TECHNICAL REQUIREMENTS DOCUMENT

Marketplace: Food Tuck Restaurant
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1. Problem to Solve: Long Wait Times and Limited Visibility

Technical Requirements:

1. **Real-Time Order Tracking**:
    - Feature: Allow customers to track their orders in real-time.
    - Implementation: Use a **Shipment Tracking API** (e.g., Google Maps) to fetch delivery updates.

2. **Dynamic Menu Updates**:
    - Feature: Ensure menus are updated in real time based on availability.
    - Implementation: Use **Sanity CMS** to manage and sync product data with the front end.

3. **Location-Based Services**:
    - Feature: Show food tucks near the customer's location.
    - Implementation: Use a **Geolocation API** (e.g., Google Maps) to fetch nearby food tucks.

4. **Push Notifications**:
    - Feature: Notify customers about order status (e.g., "Your food is out for delivery").
    - Implementation: Use a **Notification Service** (e.g., Firebase Cloud Messaging).

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2. Target Audience: Busy Professionals, Event-Goers, Food Enthusiasts

Technical Requirements:

1. **Mobile-Friendly Design**:
    - Feature: Ensure the platform works seamlessly on mobile devices.
    - Implementation: Use **responsive design** in Next.js.
2. **Quick Checkout Process**:
    - Feature: Simplify the checkout process for busy users.
    - Implementation: Use **Stripe API** for fast and secure payments.
3. **Personalization**:
    - Feature: Allow users to save preferences (e.g., favorite food tucks, dietary restrictions).
    - Implementation: Store user preferences in **Sanity CMS** and fetch them dynamically.

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3. Products-Services: FoodTuck Menus, Pre-Ordering, RealTimeOrdering

Technical Requirements:

1. **Product Catalog**:
    - Feature: Display menus with images, descriptions, prices, and availability.
    - Implementation: Use **Sanity CMS** to manage product data and fetch it via API.
2. **Pre-Ordering System**:
    - Feature: Allow customers to place orders in advance.
    - Implementation: Store pre-orders in **Sanity CMS** and schedule them for fulfillment.
3. **Real-Time Ordering**:
    - Feature: Enable instant ordering with minimal wait times.
    - Implementation: Use **Sanity CMS** to update the order status in real-time.
4. **Delivery Integration**:
    - Feature: Integrate with third-party delivery services for seamless delivery.
    - Implementation: Use a **Shipment Tracking API** to manage deliveries.

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4. Unique Selling Points: Speed, Hyper-Local Focus, Customization

Technical Requirements:

1. **Fast Loading Times**:
    - Feature: Optimize the platform for quick loading.
    - Implementation: Use **Next.js** for server-side rendering and fast performance.

2. **Geolocation API**:
    - Feature: Show food tucks within a specific radius.
    - Implementation: Use **Google Maps API** to fetch nearby food tucks.

3. **Customization Options**:
    - Feature: Customers can customize orders (e.g., toppings, spice levels).
    - Implementation: Add customization fields in **Sanity CMS** and display them on the front end.

4. **Affordability Features**:
    - Feature: Display discounts, promotions, or bundle deals.
    - Implementation: Use **Sanity CMS** to manage promotions and fetch them dynamically.

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5. Technical Requirements Chart

Feature	Frontend Requirements	Sanity CMS Backend	Third-Party APIs
User Registration	Sign-up/login forms, role-based access	User profile management	**Firebase Authentication**
Food Tuck Listings	Dynamic cards, filters, search bar	Manage food tuck profiles	**Google Maps API**
Menu Display	Menu items with images, descriptions, prices	Upload/update menu items	-
Order Placement	Add-to-cart, order summary, real-time tracking	Track orders, update status	**Twilio (SMS)**, **SendGrid (Email)**
Payment Integration	Secure payment gateway, order confirmation	Handle payment details	**Easypaisa**, **Stripe**
Location-Based Services	Geolocation, real-time tracking	Manage locations	**Google Maps API**
Reviews and Ratings	Star-based rating system, text reviews	Store reviews and ratings	**Yelp API**
Delivery Services	Real-time delivery tracking	Manage delivery status	**Uber Eats API**
Analytics	-	Generate reports	**Google Analytics**