Wear Smart: Deployment Preparation & Staging Environment Setup

Objective:
Prepare "Wear Smart" for a successful deployment by setting up a staging environment, configuring hosting services, and ensuring seamless integration. The goal is to create a real-world testing setup before launching, following industry standards for deployment and security.

Key Goals
Deployment Strategy: Implement structured deployment on a reliable hosting service.
Staging Environment: Establish a pre-production testing setup.
Environment Variables: Securely store and manage sensitive data.
Testing : Validate all functionalities through systematic testing.
Performance & Security: Optimize performance and implement security measures.
Documentation: Maintain a deployment guide for future reference.

Step 1: Hosting Platform Setup
Hosting Choice:
Selected Vercel for its efficient deployment and scalability.
Connected the GitHub repository for automated build and deployment processes.

Repository Integration:
Linked the Wear Smart GitHub repository to Vercel.
Configured deployment settings for seamless updates.

Step 2: Configure Environment Variables
Created a env.localfile to store sensitive data like API keys and database credentials.
Uploaded environment variables to Vercel's dashboard for secure handling.
Ensured that production credentials differ from staging ones to prevent conflicts.

Step 3: Deploy to Staging
 Successfully deployed the application to Vercel's staging environment.
 Ensured the build completed without errors and verified UI responsiveness.
 Checked API calls and Sanity database connections for seamless data retrieval.

Step 4: Staging Environment Testing
Functional Testing:
- **Product Listings:** Ensured all products appear correctly.
- **Product Details:** Verified price, description, and images are accurate.
- **Shopping Cart:** Validated adding, updating, and removing items.
- **Filters & Categories:** Ensured filtering functions return correct results.
- **Dynamic Routing:** Checked navigation between different product pages.

Performance Testing
- Used Lighthouse to analyze page speed and responsiveness.
- Ensured proper loading times across devices and optimized assets like images and scripts.

Security Testing
- **Tested API endpoints for secure communication over HTTPS.**
- **Verified input validation to prevent SQL injection and cross-site scripting (XSS).**
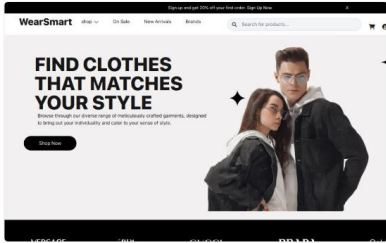- **Ensured authentication tokens are properly stored and expire securely.**

Vercel :

```
info  - Need to disable some ESLint rules? Learn more here: https://nextjs.org/docs/basic-features/eslint#disabling-rules
✓ Linting and checking validity of types
✓ Collecting page data
✓ Generating static pages (7/7)
✓ Collecting build traces
✓ Finalizing page optimization
```

mannan-e-commerce

Repository   Usage   Domains   Visit ∨

Production Deployment

Build Logs   Runtime Logs   ↺ Instant Rollback

Deployment
mannan-e-commerce-jzmfitxem-abdul-mannans-projects-aafa0406.vercel.app

Domains
e-commerce-web-pearl-one.vercel.app ↗ +2

Status   Created ⓘ
● Ready   3m ago by abdulmannan991

Source
⅃⅃ main
-○- ad561fc Enhancing web

> Deployment Configuration

⊗ Fluid Compute ✓ Deployment Protection ⊗ Skew Protection

Github Repo :

Conclusion

"Wear Smart" is now deployment-ready with a fully configured staging environment, optimized performance, and secure integrations. With thorough testing and structured deployment, the platform is set for a seamless and reliable launch.