

## 1. Executive Summary

This case study outlines a digital product solution for Setur, focused on enabling multi-product bookings that include bus transportation alongside other travel products such as flights, hotels, and car rentals. The main goal is to extend the current shopping cart infrastructure to support combined bookings—for example, Bus + Flight, Bus + Hotel, and Bus + Hotel + Car—within a single transaction flow on both the web and mobile app platforms.

The solution is designed to deliver a Minimum Viable Product (MVP) within 2 months, starting in August and targeting a go-live by end of September. The approach prioritizes early delivery of core flows (bus search, selection, payment, and voucher generation), while deferring some lower-impact enhancements (e.g., app segmented push, standalone Bus + Car) to a later phase.

This initiative will not only increase user convenience and conversion across platforms, but also improve cross-sell potential and help position Setur as a comprehensive travel planning platform that includes intercity bus journeys—a mode of transport increasingly relevant for domestic users.

## 2. Business Challenge & Opportunity

Setur currently offers a variety of travel products—flights, hotels, and car rentals—but lacks support for bus ticket sales, which represents a significant opportunity in the domestic travel market. The rise in intercity bus usage, especially in regions underserved by direct flights or trains, has created a gap between user demand and current product availability.

Additionally, customers often plan multi-modal trips, combining different types of transport and accommodations (e.g., traveling by bus and returning by flight, or renting a car after a bus ride). However, Setur's existing checkout system does not yet support true multi-product cart functionality involving bus options.

Key problems identified:

- Users cannot book bus tickets from Setur—losing market share to competitors.
- There is no support for combining bus with other product categories in one basket.
- Conversion is lost when users must switch to external sites or apps for part of their journey.
- Internal cart logic and PNR systems are not yet adapted to bus integrations.

Opportunity:

By adding bus tickets and enabling combined checkout flows, Setur can:

- Capture a broader range of travel use cases.
- Boost attach rates through product bundling.
- Differentiate the platform with convenience and completeness.
- Increase revenue from previously untapped domestic travel segments.

## 3. Key Assumptions

This project is planned and designed based on the following assumptions, which have shaped both the scope and delivery approach:

- **Bus API Provider is Ready:** Setur has a selected bus API provider (e.g., Obilet or similar), with confirmed technical documentation and access credentials available prior to the start of the development phase.
- **Design System Components Are Available:** The web and mobile teams can use existing Setur design system components for key interface elements (e.g., listings, checkout cards, modals), minimizing the need for custom UI design.
- **Unified Cart Infrastructure:** The current backend supports shared cart logic across product types (e.g., handling multiple SKUs, pricing rules, payment, and voucher logic in one transaction).
- **Bus PNR and Ticket Handling Logic is Similar to Flight:** Bus tickets will follow a similar pattern as flight bookings in terms of passenger information capture, confirmation flow, and voucher/PNR generation.
- **Mobile App and Web Feature Parity is Required:** Both channels (web and mobile app) are in scope, and users are expected to complete full booking journeys from search to confirmation on either platform.
- **MVP Timeline is Fixed:** The MVP must be released by the end of September, with development starting in early August. Any features not essential for the core booking flow will be planned for a later phase.

#### 4. Solution Approach

*Detailed in the 8<sup>th</sup> number*

To enable seamless multi-product bookings that include bus transportation, the solution will extend Setur's existing travel infrastructure and unified cart system. The aim is to support combinations such as Bus + Flight, Bus + Hotel, and Bus + Hotel + Car, all within a single transaction flow on both web and mobile platforms.

The approach is designed with two core principles in mind:

- Speed to MVP delivery (within 2 months)
- Sustainable scalability for future phases

#### **MVP Priorities**

The MVP scope is intentionally focused on delivering high-impact, technically feasible features that address core user needs. These include:

- Bus search, filtering, and seat selection
- Unified cart flow (adding bus with flight/hotel)
- Combined payment and confirmation flow
- PNR and voucher generation for bus bookings
- Parity across mobile and web platforms

#### **Deferred to Phase 2**

Some features and enhancements were intentionally excluded from the MVP to ensure timely delivery and focused impact. These items are valuable but require additional time for development, coordination, or validation, and are planned for consideration in a later phase:

#### **Bus + Car Booking**

While combining bus travel with car rentals could benefit users traveling to rural areas or smaller towns, it was deprioritized for MVP due to:

- Lower expected usage frequency and revenue impact
- Complexity in handling inventory, location-based availability, and pricing
- Insufficient time for testing and integration within the 2-month MVP timeline

#### **App-Specific Push Notifications for Bus**

Personalized push notifications targeting users who abandon bus bookings or show high intent (e.g., price drops, schedule reminders) are planned for mobile app users. These require deeper behavioral tracking and segmentation logic, which will be implemented after the core booking flow is stabilized.

#### **Change / Cancel Process for Bus Bookings**

In the MVP, cancellation and change actions will be handled through customer service or vendor-side portals. A fully integrated self-service change/cancel experience will be evaluated in Phase 2 after real user behavior and provider API flexibility are validated.

#### **Integration Approach**

- The bus booking flow will mirror the flight flow where possible, leveraging similar data models for passenger info, PNRs, and voucher handling.
- The frontend will reuse existing Setur design system components for listings, checkout cards, and modals.
- Backend will be extended to support SKU-level rules and error handling specific to bus providers.

### **5. Target User Flow**

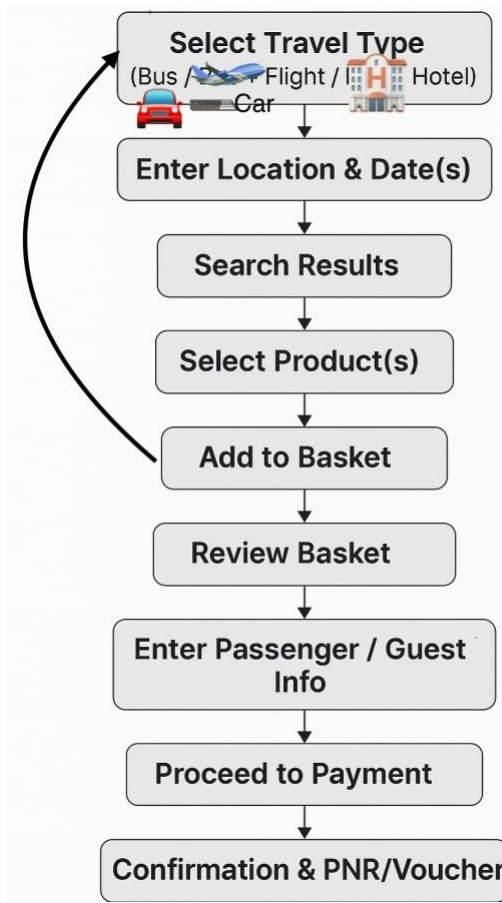
The following flow represents the end-to-end purchase journey of a user who is selecting and booking multiple travel products in a single cart. It covers both the web and mobile app experience, starting from search and continuing through selection, basket management, checkout, and confirmation.

Key scenarios include:

- Bus-only booking
- Bus + Flight
- Bus + Hotel
- Bus + Hotel + Car Rental

The goal is to ensure a seamless and unified flow regardless of product combination, while using the existing design system for consistency.

See flow diagram below:

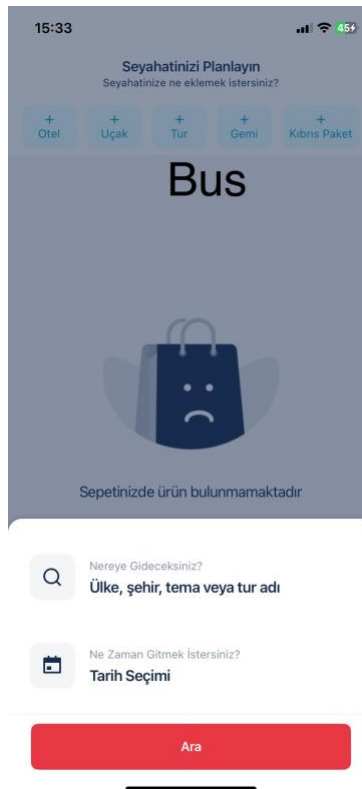


## User screen samples:

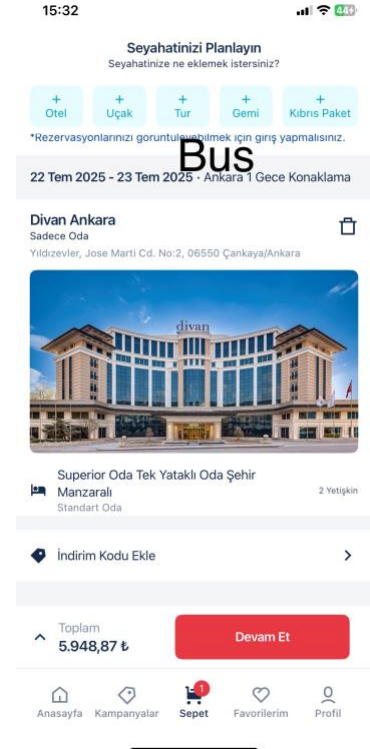
### Homepage



### Basket



### Basket Detail



## 6. Stakeholder Communication

Stakeholder / Team	Responsibility	Communication Format
1. Product Owner	Feature prioritization, roadmap ownership, stakeholder alignment	Daily standups, sprint planning, review, async updates
2. Design Team	Create screens using design system, ensure UX consistency	Weekly design review sessions + Slack updates
3. Backend Team	Develop and expose bus-related APIs, ensure cart integration	Daily standups + technical grooming
4. Frontend (Web) Team	Implement UI components and cart logic on web	Daily standups + Slack syncs
5. Mobile App Team	Implement mobile app components and ensure feature parity with web	Daily standups + ad hoc issue syncs
6. QA Team	Validate full booking journeys, run regression, smoke and UAT cycles	Post-development QA cycles + syncs during regression/smoke/UAT phases
7. Business Units	Define business logic, validate scope and feature readiness	Weekly scope alignment and sprint review participation
8. External API Provider	Provide working API with stable schema and support	Twice-weekly syncs + email status reports
9. C-Level Stakeholders	High-level progress oversight and strategic approval	Executive update every 2 weeks + monthly demo

## 7. Risk Management

Risk Description	Probability (1-5)	Impact (1-5)	Risk Score	Mitigation Action
1. Bus API may be delayed or unstable.	4	5	20	Secure API readiness confirmation before development; run smoke test upfront
2. Short MVP timeline limits testing and iteration	4	5	20	Lock MVP scope tightly; split QA and release tasks per sprint
3. Design system components may be missing or inadequate	3	4	12	Coordinate early with design team to create missing components if needed
4. Unified cart backend logic may not fully support bus logic	3	4	12	Align with backend early; scope fallbacks for unsupported logic
5. Limited availability of QA resources	3	4	12	Plan buffer time; supplement QA capacity with help from product and business development teams if needed
6. Unclear business rules for bus pricing or refund logic	3	4	12	Validate and freeze rules with business owners before implementation
7. Mobile and web delivery may fall out of sync	2	3	6	Set platform parity as a non-negotiable MVP goal and sync delivery plans
8. Dependencies on external providers (e.g. bus ticket issuer)	2	3	6	Maintain weekly status check-ins with API providers; define SLAs

## 8. Backlog Discovery & Prioritization

The features are grouped into two categories based on business value, implementation complexity, and time constraints. The MVP scope focuses on delivering the core multi-product booking experience (including bus) within the 2-month delivery window. Lower-priority enhancements are scheduled for the post-MVP phase (October onward).

A detailed delivery roadmap was already created and visualized, but here is a breakdown:

Feature	Included in MVP	Notes
Bus ticket search & booking	✓	Core API integration and voucher flow
Multi-product basket (Bus + Flight, Bus + Hotel, Bus + Hotel + Car)	✓	Combined checkout with pricing and PNR support
Web & mobile parity	✓	Both platforms will support the full flow
Unified payment & confirmation	✓	Shared cart logic with final receipt and confirmation page
Backend PNR handling for Bus	✓	Aligned with flight ticket architecture
App-based push notification / upsell	(✗ Non-MVP)	Planned for post-launch; requires campaign logic and user behavior triggers
Standalone Bus + Car booking	(✗ Non-MVP)	Edge case; will be evaluated post-MVP based on demand
Change & cancellation handling	(✗ Non-MVP)	Will be implemented once business rules are finalized



## Justification for MVP Scope

### 1. **Bus Ticket Search & Booking**

Justification:

This is the foundation of the feature. Without this core functionality, users cannot access or evaluate the bus option. It satisfies the primary user goal—being able to discover and book intercity bus tickets on Setur's platform. It also unlocks a new vertical and revenue stream.

### 2. **Multi-Product Basket** (Bus + Flight, Bus + Hotel, Bus + Hotel + Car)

Justification:

Enables Setur to offer unique value by supporting multi-modal travel planning. Bundled bookings encourage higher AOV (Average Order Value), reduce drop-offs, and meet real user needs for combined travel journeys. Including it in the MVP allows for differentiating Setur from competitors early on.

### 3. **Web & Mobile Parity**

Justification:

A consistent experience across platforms ensures broader reach and avoids confusion. MVP launch would be incomplete if a user can complete a flow on one channel but not the other. Parity also avoids creating future technical debt and customer complaints.

### 4. **Unified Payment & Confirmation**

Justification:

Combining multiple product types into a single payment and confirmation flow greatly improves convenience. From a backend perspective, it's critical to have this logic in place to prevent fragmented transaction processing and support future scalability.

### 5. **Backend PNR Handling for Bus**

Justification:

Necessary for generating vouchers and booking confirmations. Reusing existing PNR architecture (as in flights) reduces implementation effort and risk. It also ensures internal systems (e.g., customer service, email automation) can operate without change.

## ✗ **Deferred Features: Rationale for Exclusion from MVP**

### 1. **Standalone Bus + Car Booking**

Reason for Exclusion:

The Bus + Car combination was consciously excluded from the MVP due to its lower usage potential and the additional test complexity it introduces. It will be reassessed in later phases once the core booking experience is stable.

### 2. **Change & Cancellation Logic**

Reason for Exclusion:

Self-service changes/cancellations introduce operational and legal complexity (refund policy, timing rules). MVP will handle via customer service while real-world data and API flexibility are observed.

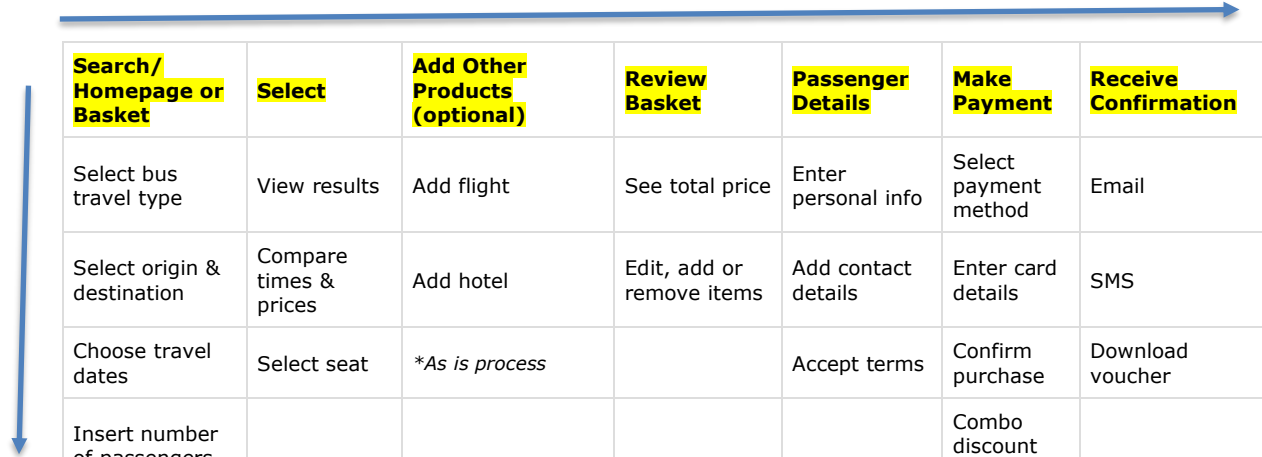
### 3. **Push Notifications / App Upsells**

Reason for Exclusion:

While valuable for engagement, these depend on behavioral triggers, user

tracking setup, and campaign logic. These are better tackled post-MVP when baseline booking data exists.

### Bus and Multi Products Story Map



Search/ Homepage or Basket	Select	Add Other Products (optional)	Review Basket	Passenger Details	Make Payment	Receive Confirmation
Select bus travel type	View results	Add flight	See total price	Enter personal info	Select payment method	Email
Select origin & destination	Compare times & prices	Add hotel	Edit, add or remove items	Add contact details	Enter card details	SMS
Choose travel dates	Select seat	<i>*As is process</i>		Accept terms	Confirm purchase	Download voucher
Insert number of passengers					Combo discount available	

### INVEST-compliant user stories prioritized each using MoSCoW

	User Story (Epic/Feature Level)	MoSCoW Priority
1	As a user, I want to search and select bus tickets so that I can view options and purchase directly on the platform.	Must Have
2	As a user, I want to add other travel products (flight, hotel) to my basket alongside my bus ticket, so I can make a single combined purchase.	Must Have
3	As a user, I want to review my combined basket and see the full itinerary with prices before checkout.	Must Have
4	As a user, I want to receive a confirmation message (email, SMS) with my voucher and travel details after completing my booking.	Must Have
5	As a user, I want to cancel or change my booking under certain conditions so that I have flexibility if my travel plans change.	Could Have
6	As a business, I want to send push notifications and upsell additional services in the mobile app, to increase cross-sell conversion.	Won't Have
7	As a user, I want to book a bus + car rental package so that I can continue traveling within the city after arriving by bus.	Won't Have



### INVEST Alignment per User Story

#### 1. Search & Select Bus Ticket



As a user, I want to search and select bus tickets so that I can view options and purchase directly on the platform.

Criteria	Explanation
I - Independent	Can be developed and tested independently of other features.
N - Negotiable	UI design, filters, and sorting can be defined collaboratively.
V - Valuable	Delivers essential core functionality for users.
E - Estimable	Easily estimable by devs; relies on clear API and UI logic.
S - Small	Represents a single, focused user interaction.
T - Testable	Results can be validated via UI and backend search behavior.

## 2. Add Other Products (Flight, Hotel)

As a user, I want to add other travel products (flight, hotel) to my basket alongside my bus ticket, so I can make a single combined purchase.

| I | Adding flights or hotels does not block or depend on bus ticket logic.

| N | Product types, availability, or pricing rules can be discussed.

| V | Enables the multi-product basket — a key value proposition.

| E | Can be estimated as it leverages existing product services.

| S | A discrete add-to-basket action per product.

| T | Can be tested by adding/removing products in different combinations.

## 3. Review Combined Basket

As a user, I want to review my combined basket and see the full itinerary with prices before checkout.

| I | Works independently after product selection.

| N | Display format, editable fields, or grouping logic is flexible.

| V | Increases clarity and confidence before purchasing.

| E | UI & price summary logic is scoping-friendly.

| S | Can be implemented as a single review screen.

| T | Testable via cart state, totals, and navigation behavior.

#### **4. Make Payment + Combo Discount (Refer number 1)**

As a user, I want to make a secure payment and receive a discount when I book multiple services.

| I | Occurs after all selections — modular in workflow.

| N | Payment methods, discount logic are configurable.

| V | Delivers value (revenue & incentive) to both user and business.

| E | Clearly scoped logic for payment gateway + discount rules.

| S | Can be kept small with proper backend handling.

| T | Testable via payment scenarios and discount validation.

#### **5. Receive Confirmation (Email, SMS, Voucher) (Refer number 4)**

As a user, I want to receive a confirmation message (email, SMS) with my voucher and travel details after completing my booking.

| I | Post-purchase flow — does not block checkout itself.

| N | Message content and delivery methods can be adjusted.

| V | Critical for user assurance and travel planning.

| E | Email/SMS services make this easily estimable.

| S | Each delivery channel can be implemented independently.

| T | Can be tested by triggering bookings and reviewing outputs.

## **9. Definition of Ready & Acceptance Criteria**

### **Acceptance Criteria in Gherkin Format**

"As a user, I want to search and select bus tickets so that I can view options and purchase directly on the platform."

**Scenario 1:** Display search results when valid input is given

Given the user is on the bus ticket search page

When the user enters a valid departure and arrival city and date

Then a list of available bus routes should be displayed

**Scenario 2:** Display no result message for invalid input

Given the user is on the bus ticket search page

When the user enters a non-serviceable route

Then a message saying "No buses available" should be shown

**Scenario 3:** Cross-platform basket consistency

Given the user has added a Flight product to the basket on the web

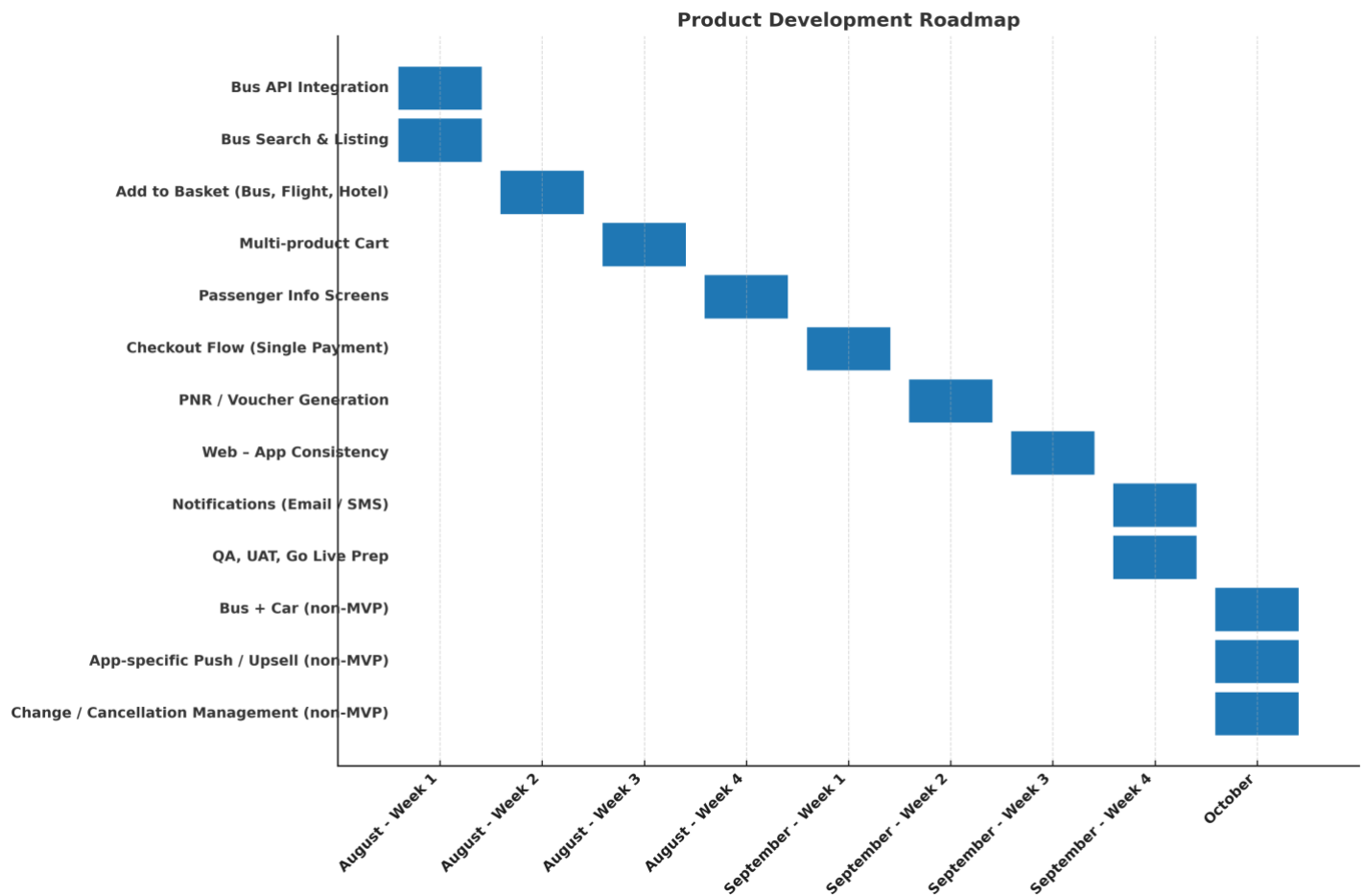
When the user opens the mobile app

Then the basket should contain the same Flight product and any previously added Bus item

#### **Ready Criteria for: 'Search and Select Bus Tickets'**

- ☐ The story is clearly written with user goal and acceptance criteria
- ☐ The design for the search page is completed and approved by UX/UI teams
- ☐ Backend API contracts for search are ready and documented
- ☐ Edge cases (e.g., empty results, invalid routes) are listed
- ☐ QA has prepared initial test scenarios
- ☐ Story is estimated and fits within one sprint
- ☐ Dependencies on other systems (e.g., bus API provider) are confirmed and stable
- ☐ Localization requirements (e.g., messages like "No buses available") are covered

## **10. Delivery Roadmap**



Sprint	Timeline	Tasks	Milestone
Sprint 1	Aug 1 – Aug 14	Bus API Integration (must finish within Sprint 1)	API connection and smoke test completed
Sprint 2	Aug 15 – Aug 31	Backend logic for multi-product basket, UI for basket & product selection, Payment layer	Functional multi-product cart available
Sprint 3	Sep 1 – Sep 14	Confirmation development (email/SMS, voucher flow), Start of regression testing	End-to-end booking flow tested
Sprint 4	Sep 15 – Sep 30	App component implementation (parity with web + combo discount), Final regression, Release	MVP released on all platforms

#### ✓ Release Criteria

- ✓ All MVP features tested and passed regression
- ✓ App and web feature parity is ensured
- ✓ No blocker or high-severity bugs open
- ✓ Confirmation & voucher flows verified
- ✓ Multi-product basket flow successfully completed end-to-end
- ✓ App Store / Play Store releases prepared if required



## Success Metrics (Post-Release KPIs)

Category	Metric	Target
Product	Conversion rate uplift for bus product	+15% within 1 month
	Multi-product booking ratio	≥ 10% of all bookings within 2 months
	Drop-off rate in basket funnel	≤ 30%
	NPS (booking experience)	≥ +40
Quality	Bug-free rate during UAT & production	≥ 95%
Technical	Average page load time (search & payment)	≤ 1.5 seconds
	Bus API availability	≥ 99.5% uptime
	End-to-end booking failure rate	≤ 1%
	App crash rate (for booking-related flows)	≤ 0.5%
	Response time for basket update API	≤ 800 ms