

# Marketplace Builder Hackathon

## 2025:

### Day 5 - Testing, Error Handling, And

### Backend Integration Refinement

## Test Summary of E-Commerce Website:

**Date of Testing:** 20-01-2025

**Tested By:** M. AHMER ALI

This report summarizes the testing activities conducted on the e-commerce website to ensure functionality, usability, performance, and security.

### Objectives:

1. Verify all core functionalities, including browsing, and searching
2. Assess the website's usability across different devices and browsers.
3. Ensure the site performs well under various load conditions.
4. Identify and mitigate potential security vulnerabilities.

### Testing Scope:

- Functional Testing
- Usability Testing
- Performance Testing
- Security Testing

# Test Cases and Results:

## Cross Browsers and Devices Testing:

Devices	Browser	Observations	Status
Desktop	Chrome	Smooth navigation	Pass
Mobile	Safari	Some alignment issues	Pass
Tablet	Firefox	Good responsiveness	Pass

## Error Handling:

### 1. Error Messages:

- Use try-catch blocks to handle API errors

#### Example:

```
try {
  const data = await fetchProducts();
  setProducts(data);
} catch (error) {
  console.error("Failed to fetch products:", error);
  setError("Unable to load products. Please try again later.");
}
```

### 2. Fallback UI:

- Display alternative content when data is unavailable

#### Example:

- “No Item found” message for an empty product list

## Security Testing:

- Validate Input fields to prevent injection attacks
- Use HTTPS for secure communication
- Avoid exposing sensitive API keys in your frontend code

## Performance Testing:

- Measures initial load and interaction times
- Compressing Image using Tools

## Functionality Testing: