**Day 6 Deployment preparation and staging Environment Set up**

**Overview:**

The focus was on preparing the market place website for deployment by settting up a staging environment, configuring the hosting platforms.this day was very tough to stimulate the production environment and to catch any potential issues before deploying the application live.The goal was to tes the application in production like settings which help to identify any deployment or configuration issues that might be arise during the final deployment to production.

**Deployment Setting Planing:**

For staging development,I chose a platform called versel because it has a reliable and efficient deployment process, which works well for both static and dynamic applications. It allows automatic updates whenever changes are made to the codde repository. I also set up build settings and deployment descriptions, making sure everything works smothly. This icludes preparing the environment, setting up resources, and optimizing the process for staging. This setup helped ensure a smooth deveopment experience and made it easier to test the application as if it were in a real production environment.

**Environment Variables Configuration:**

I created a .env file to securly store sensitive information like API keys, CMS credentials, and database details. This file kept the data safe and hidden from the code. After setting it up, I uploaded the environment variables to he hoisting platform, ensuring the app had access to the necessary settings while keeping the sensitive data secure. This way, the app worked properly in the staging environment with the right credentials.

**Staging Environment Testing:**

Functional Testing:  
I tested key features of the app, like browsing products, adding items to the cart and checking out. since product data came from sanity CMS, I made sure it was being properly fetched and displayed on the site. I used tools like thunder client to check that the API was correct processed and transferred. Everything worked as expected, and the app responded properly to user actions.

**Performance Testing:**

I used the Lighthouse tool to test the website's performance.It gave me useful information on speed, accessibility, best practices and SEO.It helped me measure things like page load time, speed and responsiveness.ighthouse also pointed out areas where the site could improve to perform better under deffeerent conditions and ensure a smooth user experience.

Security Testing:

I did security testing to make sure the site is safefrom potential threats. I checked that HTTPS was set up corectly to protect data during transmission. I also made sure sensitive info like API keys was securely hidden and not exposed. Finally I verfied that the site had the right security headers in place to protect it from attacks.

**Check List**

