

Assignment 1 – Phase 3

From Validated Problem to Solution Design

Context Reconfirmation (From Phase 2)

In Phase 2, through user interviews and survey validation, I identified the following PO problem: Occasional Need Users struggle to understand what is happening after driver assignment, especially in scheduled bookings, which leads to anxiety and unnecessary cancellations.

Business Goal (defined in Phase 2):

Reduce post-driver-assignment cancellation rate among Occasional Need Users.

This phase focuses on transforming that validated problem into thoughtful, structured solutions.

STEP 1: Brainstorming Solutions (Diverge)

1.1 Understanding the Emotional Dip

From journey mapping and interviews, the critical moment occurs here:

Confirm booking

→ Driver assigned

→ ETA displayed

→ User interprets timing

→ Emotional dip (confusion + anxiety)

→ Cancel or call driver

User emotions during this phase:

- “Is the driver coming now?”
- “Why does it say 18 minutes away if my ride is 2 hours later?”
- “Should I cancel before they reach?”

The issue is not driver quality.

The issue is communication clarity at a fragile state.

1.2 Root Cause Analysis

Using a Why-Why framework:

Problem: Post-driver-assignment cancellation.

Why?

→ User anxiety.

Why anxiety?

→ Misinterpretation of pickup timing.

Why misinterpretation?

→ Ambiguous ETA messaging.

→ No distinction between immediate vs scheduled rides.

→ No structured lifecycle visibility.

→ No explanation of what happens next.

Conclusion:

This is a state-communication problem, not a marketplace or pricing problem.

1.3 Techniques Used

A. How Might We Framing

- How might we reduce anxiety during the waiting period?
- How might we clearly differentiate scheduled and immediate rides?
- How might we make ride progression predictable?
- How might we prevent panic cancellations?

B. Journey Mapping

Mapped user journey:

1. Booking confirmed
2. Driver assigned
3. Timing shown
4. Interpretation phase
5. Waiting
6. Decision: Wait | Call | Cancel

The most fragile stage is immediately after assignment.

C. Issue Tree (Problem Branching)

Branch 1: Timing confusion

Branch 2: Lifecycle opacity

Branch 3: No next-step explanation

Branch 4: Lack of reassurance

I generated solutions against each branch.

1.4 Solution Ideas Generated

1. Context-aware ETA messaging
2. Structured ride lifecycle timeline
3. "What Happens Next" explanation card
4. Modify pickup time within safe window
5. Cancel warning popup with timing clarity
6. Push notification explaining scheduled ride logic
7. Scheduled reassurance banner
8. Driver movement visibility delay logic
9. FAQ tooltip at assignment stage
10. Trust reassurance badge

1.5 Categorization of Ideas

High Confidence:

- Context-aware ETA
- Structured lifecycle timeline
- What Happens Next card

Low Confidence:

- Modify pickup time feature
- Cancel warning popup
- Push notification logic

Moonshot:

- AI reassurance assistant
- Trust badge

Observation:

The strongest ideas cluster around structured communication redesign.

STEP 2: Prioritization (Converge)

I used a simplified RICE framework:

Scale:

1 = Low

2 = Medium

3 = High

Solution	Reach	Impact	Confidence	Effort	RICE Score
Context-aware ETA	3	3	3	2	13.5
Structured Timeline	3	3	2	2	9
Info Card	3	2	3	1	18

Interpretation:

- High reach because all assigned rides go through this state.
- High impact because timing confusion drives cancellations.
- High confidence backed by research insights.
- Moderate effort as it requires UI + state logic adjustments.

Final Decision:

Instead of shipping fragmented fixes, introduce one cohesive solution:
Post-Driver-Assignment Clarity Module.

STEP 3: Wireframe Design & Flow

Focus Scope:

Only the post-driver-assignment moment.

Current Experience

- Driver assigned
- Generic ETA shown
- No distinction between scheduled/immediate
- User misinterprets
- Anxiety
- Cancel

Redesigned Experience

- Driver assigned
- Context-aware pickup display
- Structured lifecycle timeline
- Clear explanation card
- Visible action options
- Reduced anxiety

Wireframe Structure

Screen 1: Driver Assigned – Scheduled Version

- Fixed pickup time displayed
- Clear microcopy explaining driver movement logic
- No misleading dynamic ETA

Screen 2: Lifecycle Timeline Component

Assigned → Scheduled → En Route → Arriving
Current state highlighted

Screen 3: Action Panel

Modify (if eligible)
Contact driver
Support

Annotations included in wireframe:

- Which root cause is addressed
- How it reduces anxiety
- Backend state triggers for transition

STEP 4: Success Metrics

Primary Goal:

Reduce post-driver-assignment cancellations.

Primary Metric:

Post-assignment cancellation rate.

Secondary Metrics:

Driver contact within first 5 minutes.

Modify vs Cancel ratio.

Guardrail Metrics:

Driver idle time.

Pickup delay rate.

Success Definition:

A measurable decline in cancellations without hurting operational efficiency.

STEP 5: Risks & Mitigation

Risk	Mitigation	Detection
Users ignore clarification copy	Keep concise and structured	Cancellation rate unchanged
Timeline displays wrong state	Backend-state validation & QA	User reports or mismatch logs
Modify feature misused	Restrict eligibility window	Increased idle time
UI clutter overwhelms users	Minimal visual hierarchy	Engagement drop

Core Assumption:

Improved clarity reduces anxiety-driven cancellation.

Final Reflection

This phase focused on converting a validated user problem into a practical and measurable solution.

In Phase 2, I identified that Occasional Need Users cancel rides after driver assignment due to timing confusion and lack of clarity during the waiting period. The core issue was not pricing or driver quality, but communication during a fragile moment in the journey.

In this phase, I:

- Broke down the root causes behind user anxiety
- Used structured ideation techniques to explore possible solutions

- Prioritized ideas using RICE to remain focused
- Designed a cohesive post-assignment clarity module
- Defined measurable success metrics linked to the business goal
- Identified realistic risks and mitigation strategies

The final solution does not add disconnected features. Instead, it strengthens the most fragile state in the ride journey by introducing contextual messaging and structured ride progression.

This ensures the solution is:

- User-centered
 - Evidence-backed
 - Measurable
 - Operationally realistic
 - Fully aligned with the retention goal defined in Phase 2
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PRD: Post-Driver-Assignment Clarity Redesign

1. Overview

Phase 2 user research revealed that Occasional Need Users cancel rides after driver assignment due to confusion about pickup timing and lack of clarity during the waiting phase.

This PRD outlines a redesign of the post-driver-assignment experience to introduce contextual clarity and structured ride status communication.

The goal is to reduce anxiety-driven cancellations and improve perceived reliability of the service.

2. Problem Statement

Occasional Need Users struggle to understand what is happening after a driver is assigned, particularly in scheduled bookings.

Dynamic ETA messaging creates confusion when the ride is scheduled for a later time. The absence of structured ride progression visibility leads to uncertainty during the waiting period.

This confusion results in unnecessary cancellations immediately after driver assignment.

3. Objective

Primary Objective:

Reduce post-driver-assignment cancellation rate among Occasional Need Users.

Secondary Objective:

Increase user confidence in scheduled rides.

4. Target User Persona

Primary Segment: Occasional Need User

Characteristics:

- Uses DriveU infrequently
- Often books rides in advance for outings or specific plans
- Sensitive to uncertainty in timing
- Compares experience with ride-hailing apps
- Likely to cancel if confused about pickup timing

Usage Context:

Most friction occurs during scheduled rides where pickup is planned hours later.

5. Proposed Solution

Introduce a Post-Driver-Assignment Clarity Module consisting of three components:

5.1 Context-Aware ETA Messaging

Requirement:

- Immediate rides display dynamic countdown ETA.
- Scheduled rides display fixed pickup time.
- No misleading “driver X minutes away” message for rides far in the future.

Expected Outcome:

Clear differentiation between immediate and scheduled ride logic.

5.2 Structured Ride Lifecycle Timeline

Display ride progression as:

Assigned → Scheduled → En Route → Arriving

Requirements:

- Current state visually highlighted.
- Transition triggered by backend ride state.
- Timeline updates automatically as status changes.

Expected Outcome:

Users clearly understand what stage their ride is in.

5.3 What Happens Next Information Card

Display immediately after driver assignment.

Content:

- Pickup time confirmation.
- Explanation of when driver will begin movement.
- Clear next-step guidance.

Actions Available:

- Modify pickup time (if eligible).
- Contact driver.
- Support.

Expected Outcome:

Reduce panic and prevent unnecessary cancellation.

6. User Stories

1. As an occasional user, I want to clearly understand my pickup timing so that I do not feel anxious.
2. As a scheduled ride user, I want to know when the driver will start moving so that I do not cancel unnecessarily.
3. As a user, I want predictable ride status updates so that I feel confident waiting.

7. Acceptance Criteria

- Scheduled rides display fixed pickup time clearly.
- Immediate rides show dynamic ETA countdown.
- Timeline reflects accurate backend state transitions.
- What Happens Next card appears consistently after assignment.
- Modify option only available within defined operational window.
- No incorrect state representation during testing.

8. Success Metrics

Primary Metric:

Post-driver-assignment cancellation rate.

Secondary Metrics:

Driver contact initiated within first 5 minutes after assignment.

Modify-to-cancel ratio.

Guardrail Metrics:

Driver idle time.

Pickup delay rate.

Success Definition:

A measurable decrease in post-assignment cancellations without negatively impacting operational efficiency.

9. Dependencies

- Backend must clearly classify ride as immediate or scheduled.
- Ride lifecycle states must be formally defined.
- Frontend assignment screen redesign required.
- QA validation for state accuracy across ride types.

10. Risks & Mitigation

1. **Risk:** Users ignore clarification messaging.
Mitigation: Use concise, structured copy with clear visual hierarchy.
Detection: Cancellation rate unchanged post-release.
2. **Risk:** Timeline misrepresents ride state.
Mitigation: Strong backend-state synchronization and QA testing.
Detection: Status mismatch logs or support tickets increase.
3. **Risk:** Modify option misused operationally.
Mitigation: Restrict modification to controlled time window.
Detection: Increase in driver idle time.

11. Final Note

This PRD directly aligns with the validated P0 problem identified in Phase 2.

The solution focuses strictly on improving post-assignment clarity without expanding scope into pricing, dispatch logic, or marketplace changes.

It prioritizes user understanding, measurable outcomes, and operational realism.