

Day 6 - Deployment Preparation and Staging Environment Setup - Avion

1. Deployment Strategy Planning

1.1 Hosting Platform Selection:

- Chose **Vercel** for deployment due to its seamless integration with Next.js and ease of use.
- Configured the repository for automatic deployment from GitHub.
- Ensured support for dynamic routes and server-side rendering.

1.2 Backend Service Interaction:

- Finalized the interaction with:
 - ◆ **Sanity CMS**: For content management and dynamic data.

2. Environment Variable Configuration

2.1 Securing Sensitive Data:

- Created a `.env` file to store API keys and sensitive credentials securely.

2.2 Hosting Platform Configuration:

- Uploaded environment variables to the Vercel dashboard to ensure secure access during deployment.
- Verified variable configuration by checking staging builds.

3. Environment Setup

3.1 Deployment:

- Deployed the application to a environment on Vercel.

- Validated the deployment by ensuring the build process completed without errors.

3.2 Verification:

- Confirmed the site loaded correctly in the environment.
- Tested basic functionalities like product listing, search, cart operations, and dynamic routing.

4. Environment Testing

4.1 Functional Testing:

- **Tools Used:**

- ◆ Postman for API response validation.

4.2 Performance Testing:

- Used **Lighthouse** to analyze site speed, responsiveness, and accessibility.
- Key Metrics:
 - ◆ **Performance:** 63
 - ◆ **Accessibility:** 90
 - ◆ **Best Practices:** 100
 - ◆ **SEO:** 92
- Submitted the detailed Lighthouse report in day-5 in the documentation folder.

Conclusion

The deployment preparation and environment setup for the Avion marketplace were successfully completed. The environment on Vercel was validated for functionality, performance, and security, ensuring the application is production-ready. Detailed documentation and testing report were added to the GitHub repository for future reference.