

# Proj 1c1

## Minimum Viable Product (MVP) Proposal

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### 10 New Use Cases for the MVP Design

The original document lacks some fundamental use cases needed to create a functional product. These 10 use cases define the core MVP experience.

#### UC-MVP-1: User Registration and Profile Management

- **Preconditions:** A user (Customer, Restaurant, or Rider) has downloaded the app or accessed the website.
- **Main Flow:**
  - The user selects their role (Customer, Restaurant, or Rider).
  - The user provides basic information (name, email, password).
  - The system creates a basic profile.
  - The user can later edit their profile information.
- **Subflows:**
  - **[Edit Profile]:**  
Users can update their name, contact info, and password. Customers can add delivery addresses.
- **Alternative/Error Flows:**
  - If the email is already in use, the system prompts the user to log in or use a different email.

#### UC-MVP-2: Restaurant Menu Creation and Management

- **Preconditions:** A user has a verified Restaurant account.
- **Main Flow:**
  - The Restaurant owner navigates to the menu management section.
  - The owner adds a new menu item, providing a name, description, and price.
  - The owner uploads a photo for the item.
  - The owner saves the item, making it visible to customers.
- **Subflows:**
  - **[Add Item Options]:**  
The owner can add customization options (e.g., size, toppings) with corresponding price adjustments.
  - **[Mark as Unavailable]:**  
The owner can temporarily hide an item that is out of stock.
- **Alternative/Error Flows:**
  - If required fields (name, price) are missing, the system prevents the item from being saved and highlights the missing information.

### UC-MVP-3: Customer Browses Menus and Creates Order

- **Preconditions:** A customer is logged into their account.
- **Main Flow:**
  - The customer searches for restaurants by name or cuisine type.
  - The customer selects a restaurant and views its menu.
  - The customer adds items to their cart.
  - The customer proceeds to checkout.
- **Subflows:**
  - **[Customize Item]:**  
The customer selects from the options provided for a menu item (e.g., "extra cheese").
- **Alternative/Error Flows:**
  - If a restaurant is closed, its menu is grayed out and items cannot be added to the cart.

### UC-MVP-4: Process Customer Payment

- **Preconditions:** A customer has items in their cart and has proceeded to checkout.
- **Main Flow:**
  - The system displays the order summary, including subtotal, taxes, and fees.
  - The customer enters their credit card information.
  - The system sends the payment information to a third-party payment gateway.
  - Upon successful payment confirmation, the order is finalized.
- **Subflows:**
  - **[Save Payment Method]:**  
The customer can choose to save their card details for future orders.
- **Alternative/Error Flows:**
  - If the payment is declined, the system displays an error message and prompts the customer to use a different card or check their information.

### UC-MVP-5: Restaurant Accepts and Prepares Order

- **Preconditions:** A customer has successfully placed and paid for an order.
- **Main Flow:**
  - The system sends the new order to the restaurant's terminal/app.
  - The restaurant staff reviews the order and confirms they can fulfill it.
  - The system updates the order status to "Preparing."
  - Once the food is packaged, the restaurant marks the order as "Ready for Pickup."
- **Subflows:**
  - **[Review Order Details]:**  
Staff can see all items, special instructions, and allergen information.
- **Alternative/Error Flows:**
  - If the restaurant cannot fulfill an order (e.g., an item is suddenly out of stock), they can reject the order. The system then automatically notifies the customer and processes a full refund.

## UC-MVP-6: System Assigns Rider to Order

- **Preconditions:** A restaurant has marked an order as "Ready for Pickup."
- **Main Flow:**
  - The system broadcasts the delivery job to nearby, available riders.
  - A rider accepts the job.
  - The system assigns the order to that rider and provides them with restaurant and customer details.
- **Subflows:**
  - **[View Job Details]:**  
Before accepting, a rider can see the restaurant, the customer's general location, and their potential earnings.
- **Alternative/Error Flows:**
  - If no riders are available within a certain timeframe, the system may alert customer support for manual intervention or notify the customer of a potential delay.

## UC-MVP-7: Real-Time Order Tracking

- **Preconditions:** An order has been assigned to a rider.
- **Main Flow:**
  - The customer's app displays the current status of the order (e.g., Preparing, In Transit, Delivered).
  - Once the rider picks up the order, the app displays the rider's location on a map in near real-time.
  - The customer receives notifications at key stages (e.g., "Your rider is on the way").
- **Subflows:**
  - **[Contact Rider]:**  
The customer can call or message the rider through a masked number in the app.
- **Alternative/Error Flows:**
  - If the rider's GPS signal is lost, the map displays their last known location and a "Signal Lost" message.

## UC-MVP-8: Rate and Review Order

- **Preconditions:** An order has been marked as "Complete."
- **Main Flow:**
  - The system prompts the customer to rate their experience with the food and the delivery.
  - The customer provides a star rating (1-5) for both the restaurant and the rider.
  - The customer can optionally leave a written review.
  - The system saves the feedback.
- **Subflows:**
  - **[Review an Old Order]:**  
Customers can find past orders in their history and add or edit a review within a specific timeframe (e.g., 7 days).
- **Alternative/Error Flows:**
  - The customer can choose to dismiss the rating prompt and not leave a review.

## UC-MVP-9: Rider Onboarding and Verification

- **Preconditions:** A user has registered for a Rider account.
- **Main Flow:**
  - The system prompts the rider to complete their profile by uploading required documents (e.g., driver's license, vehicle registration).
  - The rider submits their tax information (UC-17).
  - A platform employee manually reviews the documents for validity.
  - Upon approval, the system activates the rider's account, allowing them to receive delivery jobs.
- **Subflows:**
  - **[Background Check]:**

The system integrates with a third-party service to initiate a criminal background check after the rider gives consent.
- **Alternative/Error Flows:**
  - If documents are expired or invalid, the system notifies the rider and keeps the account pending until valid documents are provided. The account is rejected if the background check fails.

## UC-MVP-10: Manage Payouts to Restaurants and Riders

- **Preconditions:** A Restaurant or Rider has completed orders and has valid tax/banking information on file.
- **Main Flow:**
  - The system calculates the net earnings for the user over a defined period (e.g., weekly).
  - The calculation subtracts platform commissions and fees from the total sales/delivery fees.
  - The system initiates a direct deposit to the user's linked bank account.
  - The system generates a basic earnings statement for the user.
- **Subflows:**
  - **[View Earnings Dashboard]:**

Users can see a summary of their earnings, a list of transactions, and upcoming payout dates.
- **Alternative/Error Flows:**
  - If a bank transfer fails, the system puts the payout on hold and notifies the user to verify their banking information.

## Strategic Decisions and Stakeholder Impact

### How did you decide what NOT to do?

The decision to exclude features was driven by the core principles of an MVP: focus, speed, and learning. I prioritized the single most critical path to value: a customer ordering, a restaurant cooking, and a rider delivering. Anything not directly on this "happy path" or required for basic legal/safety operation was deferred. This strategy reduces initial engineering complexity, minimizes operational overhead (e.g., no need for a large compliance team at launch), and allows the business to get to market faster to start learning from real users before investing in more advanced, and potentially unused, features.

## What negative impacts or disappointments could this MVP have for the stakeholders?

- **Customers:** May be disappointed by the lack of features they see on competing apps, such as detailed nutritional information, charity donations, or special meal programs. The absence of a visible, robust health compliance badge system (UC-3) might make some users hesitant to trust new restaurants on the platform.
- **Restaurants:** Might feel the platform is too basic. They lack advanced promotional tools (UC-6), sophisticated menu management (e.g., ingredient-level disclaimers from UC-28), or automated support for complex tax situations, which could create administrative burdens for them.
- **Riders:** May feel anxious about the lack of automated tax reporting (UC-12), as this places the burden of tracking and filing squarely on them. They also miss out on route optimizations for perishable goods (UC-27) that could affect their efficiency and customer ratings.
- **The Business:** By deferring robust compliance and audit features (UC-3, UC-21), the business assumes more risk. A single major safety incident or a failure to meet a niche regulatory requirement could have severe reputational and legal consequences.

## What changes did you make (and why) to the MVP to appease at least some of the stakeholders?

To mitigate the most significant risks and disappointments, I would make three strategic additions to the MVP, creating a slightly more robust "MVP 1.5":

1. **Add a simplified UC-3: Manage Restaurant Health and Safety Compliance.** Why: Trust is paramount. Even without a full audit team, requiring restaurants to upload a valid food safety certificate during onboarding is a low-cost way to establish a minimum safety standard. This appeases customers by showing a commitment to safety and helps the business mitigate some risk.
2. **Add UC-5: Manage Nutritional Information Display.** Why: This feature provides immediate, tangible value to a large segment of customers and is becoming a legal requirement in many jurisdictions. Adding a simple "calories" field to the menu management tool (UC-MVP-2) is a relatively small engineering task that significantly enhances the user experience.
3. **Add UC-12: Report Earnings to Tax Authorities (Rider).** Why: This is a major point of friction and anxiety for gig workers. Automating the generation of tax forms (like the 1099-NEC) is a powerful retention tool for riders. It also ensures the business meets its legal reporting obligations accurately and on time, which is far safer than relying on a manual year-end process.

## Part 3: Prompt History

We tried out three main LLMs: the Gemini-2.5-Pro, DeepSeek, and ChatGPT5. The first two were used extensively for our *1b1* submission, along with a few representative prompt histories, which yielded good results and provided auxiliary use cases, as mentioned below:

- DeepSeek output: [https://docs.google.com/document/d/1uP\\_y\\_yCkt9EIGGaFgmE5ZGRYp-2RW0hjflgPkuMSlfc/edit?usp=sharing](https://docs.google.com/document/d/1uP_y_yCkt9EIGGaFgmE5ZGRYp-2RW0hjflgPkuMSlfc/edit?usp=sharing)
- DeepSeek prompt examples: <https://docs.google.com/document/d/1dQ0CsVFdm08s0hLrIU7CdnodvxW0XihW4mx/edit?usp=sharing>
- Gemini Pro 2.5: <https://docs.google.com/document/d/10BaFoPejinAix3NrdD8p0V1csn70AhX5pUfF9NKP1kM/edit?usp=sharing>
- ChatGPT: <https://docs.google.com/document/d/1rjZVYys0EroeFJu8c10By0m5th40b4TeM5y29Y6NqyE/edit?usp=sharing>