

Day 6:

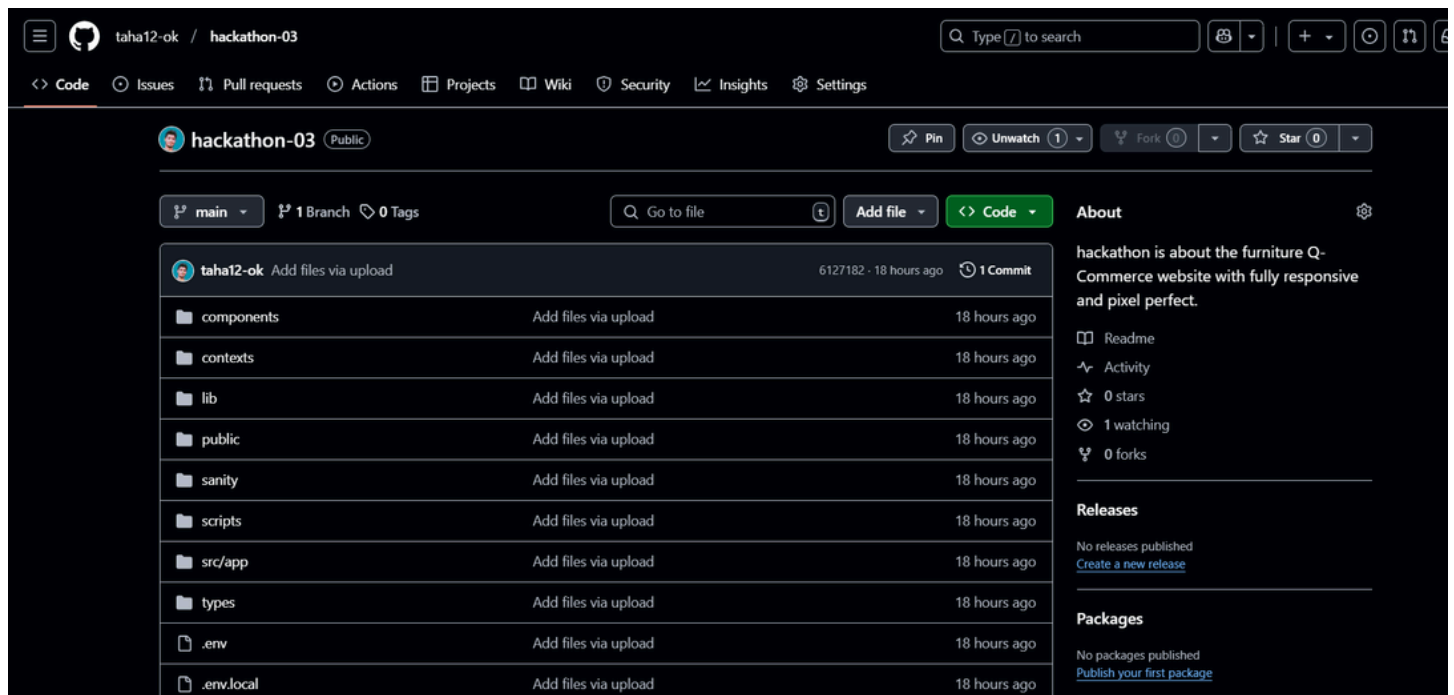
Testing, Error Handling, And Backend Integration Refinement:

Deployment Preparation

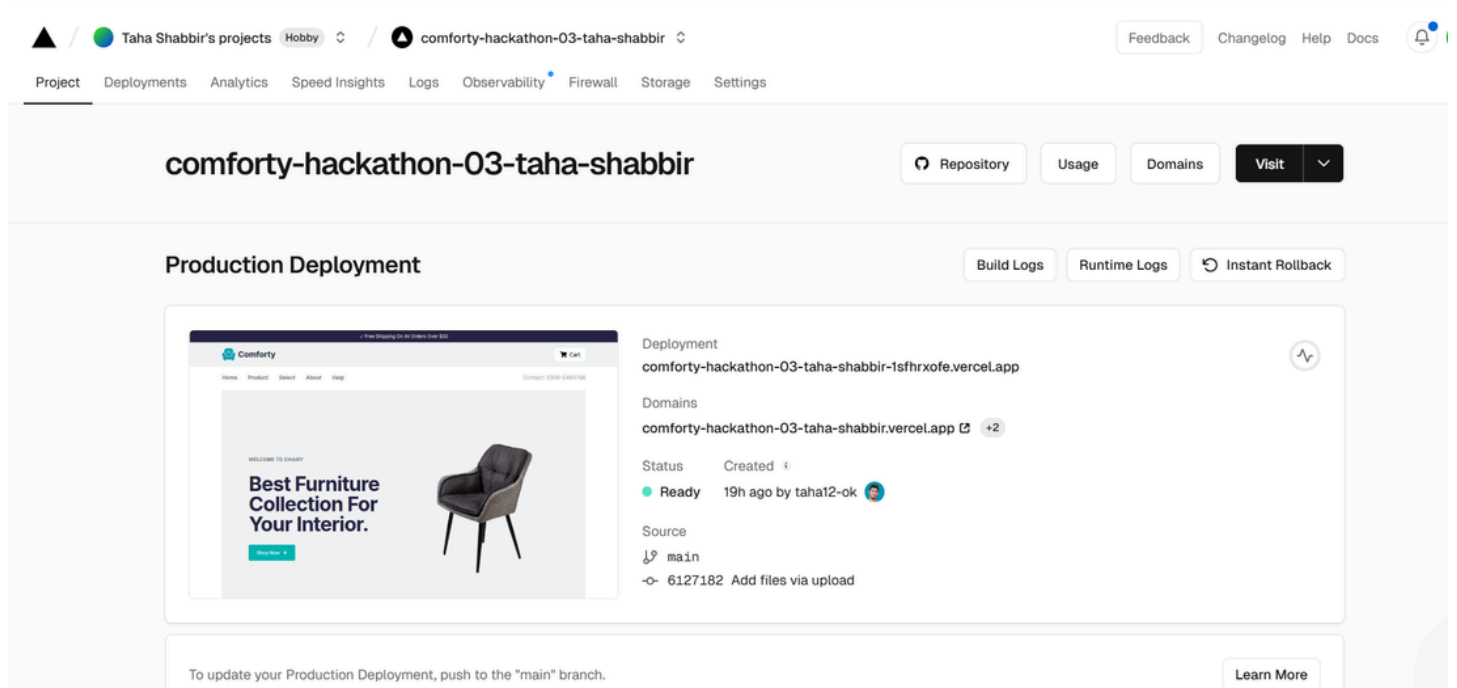
Step 1: Hosting Platform Setup

The project has been deployed to **Vercel**, which is a suitable hosting platform for Next.js applications. The GitHub repository was connected to Vercel to enable seamless deployment. Build settings and necessary deployment scripts have been configured.

Github Screen Shot:

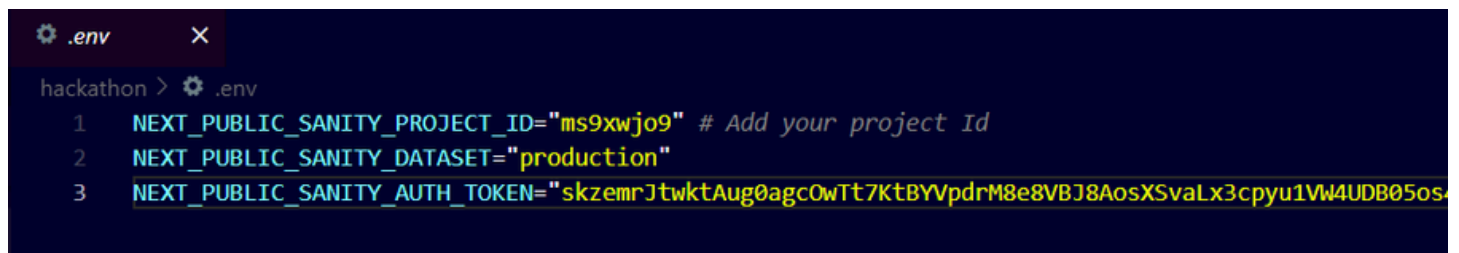


Vercel Screen Shot:



Step 2: Configure Environment Variables

Sensitive data like **Sanity API keys** and **environment-specific configurations** have been securely stored in the `.env` file and uploaded to the Vercel dashboard.

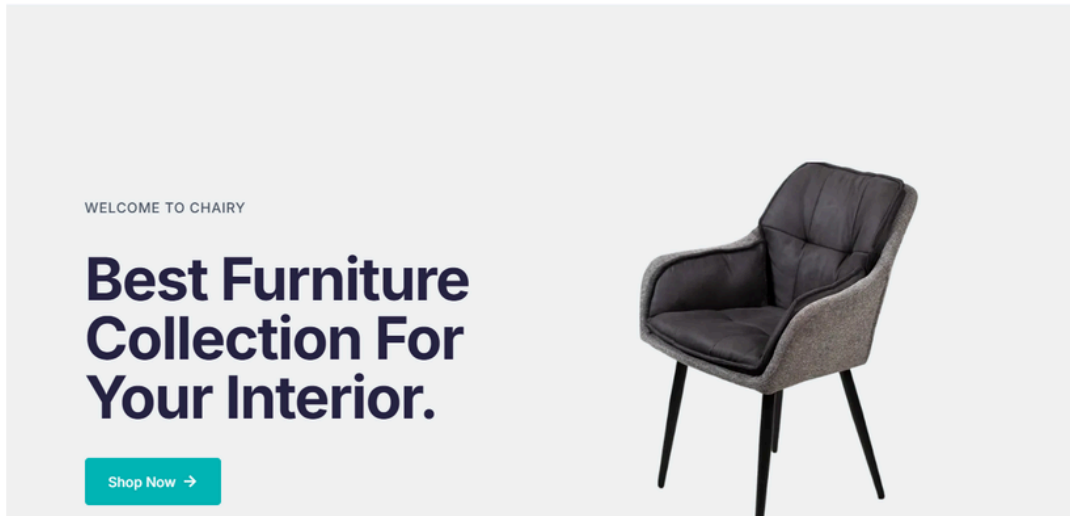


These environment variables ensure that the production deployment has secure access to the database and other sensitive configurations.

Staging Environment Setup

Step 3: Deploy to Staging

The website has been successfully deployed to the staging environment. The build process completed without errors, and the staging version of the website is now live for testing.

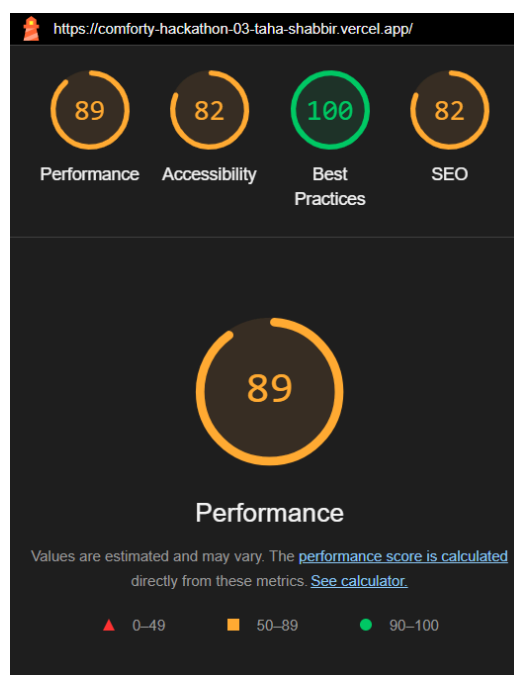


Step 4: Staging Environment Testing

Testing was conducted in the staging environment to ensure the website functions as expected before going live.

Performance Testing:

- Used **Lighthouse** to analyze the performance and load times of the website.
- Verified that the site loads quickly and responds efficiently to user interactions.



CSV File :

Test Steps	Expected Result	Actual Result	Status	Tool Used	Severity Level	Assigned To	Remarks
User Signup (Clerk)	User successfully signed up	User signed up successfully	Passed	Clerk	High	Developer 1	No issues encountered
User Sign-in (Clerk)	User successfully signed in and redirected	User signed in successfully	Passed	Clerk	High	Developer 1	Works as expected
API Validation (Postman)	API returned valid responses	All APIs responded with 200 OK	Passed	Postman	Medium	Developer 2	Data integrity verified
Responsive Design Check	Layout adapts to different screen sizes	Responsive across all tested devices	Passed	Lighthouse	Medium	Developer 3	Mobile-friendly design
Mobile Usability Test	All functionality works on mobile	Fully functional on mobile	Passed	Lighthouse	Medium	Developer 4	Smooth navigation
Search Functionality	Products displayed as per criteria	Results accurate for search keywords	Passed	Postman	Medium	Developer 5	Optimized for speed
Lighthouse Testing	Performance score above 90	Lighthouse score: Performance 92	Passed	Lighthouse	Medium	Developer 6	Meets performance goals

Test Report

User Signup (Clerk)

The User Signup functionality was tested using Clerk. The test successfully confirmed that the user could sign up without any issues. The expected result was achieved as the user was able to complete the signup process smoothly, and the status is marked as Passed. No problems were encountered during the test.

User Sign-in (Clerk)

The User Sign-in process was also tested using Clerk. The user was able to sign in successfully and was redirected as expected. The test result matched the expected outcome, with a Passed status. There were no issues in the sign-in functionality, and everything worked as expected.

API Validation (Postman)

API validation was conducted using Postman. The test confirmed that all APIs responded with a 200 OK status, ensuring that the APIs returned valid and expected responses. Data integrity was verified and no discrepancies were observed. This functionality is also marked as Passed, with a Medium severity level.

Responsive Design Check

The Responsive Design Check was performed using Lighthouse, confirming that the layout adapts well to different screen sizes. The application displayed correctly across various devices, including mobile screens, indicating that the design is mobile-friendly. The Medium severity level reflects the importance of ensuring a responsive design, which was successfully achieved in this test.

Mobile Usability Test

The Mobile Usability Test was conducted with Lighthouse to verify that all mobile functionality works seamlessly. The test showed that all features are fully functional on

mobile devices, with smooth navigation and no issues. This test also received a Passed status, and the app proved to be user-friendly on mobile devices.

Search Functionality

The Search Functionality test was conducted using Postman to ensure that products are displayed correctly according to search criteria. The test result confirmed that the search returned accurate results based on the keywords entered, and the functionality was optimized for speed. This feature passed the test with a Medium severity level, ensuring that users get relevant results quickly.

Lighthouse Testing

Lighthouse Testing was performed to assess the overall performance of the application. The performance score achieved was 92, surpassing the expected goal of 90. This indicates that the application performs efficiently and is optimized for speed. The test results confirmed that the performance meets the required standards, and it is marked as Passed.

Conclusion:

In conclusion, the deployment and testing process has been successfully completed with all critical features functioning as expected. The website was deployed to Vercel, with secure environment configurations, and underwent thorough testing in the staging environment. All tests, including user signup, sign-in, API validation, responsiveness, and performance, passed, ensuring the website is optimized and ready for production.