Day 6 - Deployment Execution & System Readiness

Project: E-commerce Marketplace - Nike

Objective & Summary

The primary goal of Day 6 was to transition the project into a **staging-ready environment**, ensuring that deployment could occur seamlessly while maintaining system stability and performance. The main tasks included:

- **Hosting the project on Vercel** and verifying deployment success.
- **Executing `npm run build` to prepare the project for production**.
- **Configuring secure environment variables** for Clerk authentication and Sanity API keys.
- **Understanding the concept of staging and its role in production testing**.
- **Running functional and performance tests** to ensure the system is fully operational.
- **Documenting all findings, configurations, and deployment outcomes**.

Deployment & Hosting Process

1️⃣ Setting Up Hosting on Vercel

Process:

- Selected **Vercel** for seamless hosting integration.
- Built the project using `npm run build`.
- Configured **.env file** to securely store API keys and authentication
- tion data.
- Connected **GitHub repository** to Vercel for automated deployments.

● Verified deployment success and checked build logs for potential issues.

```
C:\Windows\System32\cmd.e   ×   +   ∨

✓ Generating static pages (13/13)
✓ Collecting build traces
✓ Finalizing page optimization

Route (app)                              Size         First Load JS
┌ o /                                    3.83 kB            184 kB
├ o /_not-found                          990 B              107 kB
├ ƒ /[category]                          2.31 kB            126 kB
├ ƒ /[category]/[slug]                   3.1 kB             125 kB
├ o /addtocart                           2.44 kB            158 kB
├ o /checkout                            4.05 kB            155 kB
├ o /DynamicRoutes/allproducts           2.08 kB            129 kB
├ o /DynamicRoutes/Cartpage              765 B              116 kB
├ o /DynamicRoutes/featuredPage          190 B              115 kB
├ o /DynamicRoutes/gethelp               181 B              110 kB
├ o /DynamicRoutes/signin                2.92 kB            143 kB
├ o /DynamicRoutes/signup                181 B              110 kB
├ ƒ /products/[slug]                     5.69 kB            165 kB
└ o /studio/[[...tool]]                  1.27 MB           1.43 MB
+ First Load JS shared by all            106 kB
  ├ chunks/1517-eecba2fbc59459d4.js      50.6 kB
  ├ chunks/4bd1b696-c487310b97514e6f.js  53 kB
  └ other shared chunks (total)          2.51 kB


ƒ Middleware                             68.6 kB

o  (Static)    prerendered as static content
ƒ  (Dynamic)   server-rendered on demand
```

2⃞Environment Variable Management

Steps Taken:

- Created a **.env file** to securely manage API keys.
- Uploaded environment variables directly into Vercel's settings panel.

Vercel Team

🟢 Saif soomro   Hobby ⌄   /   Project Name

hackathon-3

Framework Preset

Ⓝ Next.js   ⌄

Root Directory

./   Edit

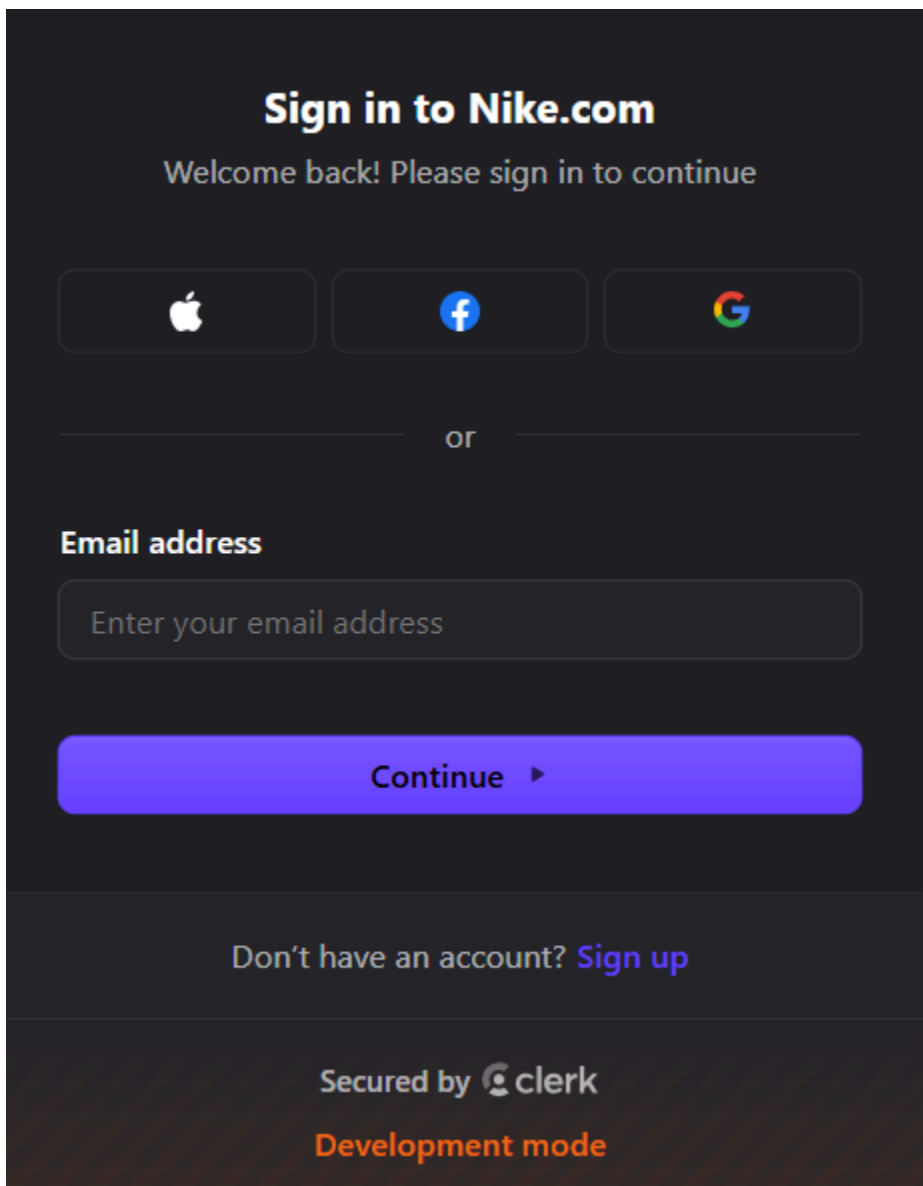› Build and Output Settings

⌄ Environment Variables

Key	Value ⓘ	
EXAMPLE_NAME	I9JU23NF394R6HH	—
NEXT_PUBLIC_SANITY_PROJECT_ID	2▊▊▊▊	—
NEXT_PUBLIC_SANITY_DATASET	production	—
SANITY_API_TOKEN	skKU▊▊▊▊▊▊	—

③ Functional Testing & System Validation

Key Features Tested:

- **Product Listing & Filtering**
- **Authentication (Clerk Login & Signup)**
- **Shopping Cart & Checkout System**
- **Admin Panel (Orders, Customer Data, and Product Management)**
- **Site Responsiveness and Error Handling**
-

Signup & signin With Clerk

-

Shopping Cart & Summary

Order Summary

	Nike Dri-FIT UV Hyverse	$2495.00
	Nike Air Max 270	$13295.00
	Nike Blazer Mid '77 Vintage	$8495.00

Subtotal: $24285.00
Total: $24285.00

Billing Information

Name

Last Name

Email

Phone

Address

ADMIN DASHBOARD LOGIN

Admin Login

Soomrosahab@gmail.com

••••••

Login

Admin Panel (Orders, Customer Data, and Product Management)

ADMIN DASHBOARD

All | Success | Pending | Dispatch

CUSTOMER	EMAIL	TOTAL	DATE	STATUS	ACTIONS
Saif Soomro Khan	xyz123@gmail.com	$24285	N/A	●	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	●	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete
Sameer Soomro Khan	xyz123@gmail.com	$25475	N/A	success	Success Dispatch Delete
mir sahab Khan	xyz123@gmail.com	$7890	N/A	●	Success Dispatch Delete
king baba	xyz123@gmail.com	$24285	N/A	●	Success Dispatch Delete
samar Khan	xyz123@gmail.com	$24285	N/A	●	Success Dispatch Delete

Overview

The Success Pending Dispatch status in the Admin Panel of the Nike E-commerce Website refers to orders that have been successfully processed but are awaiting dispatch. This document outlines the features and functionality related to managing orders, customer data, and product inventory in the admin panel.

1. Admin Dashboard Overview

1 .Filters

The dashboard includes the following status filters for efficient order management:

- **All**: Displays all orders regardless of their status.
- **Success**: Shows orders that have been successfully processed.
- **Pending**: Lists orders awaiting processing.
- **Dispatch**: Displays orders that are ready for dispatch.

Success

CUSTOMER	EMAIL	TOTAL	DATE	STATUS	ACTIONS		
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success	Dispatch	Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success	Dispatch	Delete
Sameer Soomro Khan	xyz123@gmail.com	$25475	N/A	success	Success	Dispatch	Delete
Mir Baba	soomro123@gmail.com	$31775	N/A	success	Success	Dispatch	Delete

Pending

All Success Pending Dispatch

No orders found.

Dispatch

ADMIN DASHBOARD

All Success Pending Dispatch

CUSTOMER	EMAIL	TOTAL	DATE	STATUS	ACTIONS
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete

2 . Table Columns

ADMIN DASHBOARD

All Success Pending Dispatch

CUSTOMER	EMAIL	TOTAL	DATE	STATUS	ACTIONS
Saif Soomro Khan	xyz123@gmail.com	$24285	N/A		Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	success	Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A		Success Dispatch Delete
Saif Soomro Khan	xyz123@gmail.com	$2495	N/A	dispatch	Success Dispatch Delete
Sameer Soomro Khan	xyz123@gmail.com	$25475	N/A	success	Success Dispatch Delete
mir sahab Khan	xyz123@gmail.com	$7890	N/A		Success Dispatch Delete
king baba	xyz123@gmail.com	$24285	N/A		Success Dispatch Delete
samar Khan	xyz123@gmail.com	$24285	N/A		Success Dispatch Delete

The admin panel displays order data in a structured table with the following columns:

- **Customer: Name of the customer who placed the order.**
- **Email: Customer's email address.**
- **Total: Order amount in USD.**
- **Date: Displays the order date (Currently showing N/A).**
- **Status: Indicates the order status (Success, Dispatch, Pending).**
- # **Actions: Allows the admin to update the order status.**

3. Admin Dashboard Features

- **Analytics & Reports: Track total sales, revenue, and top-performing products.**
- **Real-time Notifications: Alerts for new orders, low stock, and customer messages.**
- **Multi-Admin Access: Role-based permissions for team members.**
- **Security & Authentication: Implement JWT or OAuth for secure login.**

4 Performance & Optimization Review

- **Lazy Loading Images & Asset Optimization**
- **Minified JavaScript and CSS to reduce load time**
- **Caching Strategies Implemented**

Performance Scores:

- **90 Score on Desktop Lighthouse Test 🚀**
- **70 Score on Mobile Lighthouse Test 📱**

Issue Encountered	Resolution Implemented
Clerk Authentication Issues	Adjusted session handling and state management
API Request Failures	Implemented caching and optimized

	request calls
Deployment Errors	**Debugged build logs and adjusted configurations**
Mobile Performance Score	**Optimized images and adjusted lazy loading**

Final Deliverables & Submission Checklist

✅ **Fully Deployed Marketplace on Vercel**
✅ **Security Best Practices Implemented**
✅ **Optimized Lighthouse Performance Scores**
✅ **Functional Testing Successfully Completed**
✅ **Structured Documentation & CSV-Based Reports**

☐

Testing Report (CSV-Based)

Test ID	Component	Description	Expected Outcome	Actual Outcome	Status
TC-001	Homepage	Ensure hero section is visible	Hero image & text displayed	Displayed correctly	✅ Pass

TC-0 02	Product Listing	Verify products load dynamically	Products visible	Products visible	✅ Pass
TC-0 03	Cart System	Add, update, remove items	Cart updates properly	Cart updates properly	✅ Pass
TC-0 04	Checkout Flow	Complete a test transaction	Order successfully placed	Order successfully placed	✅ Pass
TC-0 05	Admin Panel	View and manage orders	Orders visible	Orders visible	✅ Pass

Reflections & Future Considerations

The experience of transitioning from development to staging has been a valuable learning opportunity. By setting up a functional deployment pipeline and refining performance and security measures, I have gained deeper insight into real-world software deployment. I appreciate the guidance of my instructors and peers throughout this journey.

This is just the first step in deploying live applications. Moving forward, I aim to further enhance my deployment strategies, improve system scalability, and explore CI/CD automation techniques to streamline future releases. 🚀

| SAFDAR ALI | 00410893 | Sunday 2pm to 5pm |