case 2: Stock Level Just Below Boundary (4)

Description: Add a product with a Stock Level just below the boundary (4), which should trigger a low stock alert.

Steps: ("852", "Water Bottle", 4, 675.00m)

Output: A low stock alert has been triggered for the product "Water Bottle" because the stock level is lower than 5.

- Test Case 3: Stock Level Just Above Boundary (6)

Description: Add a product with a Stock Level just above the boundary (6), which should not trigger a low stock alert.

Steps: ("82", "Xylophone", 6, 86.00m)

Output: No low stock alert should be triggered for the product "Xylophone" because the stock level is greater than 5.