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Class: Sunday (2pm to 5pm)

Day 6 - Deployment Preparation and Staging Environment Setup - Comforty

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1. Overview

Today, I focused on getting my marketplace application ready for deployment. I set up a staging environment, configured hosting on Vercel, and ensured everything was running smoothly. Since my backend is powered by Sanity, I needed to make sure the integration was seamless. Performance testing was also a priority, and I used Lighthouse to evaluate how well the application was performing.

2. Deployment Strategy Planning

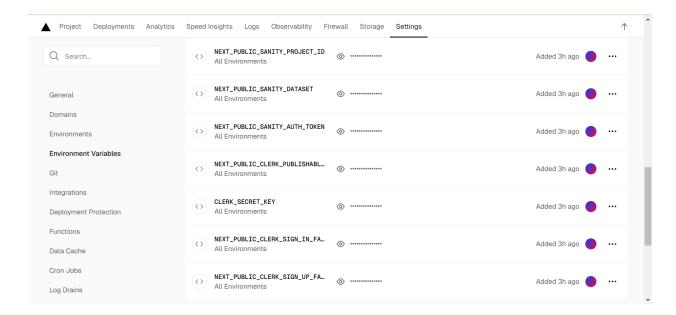
Since I planned to deploy the application on Vercel, I followed a structured approach:

- 1. Connected my GitHub repository to Vercel for seamless deployment.
- 2. Integrated Sanity as the backend service to ensure smooth data management.
- 3. Finalized how the frontend interacts with Sanity and third-party APIs.

3. Environment Variable Configuration

To ensure security and efficiency, I configured environment variables as follows:

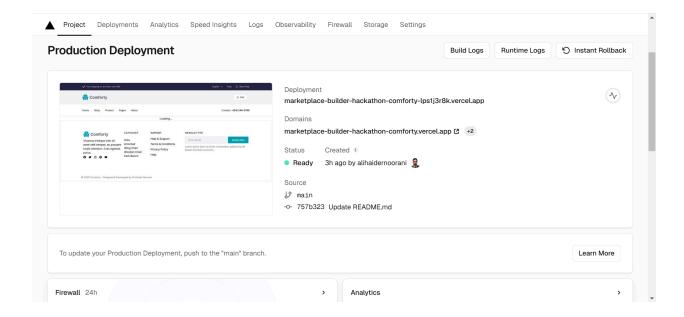
- 1. Created a .env file to store sensitive credentials like API keys and Sanity configuration.
- 2. Uploaded these environment variables securely in Vercel's settings.
- 3. Verified that all API calls and database requests were correctly referencing the environment variables.



4. Staging Environment Setup

With everything in place, I moved forward with setting up the staging environment:

- 1. Deployed the application to a staging environment using Vercel.
- 2. Checked for any build errors and ensured that the site was loading properly.
- Set up automated deployments so that new commits to the main branch would automatically trigger a deployment.



5. Staging Environment Testing

Testing was an essential step to validate the deployment. I conducted multiple tests to ensure everything was functioning as expected:

- 1. **Functional Testing:** Verified core workflows, such as product listing, cart operations, and user authentication.
- Performance Testing: Used Lighthouse to assess site speed, responsiveness, and overall performance. Addressed any areas where optimizations were needed.
- 3. **Security Testing:** Ensured HTTPS was properly implemented, validated input fields to prevent injection attacks, and checked that API keys were not exposed.
- 4. **Test Case Reporting:** Documented test results in a CSV format, noting any issues that required fixing.

6. Expected Output

By the end of the deployment preparation, I had:

- 1. A fully deployed staging environment on Vercel.
- 2. Securely configured environment variables.
- 3. A performance report generated using Lighthouse.
- 4. A structured GitHub repository with all necessary documentation.
- 5. A README.md file summarizing deployment steps and project structure.

7. Conclusion

Day 6 was a crucial step in ensuring my marketplace application was ready for production. By deploying to a staging environment on Vercel and integrating Sanity as the backend, I was able to create a smooth and efficient workflow. Using Lighthouse for performance testing provided insights into optimizations, making sure the application runs efficiently. The structured deployment process will help in maintaining a reliable and scalable system moving forward.