Testing & Backend Refinement – Nike Store

Day - 5 : Strengthening Performance and Reliability

Overview :

Day5 focused on enhancing the robustness and scalability of the Nike Store through:

✓ Comprehensive Testing
✓ Efficient Error Handling
✓ Backend Optimizations

Key areas of improvement included:
Integration Testing: Ensuring smooth interactions between components.
Input Validation: Preventing errors and enhancing security.
Performance Optimization: Improving speed and efficiency.
Responsiveness Monitoring: Ensuring a seamless experience across devices.

Key Achievements :

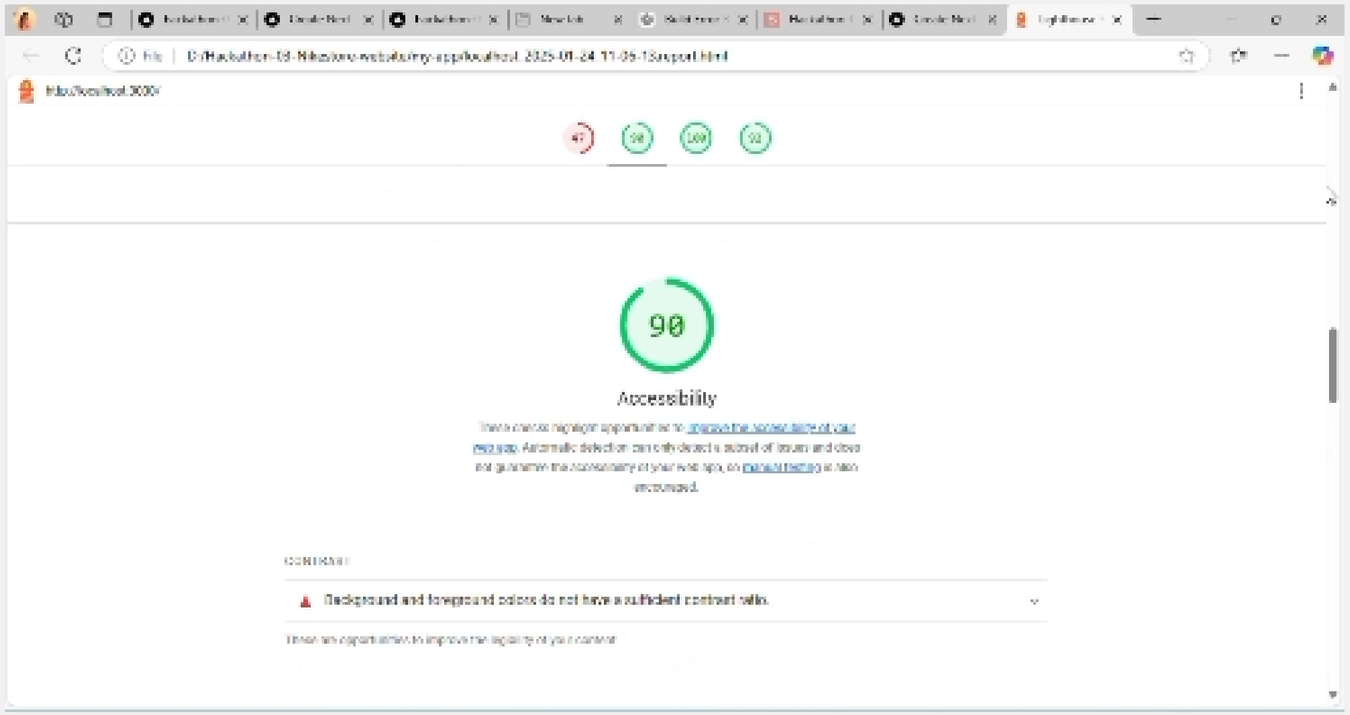
✓ Test Cases Summary
• Total Test Cases: 7
• Status: All test cases passed
✓Critical Tests Covered:
• Product Page Validation (Listing & Details)
• API Error Handling (With Fallback Mechanisms)
• Mobile Responsiveness Check

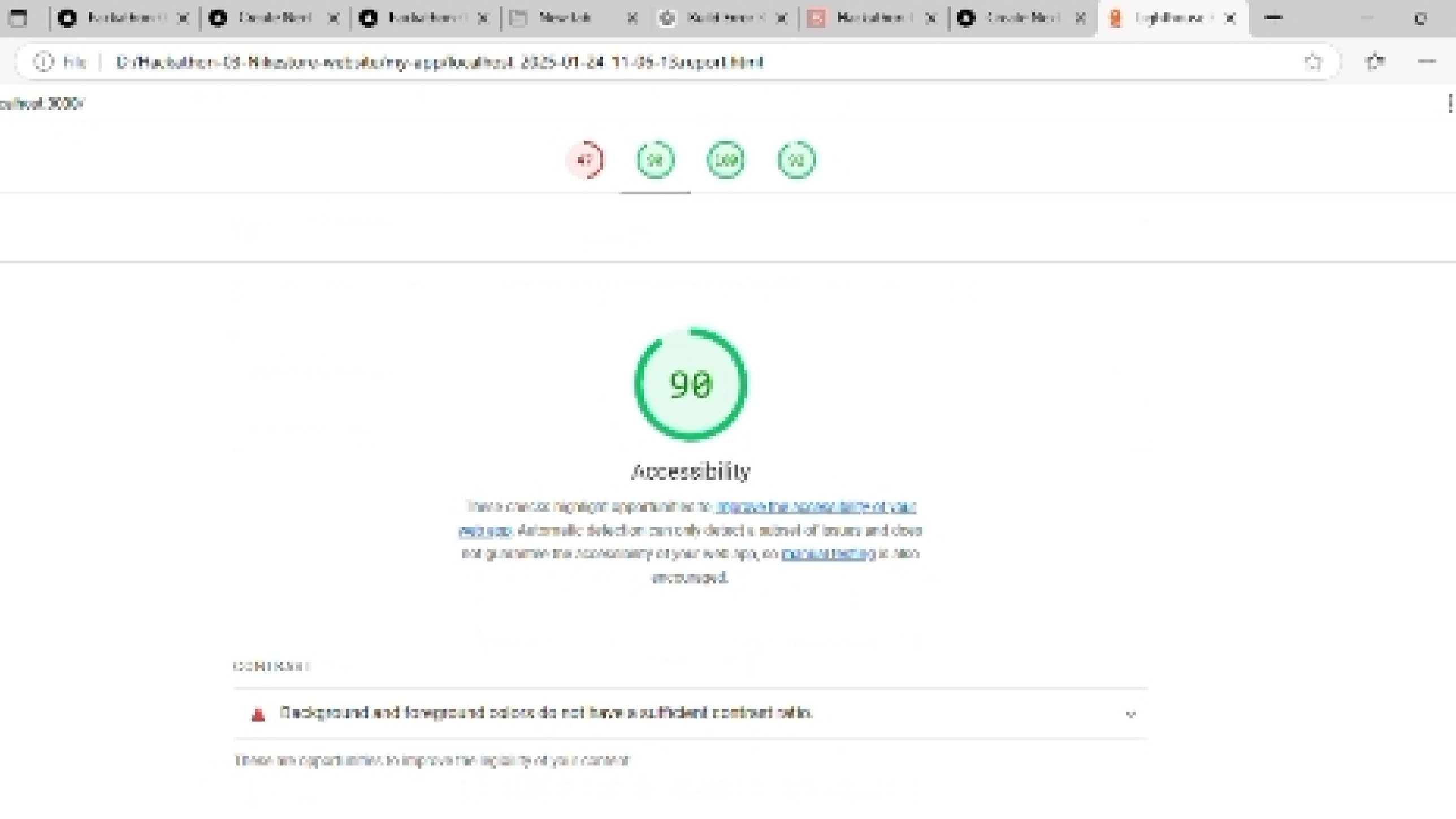
✓ Lighthouse Performance Score: 47/100

• Issue Identified: Device-specific CPU slowdown affecting performance.

2. Performance insights:

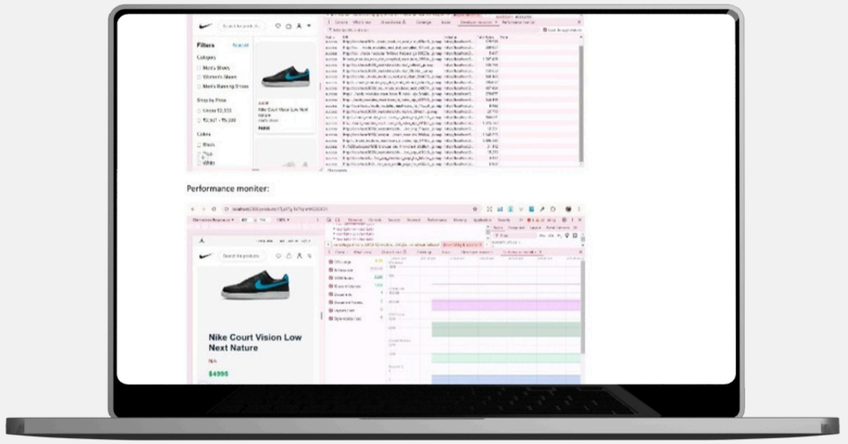
- Opportunities to optimise page loading and resource usage.
- Accessibility, SEO, Best Practices : All scored 90+




90
Accessibility
CONTRAST
Background and foreground colors do not have a sufficient contrast ratio.

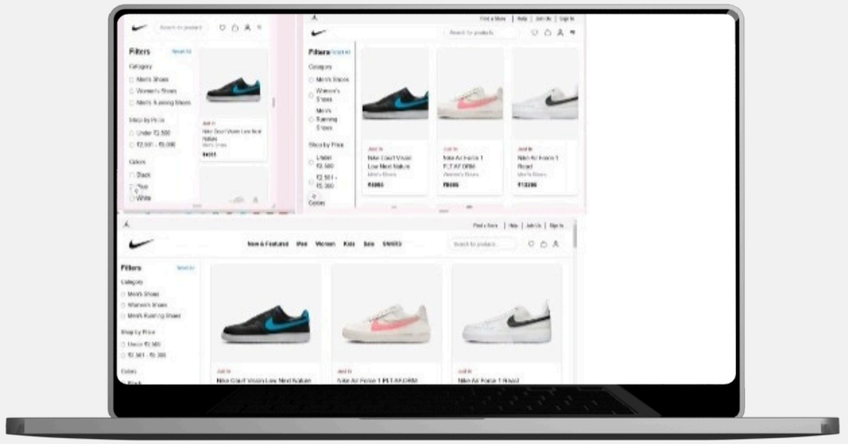
3. Debugging and Monitoring:

- Network Tab insights:
- All resources successfully fetched without any error.
- Minimal delays in API requests with optimised payloads.
- Performance Monitoring :
- DOM size and event listeners optimised for responsive behaviour
  JS heap size stable under load



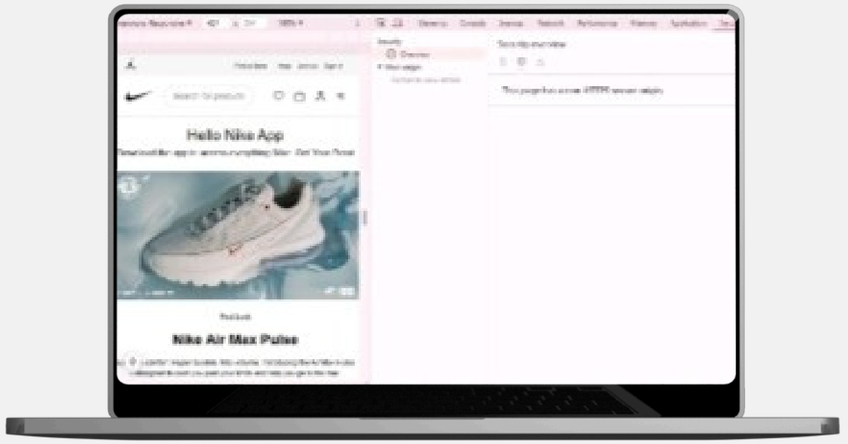
4. Responsiveness testing:

- Mobile layout resized effectively for various screen dimensions.
- No UI disruptions or responsiveness issues were identified.



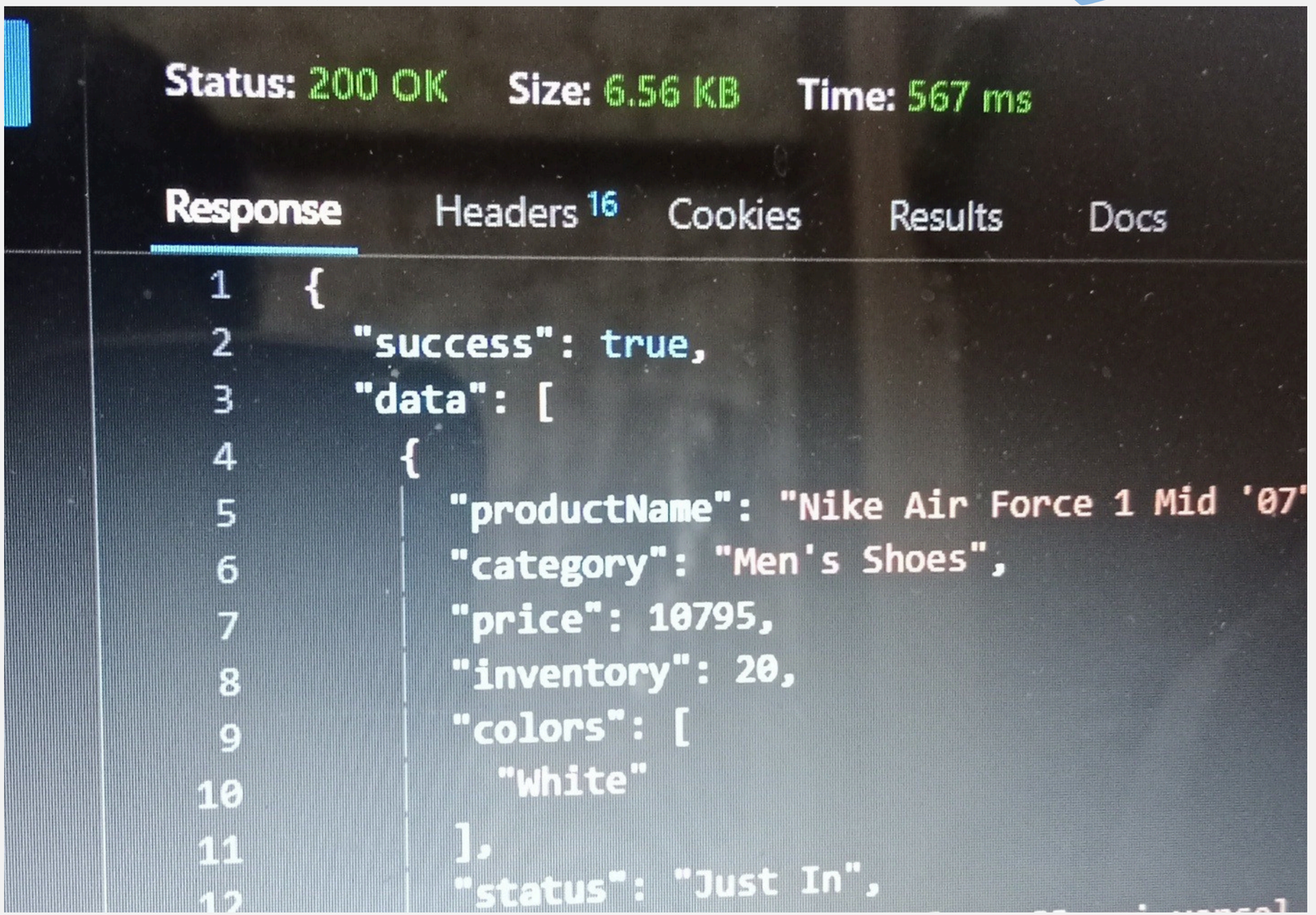
5. Security observation:

- Page tested under non http origin.
- Recommendations implement HTTPS for improved security and user trust.



6. API Response Validation:

- API endpoints (https://template-03-api.vercel.app/api/products) tested via Postman.
- Response status: 200 OK
- All fields fetched accurately with valid data structure.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Size: 6.56 KB
Time: 567 ms
Response
Headers 16
Cookies
Results
Docs
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"category": "Men's Shoes",
"price": 10795,
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"colors": [
"White"
],
"status": "Just In",

Thank you very much!

Presented By Rida Fatima