Day 6: Deployment Preparation and Staging Environment Setup

Slide 1: Title Slide

- **Title**: Deployment Preparation and Staging Environment Setup
- **Subtitle**: Day 6 Overview
- **Date**: January 21, 2025
- **Prepared By**: Muhammad Qasim

Slide 2: Objective

- Prepare the marketplace for deployment.
- Set up a staging environment.
- Ensure readiness for a customer-facing application.
- Build on testing and optimization efforts from previous stages.

Slide 3: Key Learning Outcomes

1. Configured a staging environment using platforms like **Vercel**.
2. Linked GitHub repository to hosting platform for seamless integration.
3. Ensured secure setup of environment variables.
4. Validated application functionality in a production-like setting.
5. Conducted rigorous testing and documented results.

Slide 4: Environment Management

- **TRN (Training)**: Practice and onboarding.
- **DEV (Development)**: Local code writing and testing.
- **SIT (System Integration Testing)**: Validate system integrations.
- **UAT (User Acceptance Testing)**: Stakeholder validation.
- **PROD (Production)**: Live environment for users.
- **DR (Disaster Recovery)**: Backup for critical issues.

Slide 5: Deployment Strategy

- Selected **Vercel** as the hosting platform.
- Configured environment variables using secure dashboards.
- Planned seamless interaction with backend services like Sanity CMS.
- Deployed application to staging environment.
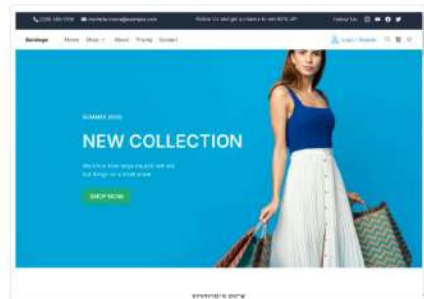
Slide 6: Testing Highlights

- **Functional Testing**: Verified product listings, search, and cart operations.
- **Performance Testing**: Utilized **Lighthouse** and **GTmetrix**.
- **Security Testing**: Ensured HTTPS usage, secure APIs, and input validation.
- Documented results in professional test case reports.

PageSpeed Insights

Copy link   Docs

📱 Mobile   🖥 Desktop

100   82   96   100
Performance   Accessibility   Best Practices   SEO

100

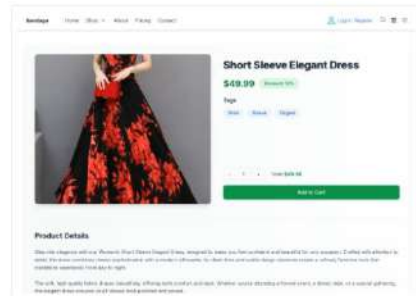**Performance**

Values are estimated and may vary. The performance score is calculated
directly from these metrics. See calculator.

▲ 0–49   🟧 50–89   🟢 90–100

Table1

Test Case ID	Description	Steps	Expected Result	Actual Result	Status
TC001	Product Listing	1. Navigate to home page.	Products should display.	Products displayed correctly.	Passed
TC002	Add to Cart	1. Click add to cart button.	Item should add to cart.	Item added successfully.	Passed
TC003	User Registration	registration page. 2. Enter valid credentials. 3. Click	Account should be created successfully.	Account created successfully.	Passed
TC004	User Login	e to login page. 2. Enter valid credentials. 3. Click lo	User should be logged in successfully.	User logged in successfully.	Passed
TC005	Search Functionality	a valid search term in the search bar. 2. Click search	Relevant search results should display.	Relevant search results displayed.	Passed
TC006	Image Loading	. View a product page. 2. Observe the product imag	Product image should load correctly.	Product image loaded correctly.	Passed
TC007	Cart Quantity Update	Add an item to cart. 2. Update the quantity in the ca	Cart total should update correctly.	Cart total updated correctly.	Passed
TC008	Checkout Process	lid billing and shipping information. 3. Select paym	Order should be placed successfully.	Order placed successfully.	Passed

Sheet1

Slide 7: Documentation and Organization

- Created a comprehensive **README.md**.
- Organized project files in a clear folder hierarchy:
  - `documents/`
  - `src/`
  - `public/`
- Included:
  - Test case reports (CSV format).
  - Performance reports.
  - Deployment instructions.

Slide 8: Key Achievements and Next Steps

- Successfully deployed a staging environment.
- Validated deployment readiness with detailed testing.
- **Next Steps:**
  - Resolve documented issues.
  - Transition to production deployment.
  - Continue refining for optimal user experience.