

# "Day 5 - Testing and Backend Refinement -

## [Nike E-Commerce]"

**Prepared By: Rubab Fatima**

### **Overview:**

This document highlights the test cases and results for the Nike E-Commerce project, focusing on functionality, responsiveness, API validation, security, and cross-browser compatibility.

**Test Cases with Results:** Various test cases were conducted to ensure the application functions as expected. These include testing product listings, product details, add-to-cart functionality, API responses, and responsive design.

**Security Input Validation:** Validated email input to ensure correct format by displaying appropriate messages when users omit the "@" symbol.

**Performance Analysis:** Used Lighthouse for performance evaluation, ensuring the project meets performance, accessibility, and SEO standards.

**Browser Compatibility:** Tested the application across multiple browsers (Chrome, Edge) to confirm consistent performance.

The document includes detailed screenshots and results for each test case and validation step.

## **Test Cases with Results**

Here, I am explaining the test cases I have worked on. Each test case checks a specific functionality of the project to ensure it is working as expected.

### **Test Case 1: Product Listing**

**Description:** I tested the product listing page to ensure all products are displayed correctly, with details like name, price, and image.

**Steps:**

Opened the homepage of the project.

Checked whether all the products were visible.

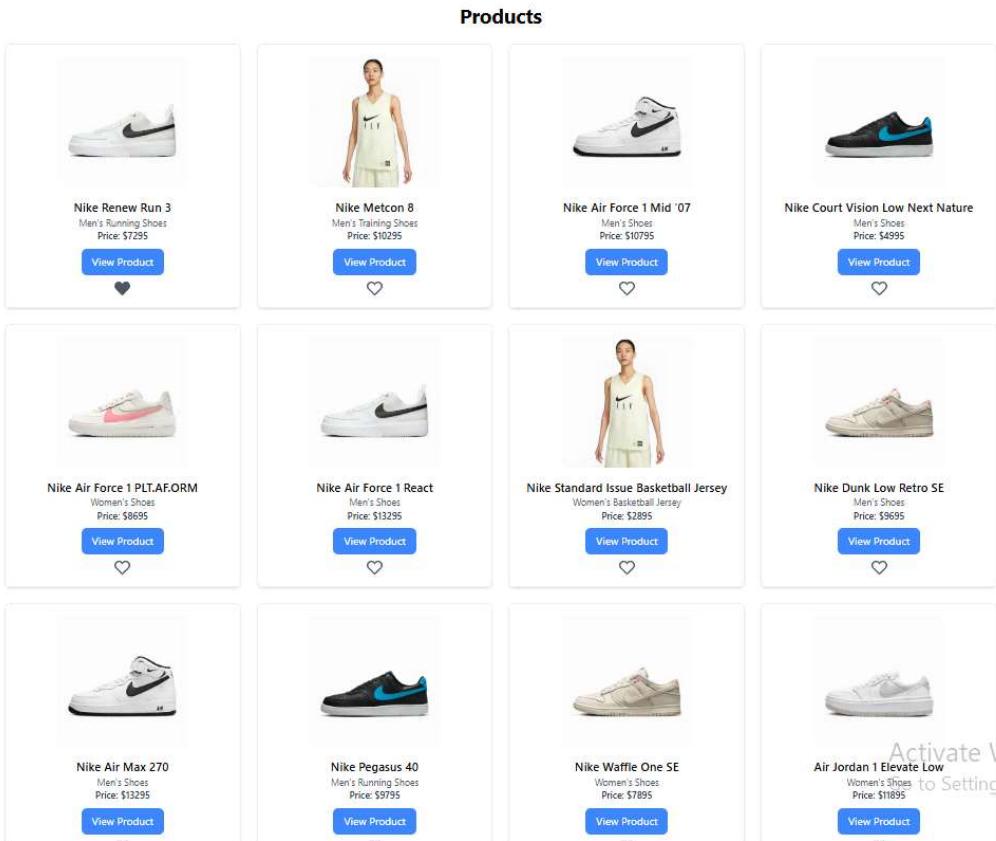
Verified that each product had the correct name, price, and image.

**Result:** The product listing page works as expected, and all details load correctly.

**Severity Level:** Medium

**Remarks:** Everything is fine here.

**ScreenShot:**



## Test Case 2: Product Detail

**Description:** I checked if the product detail page loads correctly when clicking on any product.

**Steps:**

Went to the product listing page.

Clicked on different products to open their detail pages.

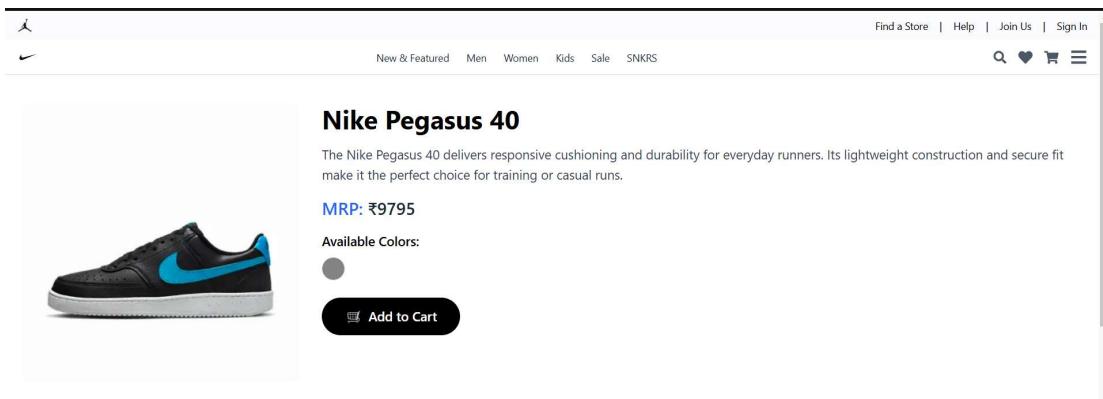
Ensured that all product details, like description and price, were loading accurately.

**Result:** The product detail page loads fine without any errors.

**Severity Level:** Low

**Remarks:** No issues found here.

**Screenshot:**



### Test Case 3: Add to Cart

**Description:** I tested the add-to-cart feature to confirm that selected products are added to the cart properly.

**Steps:**

Opened the product listing page and selected a product.

Clicked the “Add to Cart” button.

Checked the cart to ensure that the product appeared there.

The user can also delete the product from the cart or update the quantity by using the "+" or "-" buttons.

**Result:** The product was successfully added to the cart.

**Severity Level:** High

**Remarks:** successfully work

**Screenshot:**

Summary	
Subtotal	₹ 21885.00
Estimated Delivery & Handling	Free
Total	₹ 21885.00

## Test Case 4: API Check

**Description:** I used Postman to verify that the API endpoints work correctly and return the expected results.

### Steps:

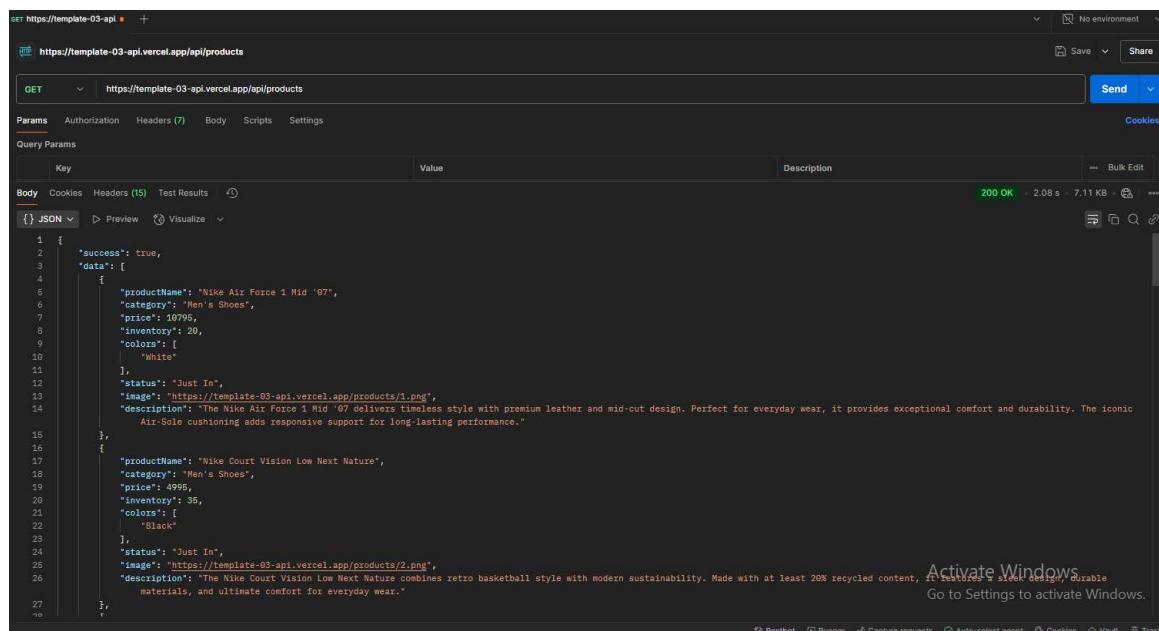
Opened Postman and tested the product listing API.

Verified that the response included the correct data.

**Result:** API are working fine, and responses are accurate.

**Severity Level:** High

### Screenshot:



The screenshot shows a Postman interface with a successful API call to `https://template-03-api.vercel.app/api/products`. The response status is `200 OK` with a response time of `2.08 s` and a size of `7.11 KB`. The response body is a JSON object containing an array of products. The first product is a Nike Air Force 1 Mid '07, which is white and has an image at `https://template-03-api.vercel.app/products/1.png`. The second product is a Nike Court Vision Low Next Nature, which is black and has an image at `https://template-03-api.vercel.app/products/2.png`.

```
{} {
  "success": true,
  "data": [
    {
      "productName": "Nike Air Force 1 Mid '07",
      "category": "Men's Shoes",
      "price": 10795,
      "inventory": 20,
      "colors": [
        "White"
      ],
      "status": "Just In",
      "image": "https://template-03-api.vercel.app/products/1.png",
      "description": "The Nike Air Force 1 Mid '07 delivers timeless style with premium leather and mid-cut design. Perfect for everyday wear, it provides exceptional comfort and durability. The iconic Air-Sole cushioning adds responsive support for long-lasting performance."
    },
    {
      "productName": "Nike Court Vision Low Next Nature",
      "category": "Men's Shoes",
      "price": 4995,
      "inventory": 35,
      "colors": [
        "Black"
      ],
      "status": "Just In",
      "image": "https://template-03-api.vercel.app/products/2.png",
      "description": "The Nike Court Vision Low Next Nature combines retro basketball style with modern sustainability. Made with at least 20% recycled content, it features a durable material, and ultimate comfort for everyday wear."
    }
  ]
}
```

## Test Case 5: Responsive Design

**Description:** I ensured the design is responsive and adjusts properly across different devices.

### Steps:

Opened the project on a desktop browser and resized the window to test responsiveness.

Checked the layout on a mobile phone and a tablet.

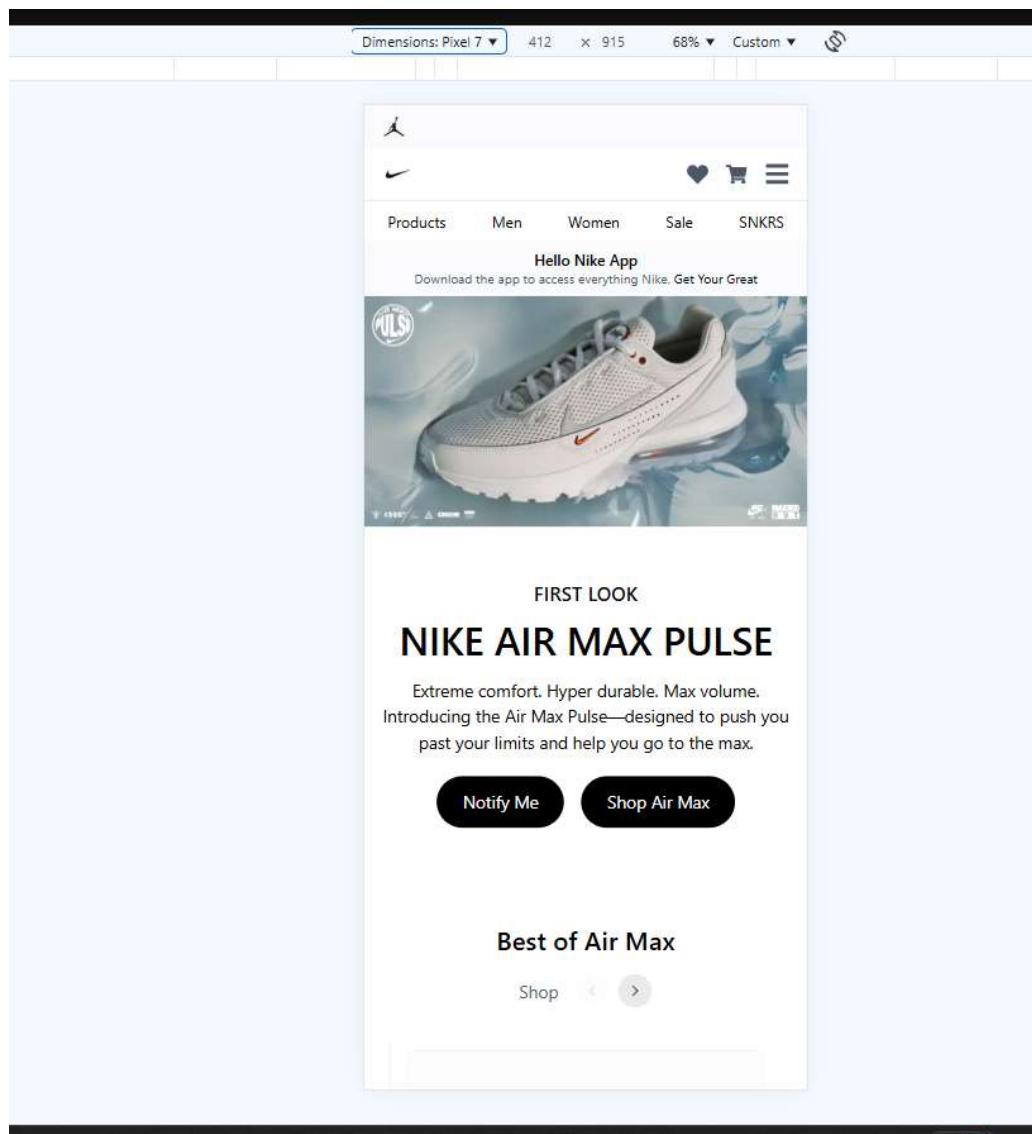
Verified that the UI components adjusted without breaking.

**Result:** The project is fully responsive and works well on all screen sizes.

**Severity Level:** Medium

**Remarks:** No alignment issues found.

**Screenshot:**



## Test Case 6: Search Bar

**Description:** I tested the search bar functionality to ensure it provides relevant results.

**Steps:**

Typed queries into the search bar (e.g., product names).

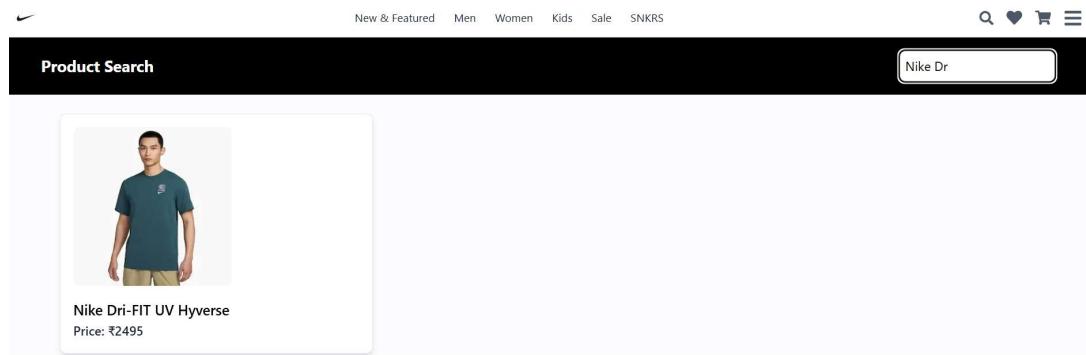
Verified that the correct products were displayed.

**Result:** The search bar functionality works well, and results are accurate.

**Severity Level: Low**

**Remarks:** Proper Work

**Screenshot:**



## Security Input Validation for Email Field

I also tested the input validation for the email field. The main issue I identified was that the user might not include "@" in their email address.

**Steps:**

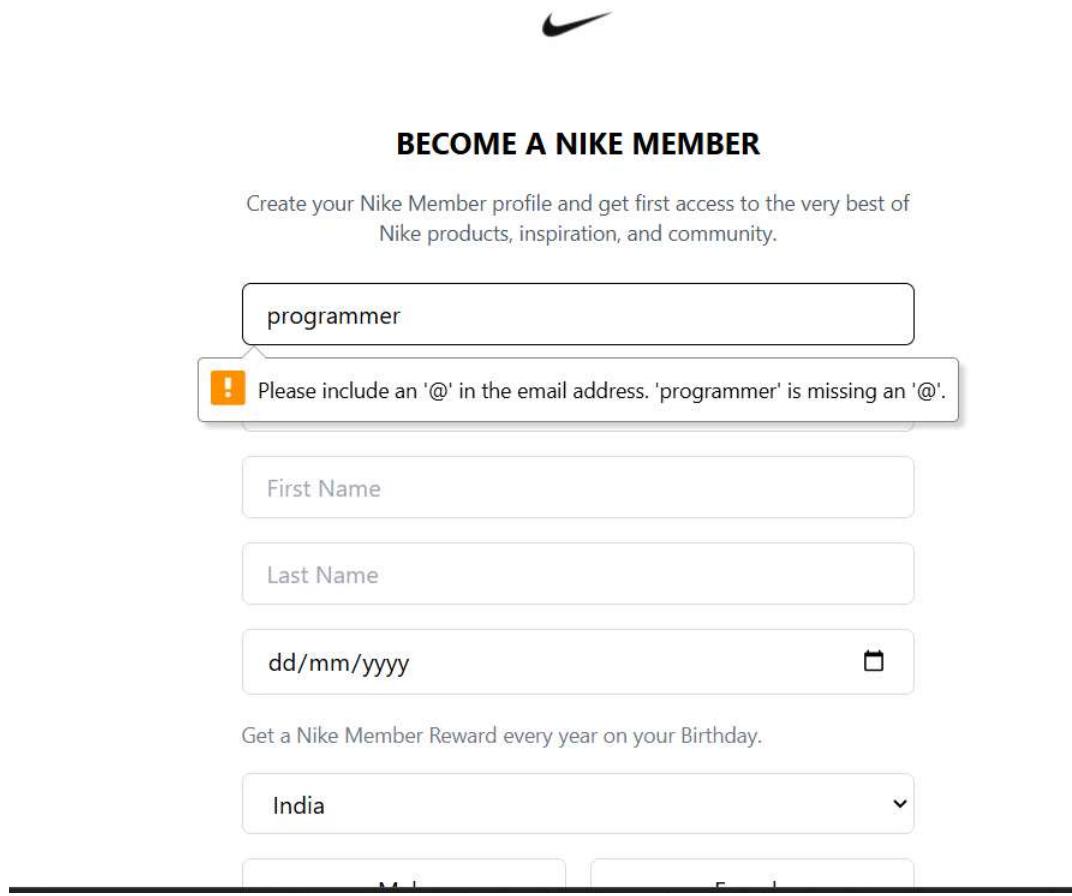
Left the "@" symbol out while entering an email.

Checked if a validation message appeared.

Verified that the message stated: "Please include an '@' in this email address."

**Result:** The validation message is displayed correctly when the email format is incomplete.

**Screenshot:**



The screenshot shows a Nike Member sign-up form. At the top is the Nike swoosh logo. Below it, the heading "BECOME A NIKE MEMBER" is centered. A subtext below the heading reads: "Create your Nike Member profile and get first access to the very best of Nike products, inspiration, and community." The form fields include:

- An email input field containing "programmer". A validation message bubble says: "Please include an '@' in the email address. 'programmer' is missing an '@'."
- A "First Name" input field.
- A "Last Name" input field.
- A date input field showing "dd/mm/yyyy" with a calendar icon.
- A dropdown menu set to "India".

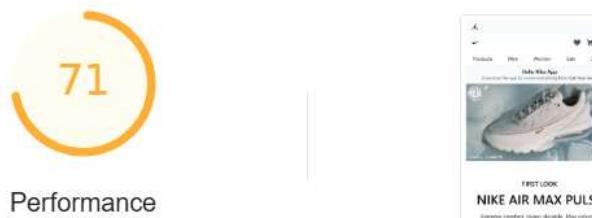
At the bottom of the form is a horizontal navigation bar with icons for "M", "L", "F", and "I".

## Analyze Performance

### **To analyze the performance of the project:**

I used Lighthouse to check performance, accessibility, and SEO scores.

Took screenshots of the Lighthouse reports to include here.



Values are estimated and may vary. The [performance score](#) is calculated directly from these metrics. [See calculator.](#)

▲ 0–49   ■ 50–89   ● 90–100



#### METRICS

[Expand view](#)

● First Contentful Paint

1.1 s

● Largest Contentful Paint

1.4 s

▲ Total Blocking Time

3,410 ms

● Cumulative Layout Shift

0

● Speed Index

1.2 s

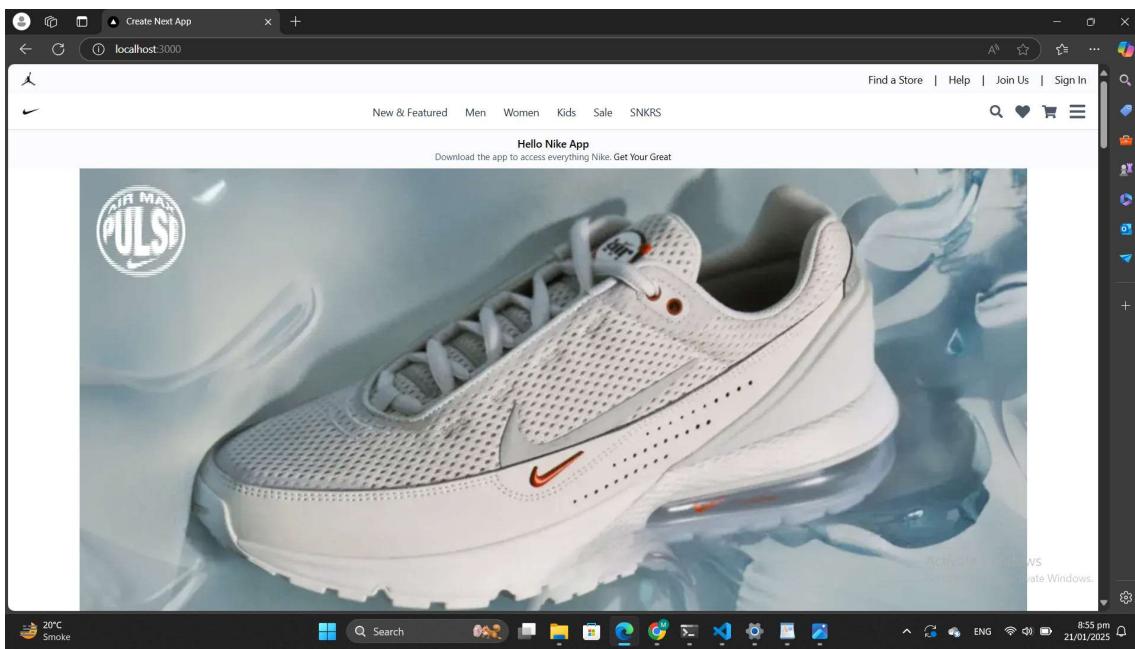
A  
Gc

## Browser Compatibility Check

Lastly, I tested the project on multiple browsers (e.g., Chrome, Edge) to ensure it works the same way everywhere.

**Result:** The project works perfectly on all tested browsers.

**Screenshot:**



## **Checklist:**

**Product Listing Test ✓**

**Product Detail Test ✓**

**Add to Cart Test ✓**

**API Check ✓**

**Responsive Design Test ✓**

**Search Bar Functionality Test ✓**

**Email Input Validation Test ✓**

**Performance Analysis (Lighthouse) ✓**

**Browser Compatibility Check ✓**

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