

UX Research & High-Fidelity Prototyping for Food Delivery App

CIA3 - Human Computer Interaction

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1. Abstract

This document presents the development of user personas and a platform-neutral high-fidelity prototype flow for a next-generation food delivery application. Drawing inspiration from the adult versions of the Nohara family, the personas reflect diverse user needs, technological behaviors, dietary preferences, and lifestyle motivations. These personas form the basis for translating user expectations into a structured design process. A detailed user flow—spanning Home, Search, Restaurant Selection, Dish Customization, Cart, Checkout, and Delivery Tracking—is outlined with clear reasoning, emphasizing minimal, warm, pastel-based UI decisions and sharp, modern iconography. The prototype framework aligns with core UX design principles such as consistency, visibility, feedback, user control, and simplicity. Step-by-step instructions for constructing each screen in Figma are included, along with placeholders for design insertion, ensuring the document is ready for academic submission and practical implementation.

2. Introduction

A strong food delivery application depends fundamentally on understanding real user motivations, constraints, and behavioral patterns. The persona created for this project is based on the Nohara family (Shinchan universe), reimagined as realistic adults with distinct lifestyle needs, food habits, and pain points. One **primary persona** guides the core experience design, while **supporting personas** highlight secondary needs that influence feature breadth. This approach avoids designing for extremes and keeps decision-making focused on the highest-impact user.

3. Q1 - PERSONAS

A. PRIMARY PERSONA

Shinnosuke Nohara, now 25, is a junior graphic designer living in Pune. His workday is visually intensive and mentally saturated, which leaves him with little energy to cook or engage in complex digital tasks. He relies heavily on his mobile phone, often juggling chats, music, and work apps simultaneously. Food delivery apps become his go-to utility, not just a service. His behavior shows a preference for quick loading, high visual clarity, and minimal cognitive load.

Shinchan's diet is largely non-vegetarian, but he prefers meals that balance indulgence and nutrition—Japanese rice bowls, chicken-based Indian fusion, and western fast food. He orders frequently: lunches during hectic workdays, evening snacks, and late-night meals on weekends. His ordering pattern emphasizes **speed**, **familiarity**, and **visual confirmation**. He wants to feel that the app supports his chaotic, creative lifestyle rather than interrupting it.

His major pain points highlight systemic issues in existing food delivery systems: cluttered UI layouts, unpredictable delivery times, poor restaurant images, and hidden customization options. These issues directly contribute to decision fatigue — a phenomenon where excessive choices or unclear pathways hinder quick action. He primarily pays via UPI because it is frictionless and instant. His tech pattern is mobile-first, with minimal patience for slow interfaces. His personality reflects spontaneity, humor, and a desire for low-effort decision-making.


His perspective can be captured through two central quotes that crudely frame his expectations:

“If an app makes me think too much, I’m deleting it.”

“I want quick choices, fast delivery, and clear tracking.”

These quotes become core drivers for subsequent design decisions, especially around simplicity, visual hierarchy, and feedback mechanisms.

Shinnosuke Nohara



AGE

26

EDUCATION

Masters in Animation

STATUS

Single

OCCUPATION

Freelance Animator

LOCATION

Kasukabe, Tokyo

TECH LITERATE

High

“ If it takes more than 30 seconds to order, I lose interest. Food is happiness – bring it fast!

Food Habits and Preference

- Diet: Non-veg
- Favourite: Ramen, Fried chicken, Spicy curries, late-night snacks
- Typical ordering time: Late-nights 10-12 PM, busy-day lunch.


Psychographics and Lifestyle

- Impulsive, fun-loving, values speed and novelty.


Pain Points and Challenges

- Long delivery times breaks his flow.
- Overloaded UIs put him off.
- Needs very fast reorder options.

Payment medium


Digital Payment

Platform


Mobile App

Behavioral Traits

Mobile-only, heavy app usage

Thinker Orders 3-6x/week


Tech-savvy

B. SUPPORTING PERSONAS

B1. Adult Himawari Nohara – The Snack-Loving Trend Follower

At 21, Himawari is experimental and influenced by social media food trends. Her motivations revolve around novelty and visual appeal. She dislikes hidden delivery fees or price surges. Her inclusion ensures the app caters to trend-driven, young adult behavior.

Himawari Nohara



AGE 21

EDUCATION Bachelors in Fashion Tech

STATUS Single

OCCUPATION Micro Influencer

LOCATION Kasukabe, Tokyo

TECH LITERATE High

“ If the food looks good, I'm ordering it. I want options that fit my aesthetic and mood.”

Food Habits and Preference

- Diet: Mostly vegetarian, occasional sushi
- Favourite: Café plates, Korean bowls, boba
- Typical ordering time: Evenings & weekends for visuals & sharing


Psychographics and Lifestyle

- Aesthetic-driven, opinionated, social

Pain Points and Challenges


- Needs attractive photos and filters
- Wants clear customization (no onion/low oil)

Payment medium



Digital Payment

Platform



Mobile App

Behavioral Traits

Daily-app user Thinker

Loves filters and social sharing

Aesthetic matcher

B2. Hiroshi Nohara – The Budget-Conscious Family Planner

Hiroshi, 48, values clarity in pricing and reliability over aesthetics. His persona ensures that affordability, transparent pricing, and predictable delivery are part of the app's foundation.

Hiroshi Nohara



AGE	49
STATUS	Married
OCCUPATION	Senior Sales Executive
LOCATION	Kasukabe, Tokyo
TECH LITERATE	Moderate

Food Habits and Preference

- Diet: Non-veg, simple meals (Bento, curry)
- Favourite: Ramen, Fried chicken, Spicy curries.
- Typical ordering time: Weekday lunch.

Psychographics and Lifestyle

- Practical, disciplined, time-focused

Pain Points and Challenges


- Hates unpredictable delivery times.
- Values hygiene and reliable restaurants

“ Show me trusted restaurants and clear delivery time, for lunch delivery, without hassle.

B3. Misae Nohara – The Health-Conscious Homemaker

Misae, 45, prioritizes healthy options, lower oil content, and clear allergy labeling. Her needs guide the presence of dietary filters and ingredient transparency.

Misae Nohara



AGE

46

EDUCATION

High School Grad

STATUS

Married

OCCUPATION

Home maker

LOCATION

Kasukabe, Tokyo

TECH LITERATE

Average

“ I want healthy food without worrying about hidden oils, Good ratings matter.

Food Habits and Preference

- Diet: Mostly Non-vegetarian, low oil, homemade style
- Favourite: Fried chicken, Spicy curries, Balanced Diet, Sweet Potato.
- Typical ordering time: Evenings for family dinner.

Psychographics and Lifestyle

- Caring, organized, values family meals

Pain Points and Challenges

- Budget sensitive, needs transparent ingredients.
- Prefers hygienic, well-rated places

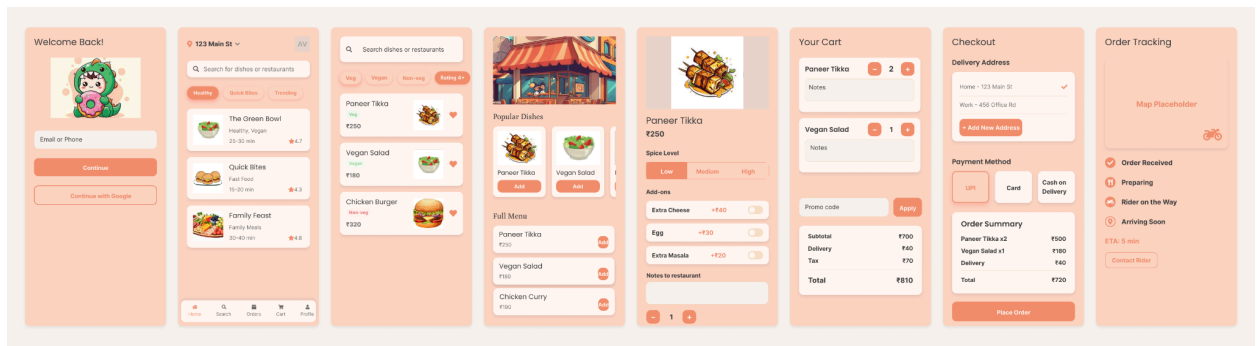
These supporting personas ensure that the app does not remain narrow and can support household-style ordering patterns, shared accounts, family meals, and varied dietary needs.

4. Q2. HIGH-FIDELITY PROTOTYPE DEVELOPMENT

a. INTRODUCTION TO THE USER FLOW

The core user flow follows seven progressive screens: **Home** → **Search** → **Restaurant** → **Customization** → **Cart** → **Checkout** → **Tracking**.

The flow is intentionally linear and cognitively light, reflecting the needs of the primary persona. Each screen is designed around minimizing decision complexity, ensuring continuity of information, and offering clear next steps. The visual style uses warm pastel colors, soft contrast, and a minimal aesthetic to reduce digital noise and enhance clarity.



b. SCREEN BY SCREEN RATIONALE AND PLACEHOLDERS

-Home Screen

The home screen serves as a decision-orientation point. For Shinchan, the home screen must present the “shortest path to food.” The design uses a prominent search bar, quick-access categories, and past orders since repeated behavior is common among frequent users. Visual cards reduce textual scanning and support his preference for quick visual decision-making.

Welcome Back!



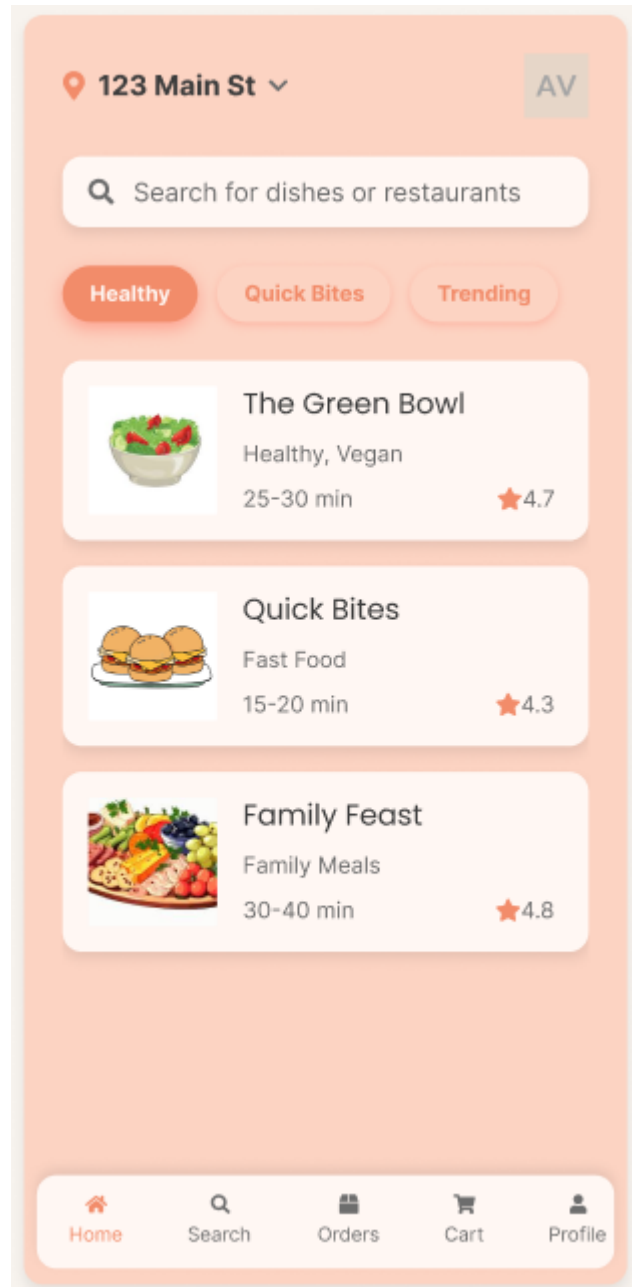
Email or Phone

Continue

Continue with Google

-Search Screen

The search interface relies on predictive suggestions and clean filter chips to avoid overwhelming users. The filters (Veg, Fast Delivery, Budget, Trending) align with supporting personas' needs as well. The overall goal is to support both goal-directed searches and exploratory browsing in a visually quiet space.



🔍 Search dishes or restaurants

Veg

Vegan

Non-veg

Rating 4+

Paneer Tikka

Veg

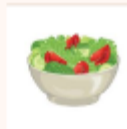
₹250



Vegan Salad

Vegan

₹180



Chicken Burger

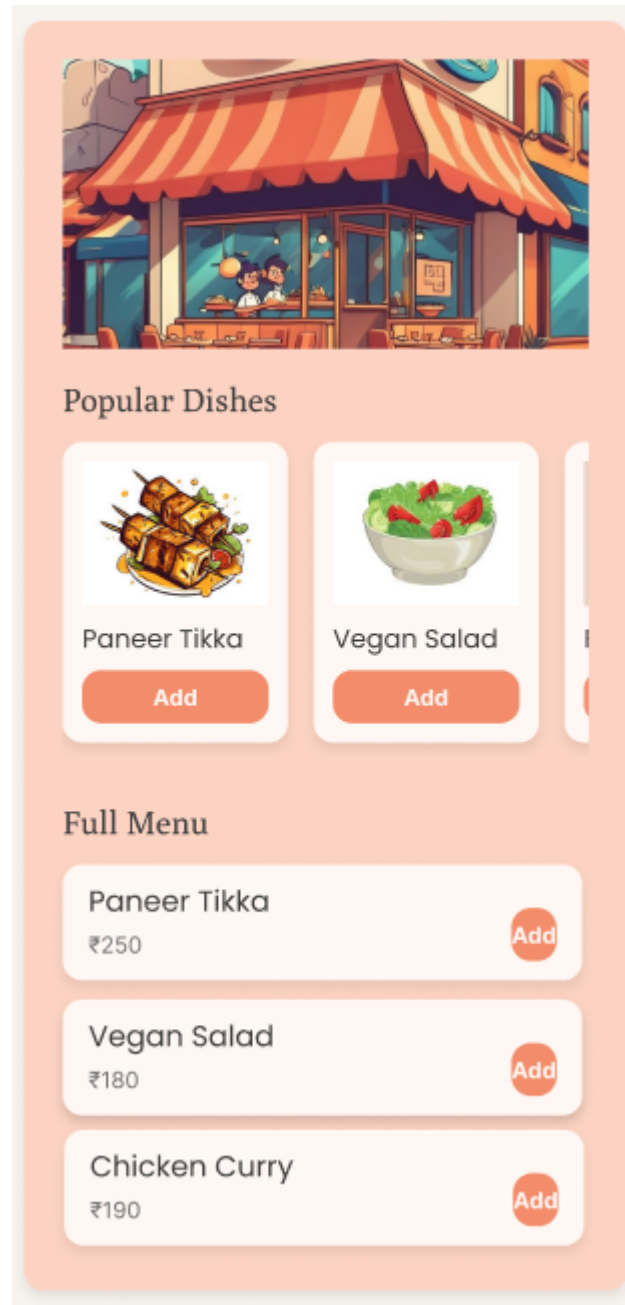
Non-veg

₹320




-Restaurant Screen

This screen uses strong visual hierarchy: large dish images, category dividers, and top-positioned bestsellers. This supports Shinchon's scanning behavior and helps avoid decision fatigue. The menu is structured so that popular items and signature dishes reduce uncertainty.



-Customization Screen

Customization is often where users abandon the order due to complexity. For Shinchuan, the customization screen foregrounds key choices (spice level, add-ons) and provides immediate visual feedback. Allergy information is shown upfront for supporting personas like Misae. The notes field allows personal preferences without friction. A persistent bottom bar ensures the “Add to Cart” action is always accessible without scrolling.



Paneer Tikka
₹250

Spice Level

Low Medium High

Add-ons

Extra Cheese +₹40 ☒

Egg +₹30 ☒

Extra Masala +₹20 ☒

Notes to restaurant

- 1 +

-Cart Screen

The cart reflects transparency—each item breakdown, delivery fees, discounts, and expected taxes. This addresses Hiroshi's need for clarity. Favourites and address selection are displayed upfront to reduce repeated actions.

Your Cart

Paneer Tikka

-

2

+

Notes

Vegan Salad

-

1

+

Notes

Promo code

Apply

Subtotal	₹700
Delivery	₹40
Tax	₹70
<hr/>	
Total	₹810

-Checkout Screen

Payment choices (UPI, card, COD) are separated cleanly, not buried. This respects cognitive load principles and ensures users do not feel overwhelmed. Address verification, promos, and order confirmation are positioned in a logical progression.

Checkout

Delivery Address

Home - 123 Main St ✓

Work - 456 Office Rd

+ Add New Address

Payment Method

UPI

Card

Cash on Delivery

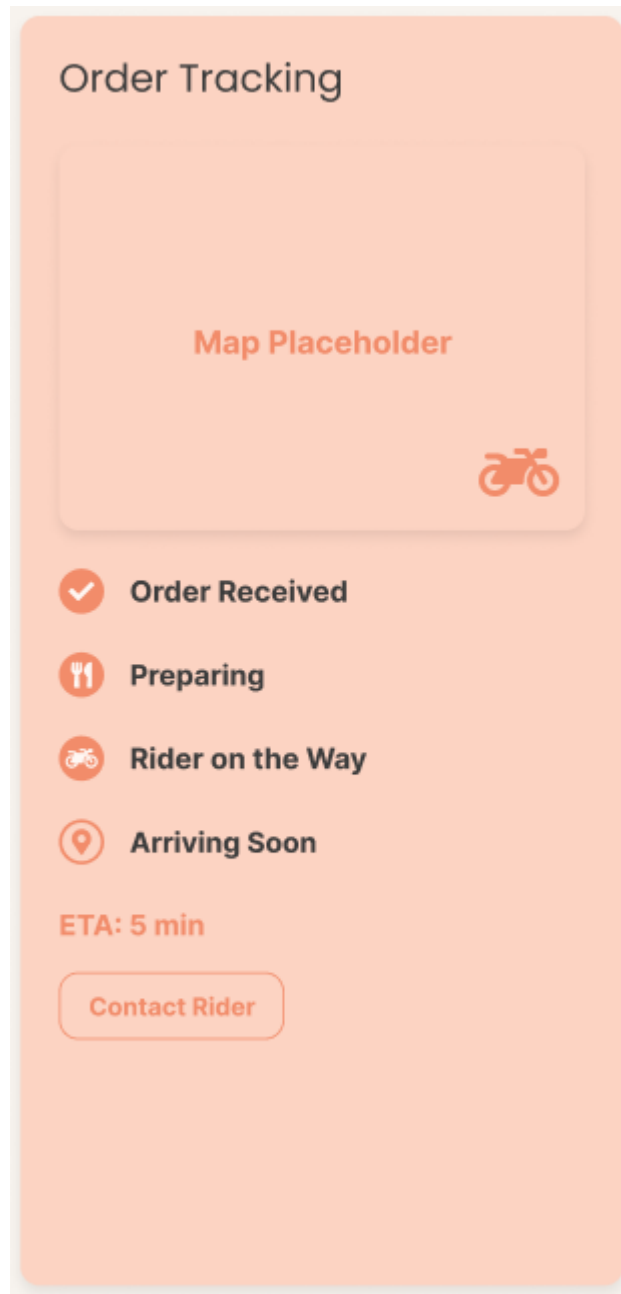
Order Summary

Paneer Tikka x2	₹500
Vegan Salad x1	₹180
Delivery	₹40
Total	₹720

Place Order

-Tracking Screen

The tracking screen merges map and timeline because users like Shinchon primarily want *certainty*. A combined interface solves one of his biggest pain points — inconsistent tracking. Real-time marker movement on the map, paired with a stage-based timeline (“Preparing,” “Out for Delivery,” “Arriving”), provides reassurance and reduces anxiety about delays.



c. HOW DESIGN PRINCIPLES AFFECT USER EXPERIENCE

- **Simplicity**

Simplicity is not about removing features; it is about reducing mental effort. Every screen emphasizes the essential while removing visual clutter—few colors, clean sections, consistent spacing. This directly aligns with Shinchon's low tolerance for complexity and supports rapid decision-making.

- **Visibility**

Core functionalities such as Search, Cart, and Tracking remain visually persistent. When affordances remain stable across screens, the user does not need to relearn navigation. The pastel palette increases visibility without strain, reinforcing comfort and confidence.

- **Feedback**

The tracking system represents high-quality feedback. Instead of generic timers, the app shows real-time movement and stage progression, reducing emotional uncertainty. Micro-interactions (button presses, active states, and confirmation messages) consistently reassure users.

- **Flexibility and Efficiency**

Dietary and allergy filters meet supporting users' needs without overwhelming Shinchon, who prefers quick choices. The app accommodates multiple behavioral styles without complicating the primary experience.

- **Consistency**

Typography, layout grids, iconography, and color system remain constant throughout the app. This prevents context-switch fatigue and builds familiarity — key for habitual users who open food apps multiple times a week.

5. CONCLUSION

This assignment demonstrates how thoughtful UX research—beginning with rich, realistic personas—can directly shape a food delivery application's design, functionality, and overall user experience. By grounding the process in the lived behaviors, frustrations, and motivations of the adult Nohara family personas, the final prototype reflects not only aesthetic clarity but also practical usability. The warm, minimal interface style, combined with streamlined navigation and personalized features, showcases how user-centered design decisions address genuine needs such as convenience, trust, dietary preferences, and order transparency. The step-by-step prototyping workflow further illustrates how design principles translate into

actionable screen layouts within Figma, ensuring coherence from concept to execution. Overall, the document highlights the importance of aligning user insights with design strategy to build digital products that are intuitive, emotionally resonant, and efficient—qualities essential for modern food delivery experiences.