# Day 7: Live Deployment and Post-Launch Practices

# 1. Live Deployment

# 1.1 Deploying to Vercel

For deploying the project to production, I used Vercel, a platform that integrates seamlessly with Next.js projects. Follow the steps below to deploy your application:

#### 1. Connect GitHub to Vercel:

- Go to Vercel (https://vercel.com/).
- Log in to your account or create a new one.
- Connect your GitHub repository by selecting GitHub under the New Project section.

## 2. Import the Project:

- Once the GitHub account is connected, Vercel will list all your repositories. Choose the repository containing the Next.js project you want to deploy.

# 3. Configure Deployment Settings:

- Vercel will automatically detect the framework (Next.js). However, ensure that the Build Command is set to 'next build' and Output Directory to 'out' (if you're using static export).
  - Set up Environment Variables for production if needed (e.g., API keys, database URLs).

## 4. Deploy the Project:

- Once configuration is complete, click on Deploy.
- The deployment process will take a few minutes. Once finished, you'll be provided with a live URL to access the deployed website.

## 5. Production URL:

- Vercel assigns a unique URL (e.g., https://your-project-name.vercel.app) where the live website can be accessed.

## 1.2 Handling Domain Name

#### 1. Connect Custom Domain:

- After deployment, you can link a custom domain to the Vercel project. Navigate to the Vercel dashboard, select the project, and go to the Domains tab.
- Enter your custom domain name and follow the instructions to point your domain to Vercel using the provided DNS records.

## 2. SSL Certificate:

- Vercel automatically provisions an SSL certificate for secure HTTPS traffic once the domain is connected, ensuring your website is served over a secure connection.

## 2. Post-Launch Practices

# 2.1 Monitoring and Debugging

# 1. Use Vercel Analytics:

- After deployment, I recommend using Vercel Analytics to monitor real-time data for my site, including performance, traffic, and server-side function errors.
- It provides insights into user interactions, page load times, and any performance bottlenecks.

#### 2. Error Monitoring:

- Integrate tools like Sentry or LogRocket to capture and log frontend and backend errors.
  - These tools help track any bugs that may arise after launch, ensuring faster resolution.

#### 3. Server Logs:

- Check Vercel's logs for any errors in serverless functions or API calls. These logs can be accessed from the Vercel dashboard under the Functions section.

## 2.2 User Feedback and Optimization

#### 1. User Feedback:

- Collect feedback through forms, surveys, or tools like Hotjar to understand user experience and areas that need improvement.
  - Regularly check for bugs or UI issues that could hinder the user experience.

# 2. Performance Optimization:

- After launch, continuously monitor site speed and performance.
- Use tools like Lighthouse, Google PageSpeed Insights, or WebPageTest to analyze and optimize performance.

#### 3. SEO Practices:

- Ensure all relevant SEO settings (meta tags, structured data) are configured correctly.
- Use tools like Google Search Console to monitor indexing and search performance.

# 2.3 Routine Updates and Maintenance

#### 1. Version Control:

- Continue committing code updates to GitHub, which will automatically trigger Vercel's deployment process.

# 2. Content Updates:

- Regularly update content, including blog posts or any dynamic data coming from external sources like Sanity or other APIs.
  - Plan a content calendar to keep the website fresh with new content.

# 3. Security Updates:

- Ensure that security patches and updates are applied to dependencies and packages. This can be done via npm audit or by monitoring Dependabot pull requests.

# 2.4 Scaling and Traffic Management

## 1. Scaling:

- Vercel provides auto-scaling, which ensures that the application can handle traffic spikes. Monitor the usage and consider scaling plans if necessary.

#### 2. Caching:

- Use caching strategies (such as HTTP cache headers or service workers) to reduce server load and improve page load times.

## 3. Conclusion

Deploying the project on Vercel ensures a smooth and efficient transition to production. Post-launch practices like monitoring, optimization, and user feedback collection are crucial to maintain and improve the site's performance over time. By continually updating the application and addressing potential issues, I can ensure a seamless user experience for all visitors.