



As Food Website

Dynamic Frontend Components

Deployment Preparation and Staging Report

Introduction

On Day 6 of our food truck platform project, we dedicated our efforts to building a reliable staging environment that mirrors real-world conditions. This step was crucial in guaranteeing a seamless and error-free user experience. By implementing industry best practices for deployment and conducting thorough testing, we ensured that the platform is well-prepared for its transition to live operations.



Objectives

1. **Develop a Robust Staging Environment** – Set up a fully functional staging environment that accurately replicates the food truck ordering platform's real-world operations.
2. **Enhance Deployment Security** – Implement secure deployment configurations to protect sensitive data and ensure system integrity.
3. **Perform Comprehensive Testing** – Rigorously test all functionalities, performance, and security aspects to identify and resolve potential issues.
4. **Streamline Deployment Management** – Document the deployment process thoroughly for efficient management and future scalability.



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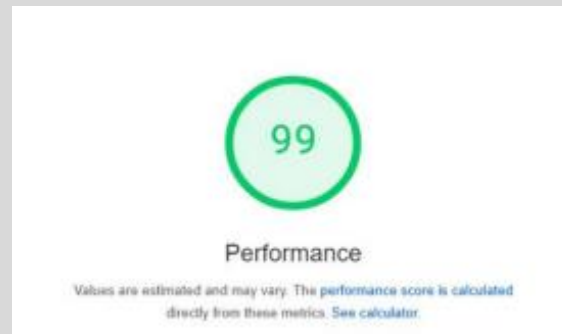
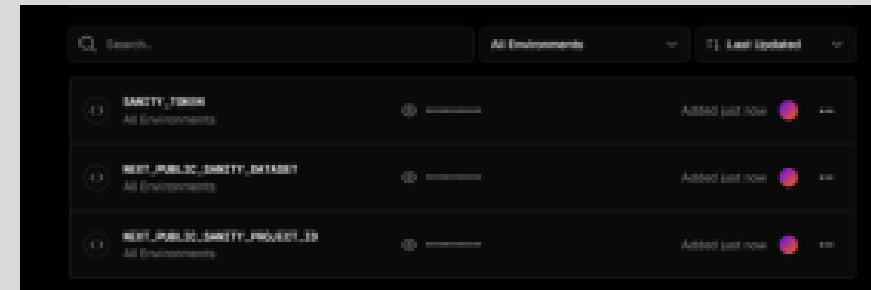
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Methodology

Hosting Platform Setup

We selected Vercel as the hosting platform due to its seamless deployment pipelines and compatibility with real-time updates. The key steps in setting up the environment included:

- *GitHub Integration* – Connected the GitHub repository to automate builds and streamline the deployment process.
- *Deployment Configuration* – Optimized settings to support essential backend functionalities such as live menu updates, cart management, and order tracking.



Checking Performance

- **Performance Score: 99 (Excellent)** – The platform demonstrates exceptional speed and efficiency, ensuring a seamless user experience with minimal load times.



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Accessibility

These checks highlight opportunities to improve the accessibility of your web app. Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so manual testing is also encouraged.

Accessibility Review

- **Score: 87** – While the platform is generally accessible, there are areas that need improvement to enhance usability for individuals with disabilities. Addressing these issues will ensure a more inclusive experience for all users.

Best Practices & SEO Review

- **Best Practices (93)** – The platform follows strong coding and security standards, with only minor refinements needed for full optimization.
- **SEO (83)** – The site is fairly well-optimized for search engines but can be further improved to boost visibility and ranking. Implementing additional SEO strategies will enhance overall performance.



SEO

These checks ensure that your page is following basic search engine optimization advice. There are many additional factors Lighthouse does not score here that may affect your search ranking, including performance and Core Web Vitals. [Learn more about Google Search Essentials.](#)



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Staging Deployment

The platform was successfully deployed in a staging environment to replicate real-world conditions. This process included:

- **Validating Core Functionalities** – Ensured smooth user interactions, including food menu browsing, cart updates, and order placement.
- **Backend API Integration** – Verified seamless communication with inventory management and order processing systems.

Testing and Validation

A series of rigorous tests were conducted to confirm the platform's readiness for production:

1. Functional Testing

- Verified the correct addition and removal of food items from the cart.
- Ensured smooth checkout and payment processing workflows.

2. Performance Testing

- Used Lighthouse to assess page load speed and responsiveness, particularly under peak traffic conditions.

3. Security Testing

- Confirmed HTTPS encryption for secure data transmission.
- Ensured proper handling of sensitive user data to prevent security vulnerabilities.



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Shared Chunks

Refer to JavaScript files that are used by multiple pages of the platform. These files are shared to optimize loading times and reduce redundancy, ensuring that common code is only loaded once, improving the overall performance of the site.

```

}
✓ Generating static pages (26/26)
✓ Collecting build traces
✓ Finalizing page optimization

```

Route [src]	Size	First Load JS
• /	12.48 KB	164.48 KB
• /_next-build	888.0 B	88.8 KB
• /[category]	251.0 B	155.48 KB
• /about-us	3.41 KB	155.48 KB
• /blog	1.78 KB	151.48 KB
• /blog/[id]	1.71 KB	151.48 KB
• /checkout	3.31 KB	158.48 KB
• /error	1.21 KB	167.48 KB
• /faq	1.25 KB	167.48 KB
• /order-tracking	1.21 KB	167.48 KB
• /product	251.0 B	155.48 KB
• /product/[id]	251.0 B	155.48 KB
• /reviews	3.13 KB	154.48 KB
• /payment	1.87 KB	166.48 KB
• /shop	4.21 KB	159.48 KB
• /shop/[id]	1.3 KB	156.48 KB
• /shipping-part	2.34 KB	167.48 KB
• /signin	1.27 KB	151.48 KB
• /signup	1.86 KB	156.48 KB
• /studio[...html]	1.34 KB	1.46 MB
• /user	1.26 KB	167.48 KB
• /wishlist	1.38 KB	156.48 KB
• First Load JS shared by all	867.8 KB	
chunks/1111-00f96e6a71111111.js	15.8 KB	
chunks/11111111-3e0b4d7f4b4b4b4b.js	15.8 KB	
other shared chunks (total)	2.39 KB	

```

• (Static) prerendered as static content
• (Dynamic) server-rendered on demand

```

Outcomes

- Successful Deployment** – The staging environment was fully deployed, accurately simulating real-world conditions for seamless functionality.
- Enhanced Security** – Sensitive data and environment variables were effectively managed, ensuring protection against unauthorized access.
- Reliable Performance** – Comprehensive testing validated that all critical functionalities performed smoothly without issues.
- Well-Organized Repository** – The project repository was structured for clarity, with a professional README.md summarizing the deployment process and key details.

Conclusion

The successful deployment and testing of the staging environment represent a significant milestone for the food truck platform. This preparation lays the groundwork for a seamless, user-friendly experience and ensures the platform is ready for a smooth transition to production. By addressing key pre-launch challenges and following industry best practices, we are well-prepared for future improvements and scalability.

