Day 6 — Deployment Preparation & Staging Environment Configuration

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Marketplace Name: E-commerce Marketplace

Task: Day 6 — Deployment Preparation & Staging Environment Configuration

Class Slot: Saturday, 2:00 PM to 5:00 PM

Hosting Platform Setup & Configuration

- **Platform Chosen**: Vercel
- **Deployment URL**: https://ghproject-6ma99sukt-shahzain-alis-projects.vercel.app/
- **GitHub Repo**: https://github.com/Shahzain-Bangash/ghproject

Build Settings: Custom build settings applied for enhanced performance and security.

- **Environment Variables**: Securely configured specific variables for deployment.

Secure Environment Variables Configuration

- A .env file was created with the following key variables:

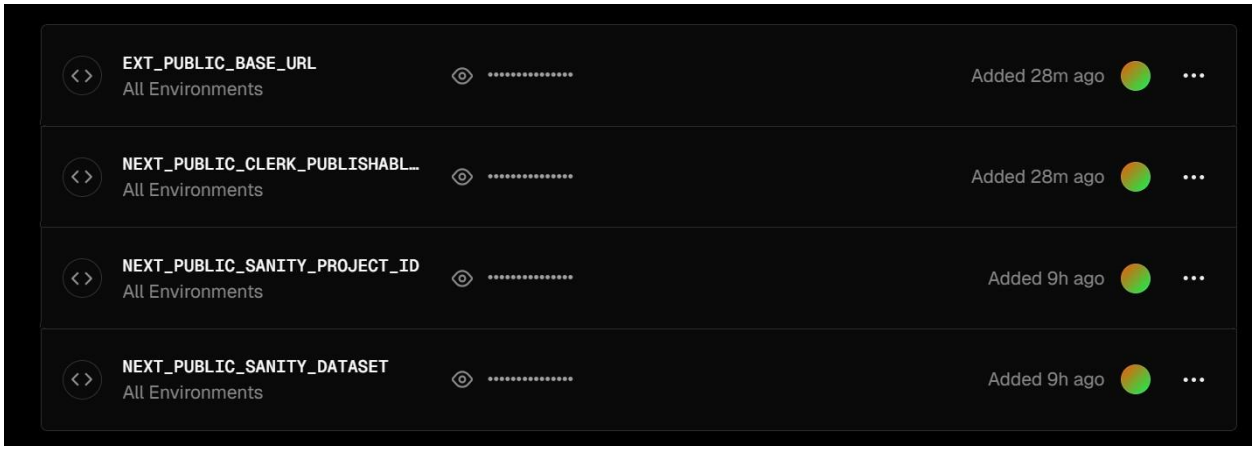
○ NEXT_PUBLIC_SANITY_PROJECT_ID: Unique Sanity project identifier.

○ NEXT_PUBLIC_SANITY_DATASET: Dataset name for production data.

○ API_KEY: Key for third-party service integration.

Deployment Tip:

- Make sure the .env file is properly configured and securely uploaded to Vercel.
- Always verify the environment variables in the **Vercel Project Settings** to ensure they are correctly mapped before deployment.

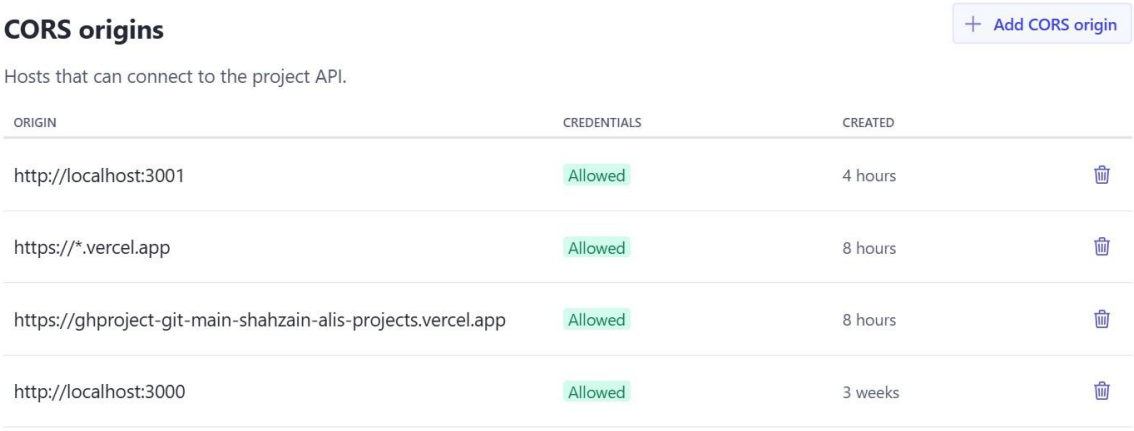


Sanity Deployment URL Configuration

- **Sanity CMS Integration**: If your data is being fetched from Sanity CMS, ensure the deployment URL is defined in the **CORS (Cross-Origin Resource Sharing)** settings of Sanity.

○ **Steps**:

1. Go to the **Sanity Project Settings > API > CORS Origins**.
2. Add your deployment URL ghproject-qkq7kibl6-shahzain-alis-projects.vercel.app to the allowed origins list.



Why It's Important:

- This step ensures secure communication between your deployed application and Sanity CMS.

Clerk Webhook Setup

- If **Clerk** is used for authentication, configure webhooks for secure operations:

Important Notes:

- Ensure your application securely verifies the webhook signature provided by Clerk.
- Test the webhook functionality to confirm that Clerk events (like user creation or deletion) are properly received and handled.

Why It's Important:

- Webhooks ensure real-time synchronization between Clerk and your application.

Clean Code Practices Before Deployment

- **Unused Imports & Functions**:

○ **Review Codebase**: Ensure that all unused imports, variables, and functions are removed.

○ Use tools like **ESLint** or **Prettier** to detect unused code.

○ Run the npm build command locally to identify any unused dependencies or warnings.

Why It's Important:

1. Unused code can cause unexpected errors during deployment.
2. It bloats the bundle size, impacting performance.
3. Cleaning ensures the application is optimized and error-free.

Error Check Before Deployment

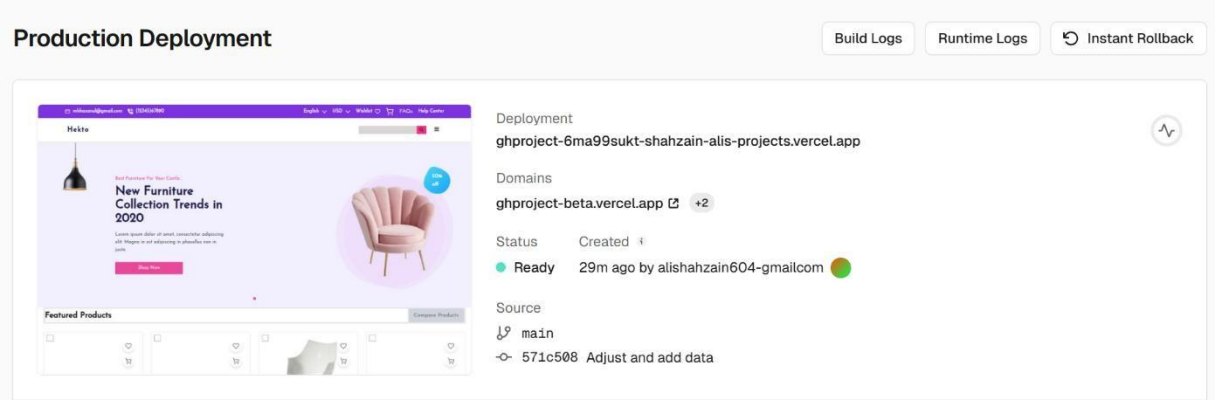
● **NPM Build Check**:

○ Before deploying, the codebase was tested locally using the npm build command to detect and resolve any build errors.

○ **Outcome**: This process ensured that the deployment was free of potential build-related issues.

Staging Deployment & Verification Process

- **Staging Environment**: Successfully deployed the application to Vercel.
- **Deployment Status**: Completed without issues.



- **Site Verification**: Conducted thorough testing to confirm proper loading and functionality.

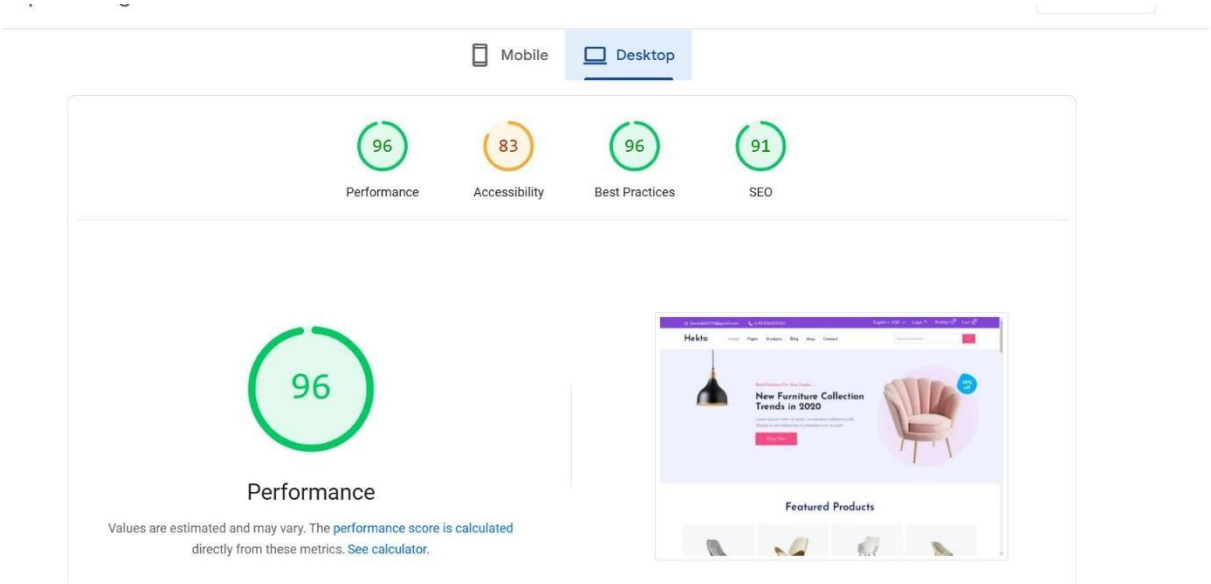
```
✓ Collecting build traces
✓ Finalizing page optimization

Route (app)                              Size     First Load JS
┌ ○ /                                    2.59 kB        146 kB
├ ○ /_not-found                          880 B          88.8 kB
├ ○ /about                               1.8 kB         94.9 kB
├ ƒ /api/review                          0 B               0 B
├ ƒ /api/shipengine                      0 B               0 B
├ ƒ /api/webhook                         0 B               0 B
├ ƒ /blog/[id]                           6.42 kB        110 kB
├ ○ /blogs                               485 B          100 kB
├ ○ /cart                                6.23 kB        174 kB
├ ○ /contact                             477 B          93.6 kB
├ ƒ /products/[slug]                     18.9 kB        162 kB
├ ƒ /search                              1.71 kB        145 kB
├ ○ /shipping                            4.71 kB        124 kB
├ ○ /shop                                2.37 kB        146 kB
├ ƒ /sign-in/[[...sign-in]]              4.47 kB        130 kB
├ ƒ /sign-up/[[...sign-up]]              3.99 kB        127 kB
├ ○ /studio/[[...tool]]                  1.3 MB         1.46 MB
├ ○ /success                             3.95 kB        104 kB
└ ○ /wishlist                            4.22 kB        172 kB
+ First Load JS shared by all            87.9 kB
  ├ chunks/2117-c2449cbe7722dfe4.js      31.8 kB
  ├ chunks/fd9d1056-375afd9ebfb3f72d.js  53.6 kB
  └ other shared chunks (total)          2.52 kB


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

Performance Testing & Evaluation ●

Desktop Performance:

○ Verified optimal page load speed.

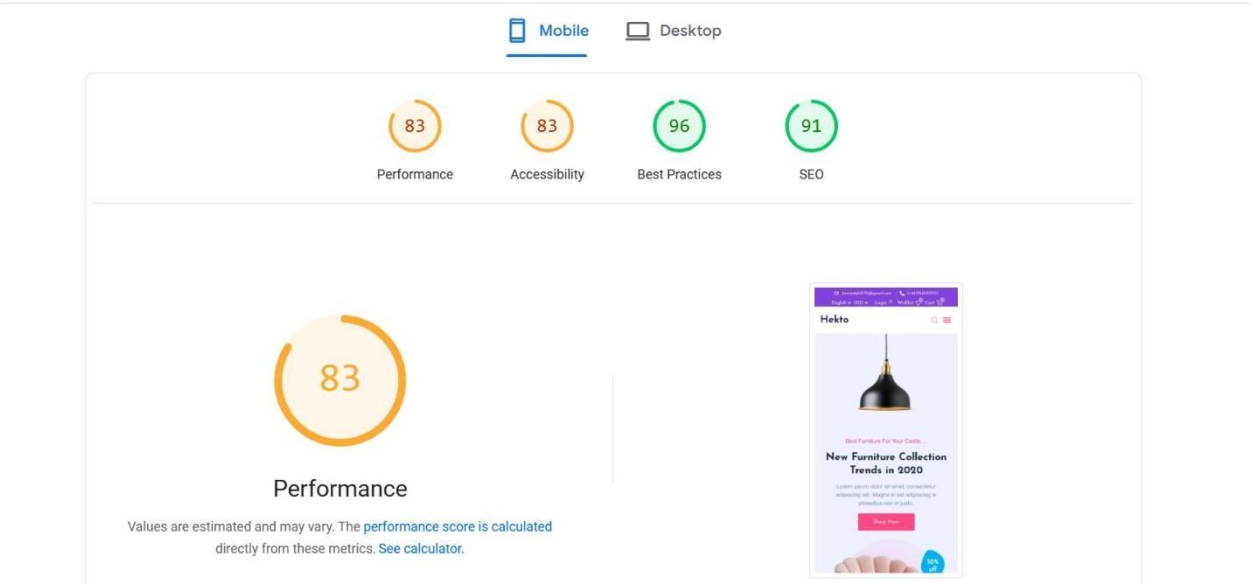
○ Ensured seamless browser compatibility across different platforms.



- **Mobile Performance**:

○ Conducted responsiveness tests to confirm mobile-friendly design.

○ Optimized page speed for an excellent mobile user experience.



Summary

- The deployment process was executed successfully, with additional steps for:

○ Configuring **Clerk webhooks**.

○ Secure **environment variable handling**.

○ Clean coding practices.

- Regular testing on desktop and mobile platforms ensured optimal performance and functionality.
