

Day 6 - Deployment Preparation and Staging Environment Setup

Objective

The objective of Day 6 is to prepare and deploy the marketplace application to a staging environment using Vercel. This includes configuring hosting settings, securely managing environment variables, and validating the application in a production-like environment. Additionally, all project activities and test results are documented for review.

Why Vercel?

Vercel is chosen for hosting due to its:

- **Ease of Use:** User-friendly interface for seamless deployment.
- **GitHub Integration:** Connects easily with GitHub repositories.
- **Automatic Deployments:** Re-triggers deployment whenever code is pushed to GitHub.

Step Followed For Deployment:

- Logged into my Vercel Account.
- On the Vercel dashboard click on Add new project.
- Select my marketplace hackathon project.
- Configured environment variables in project setting.
- Deploy the application to a staging environment to test it in a production-like setting.
- Validate that deployment builds successfully and the site loads correctly.

Deployment link: <https://hackathon-2-flax.vercel.app/>

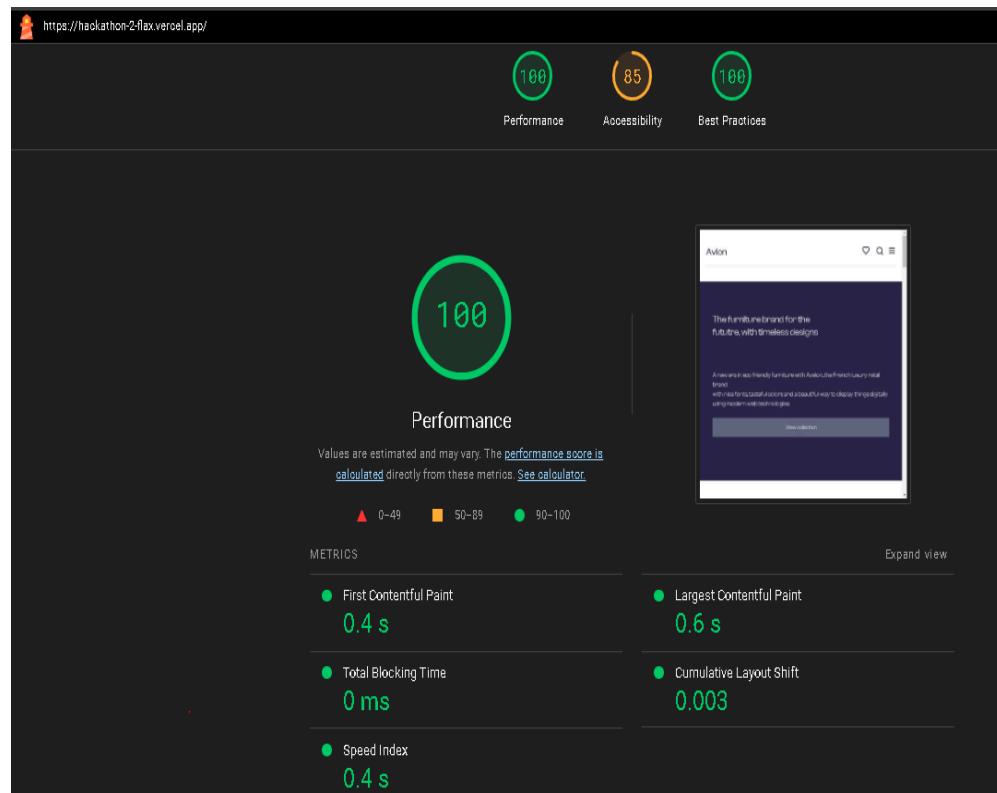
Staging Environment Testing:

1. Functional Testing

Simulated Real-World Usage: Performed tasks such as browsing products, adding items to the cart, and checking out to ensure functionality meets user expectations.

2. Performance Testing

- Analyze speed and load times with Lighthouse.
- Key metrics: Page load time and Cumulative Layout Shifts (CLS).



3. Security Testing

- Validate HTTPS usage and secure API communication.

- Ensure input sanitization using Zod and React Hook Form to prevent vulnerabilities like SQL injection and XSS.

First Name

First name is required

Last Name

Last name is required

Phone Number

We will contact you on this number.

Phone number is required

Email

Invalid email address

City

City is required

Full Address

House number is required

Postal Code

Postal code is required

Country / Region

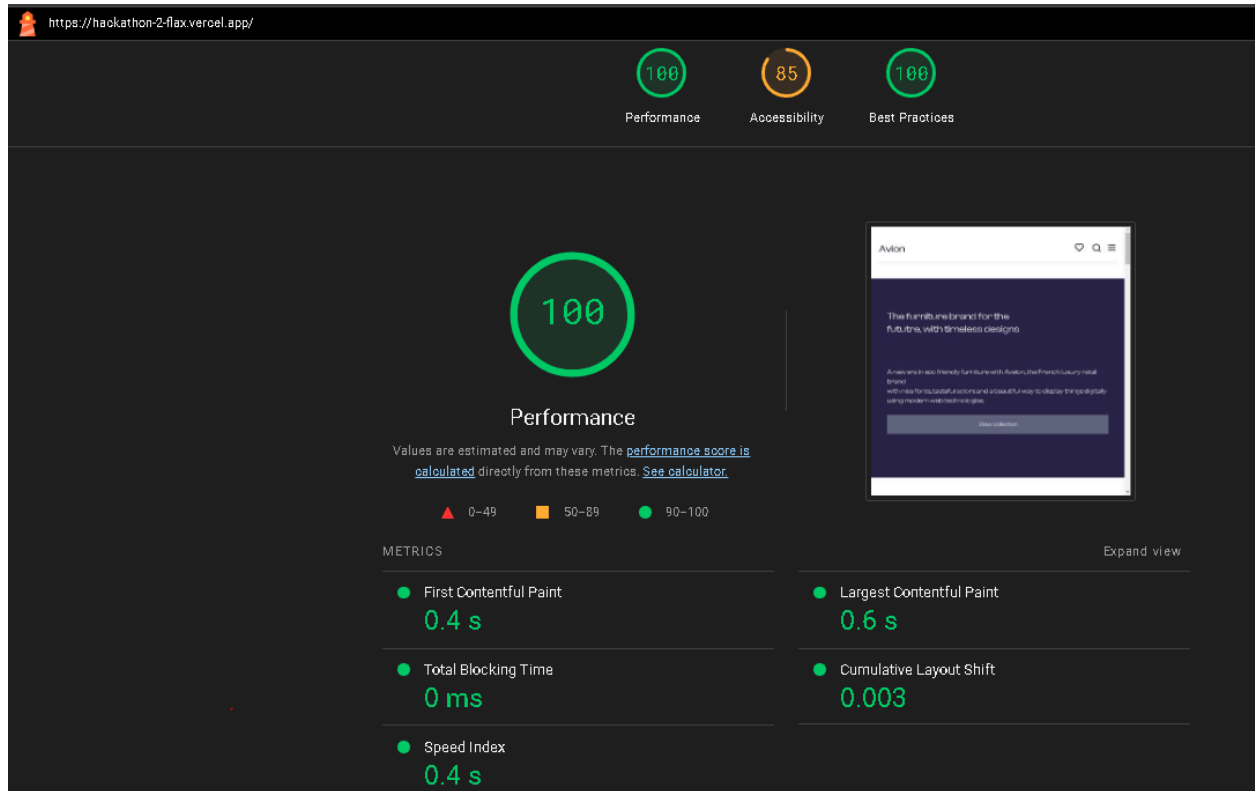
4. Test Case Reporting:

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Remarks
TC001	Validate Product listing page	Open products page > Verified products	Products displayed correctly.	Products displayed correctly.	Passed	High	Passed
TC002	Validate Dynamic routing for product details	Click on a product > Verified it's details.	Product details displayed correctly.	Product details displayed correctly.	Passed	High	Passed

TC003	Validate Dynamic routing for product categories	Navigate through different categories > Verified products based on their category	Products display based on their category.	Products display based on their category.	Passed	High	Passed
TC004	Check Cart functionality	Add product to cart > Verify cart contents	Cart items with correct color, size, and quantity.	Cart updates as expected.	Passed	Medium	Works as expected
TC005	Check Checkout functionality	Navigated to checkout from cart page > Verified form submission & cart Items.	Valid form submission & Cart items display with subtotal amount.	Valid form submission & Cart items display with subtotal amount.	Passed	High	Handled gracefully
TC006	Check Search products functionality	Searched for products by their names > Verified search functionality.	Correct product display, based on searched items.	Correct product display, based on searched items.	Passed	Low	Test successful
TC007	Check Products filtering functionality	Open products page > Performed filtering of products by categories and prices.	Correct products display based on categories selected and filtered price.	Correct products display based on categories selected and filtered price.	Passed	High	Test successful
TC008	Check Wishlist functionality	Toggled products in wishlist from products listing > Verified wishlist.	Correct wish items display, in wishlist.	Correct wish items display, in wishlist.	Passed	High	Test successful
TC009	Check Pagination functionality	Open products listing and > Verified pagination functionality.	products displayed based on products per page.	products displayed based on products per page.	Passed	Medium	No issues found
TC010	Ensure responsiveness on mobile	Resize browser window > Check layout	Layout adjusts properly to screen size	Responsive layout working as intended	Passed	Medium	Test successful
TC011	Test API error handling	Disconnect API > Refresh page	Show fallback UI with error message	Error message shown	Passed	Medium	Handled gracefully

5. Performance Testing With Lighthouse:

HomePage:



Products listing:

