



CSEN 174



TRIPSITTER

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Tripsitter

INSPIRATION

The Problem:

Planning trips with friends is hard ...

Different sites for booking plane tickets, hotels, activities, etc.

Figuring out how to divide costs

... and more

The Solution?

TRIPSITTER





Tripsitter

VISION STATEMENT

FOR those who want to travel with friends
WHO want to simplify and organize the travel planning process
Tripsitter is a mobile and web application
THAT allows a group to plan a trip together
UNLIKE TripAdvisor, Expedia, and other travel websites
OUR PRODUCT seamlessly integrates disparate sources into one place, offering users the ability to collectively book flights, hotels, rental cars, activities, and restaurants, synchronize with one's Google Calendar, and manage trip expenses.



BRANDON, THE BUSY TRAVELER

As a busy traveler, I want to view flights, hotels, and rental cars for my upcoming trip in one central place.

As a busy traveler, I want to invite others to my trip so that I can collect input about what options make the most sense.



UMA, THE UNMOTIVATED FRIEND

As an unmotivated planner, I want to be able to see all booked items in an itinerary to be viewed at a later date.

As an unmotivated planner, I want to save my information in a profile so I don't have to enter it every time.



OLIVIA, THE OVERPLANNER

As an overplanner, I want to be able to filter by airline brands to I am only using airlines I trust.

As an overplanner, I want to be able to sort flights and hotels by departure time and distance to make sure I choose the best option.



MICHAEL, THE MANAGER

As a manager, I look for activities like concerts in a specific city for my team to attend.

As a manager, find high quality restaurants so that team members can bond over a nice meal.

As a manager, I want to upload travel plans to team member's Google Calendars so that the trip will work around everyone's schedule.



Tripsitter

PLANNING

From Concept...

TripSitter Board

Board Overview: This is a digital product backlog board showing tasks across four sprints: [Current Sprint] Done, [Past Sprint] W6-7, [Past Sprint] W8-9, and [Past Sprint] W10-11. The board includes columns for DONE, In Progress, and To Do.

- [Current Sprint] Done:**
 - DONE: Instructions: Tasks you have completed in the current sprint.
 - Update trip name, date, delete trip
 - Implement Profile Photos
 - Implement upcoming and past trips on profile page
 - remove editing email
 - Format datetime on profile page
 - Implement home page
 - Implement hotels page
 - Implement flights page
- [Past Sprint] W6-7:**
 - In Progress: Retrospective Takeaways
 - To Do: As a manager, I want to be able to book flight tickets through an app so that the travel process will be simplified
 - To Do: As a concert-goer, I want to be able to view flights from a starting location to a destination on provided dates so I can get to my event.
 - To Do: As a concert-goer, I want to be able to view rental cars at the airport so I can get to my hotel, event, and restaurants.
 - To Do: As an unmotivated planner, I want to be able to save my information in a profile so that I don't need to enter it every time.
 - To Do: Implement "Share Trip" Functionality
 - To Do: Implement rental cars page
- [Past Sprint] W8-9:**
 - In Progress: Retrospective Takeaways
 - To Do: As an unmotivated planner, I want to be able to see all of my booked items in an itinerary so I can, like, view them all at a later date.
 - To Do: As a manager, I want to be able to filter by hotel and airline brands so I am only using airlines that I trust and hotels I can afford.
 - To Do: As a manager, I want to be able to find high quality restaurants so that team members can bond over a nice meal
 - To Do: Fix equality for flights, hotels, rental cars, and events
 - To Do: As an unmotivated planner, I want to be able to upload travel plans to team member's Google Calendars so that the trip will work around everyone's schedule and serve as a reminder for team members
- [Past Sprint] W10-11:**
 - In Progress: Retrospective Takeaways
 - To Do: Complete amadeus bookings on test API
 - To Do: As an over-planner, I want to be able to filter by hotel and airline brands so I am only using airlines that I trust and hotels I can afford.
 - To Do: As a manager, I want to be able to view flights from a starting location to a destination on provided dates so I can get to my event.
 - To Do: As a concert-goer, I want to be able to view rental cars at the airport so I can get to my hotel, event, and restaurants.
 - To Do: Implement "Share Trip" Functionality
 - To Do: Implement rental cars page

Filters: DH CG CY GG JW +2

Share: ...

Add /search/find Amadeus Self

Add Trips to D

Add /search/find Amadeus Self

+ Add a card

G

Flowchart illustrating the user flow for TripSitter:

- User logs in or signs up on the TripSitter login screen.
- The user is directed to their "My Trips" dashboard, which shows a summary of their trips and a "Create New Trip" button.
- The user creates a new trip, entering details like trip name, start date, and end date.
- The user selects flights from various carriers (e.g., Delta, United, American) for their trip.
- The user selects rental cars from various providers (e.g., Hertz, Avis, Enterprise) for their trip.
- The user selects activities (e.g., North Coast Festival, Union Park, Chicago) for their trip.
- The user selects hotels (e.g., Hotel X, Hotel Y) for their trip.
- The user reviews the itinerary and adds options for each trip component.
- The user completes the payment information (e.g., card number 4342 4342 4342 4342, expiration MM/YY, CVV) and confirms the trip.



Tripsitter

PLANNING

... To Reality!

TripSitter

My Trip to Las Vegas Las Vegas, United States Mar 20 -> Mar 28

Rental Cars
Flights
Restaurants
Hotels
Activities

Members: 1
Jordan Mosakowski jmosakowski@scu.edu
+ Add Member

Discussion
Add Comment >
Split Payments
Checkout
Delete Trip

TripSitter

My Trip to London Mar 22, 2024 -> Mar 31, 2024 London, United Kingdom

- Edit Trip Info
- Manage Participants
- Discussion
- Flights
- Hotels
- Rental Cars
- Activities
- Restaurants
- Trip Map
- Split Payments
- Checkout

Tripsitter is a fully featured mobile and web experience!



CORE FEATURES



FLIGHTS



HOTELS



RESTAURANTS



RENTAL CARS



ACTIVITIES



MORE FEATURES



MAP



CHECKOUT



ITINERARY
TO PDF



GOOGLE
CALENDAR





EVOLUTION

RESTAURANTS

Added during user story writing to make Tripsitter an end-to-end planner

ITINERARY PDF

Added during development for overplanners/managers

MAPS

Added after we found lists were unintuitive

HOTEL/CAR GROUPS

Added during wireframes to tackle large groups

USER INFO

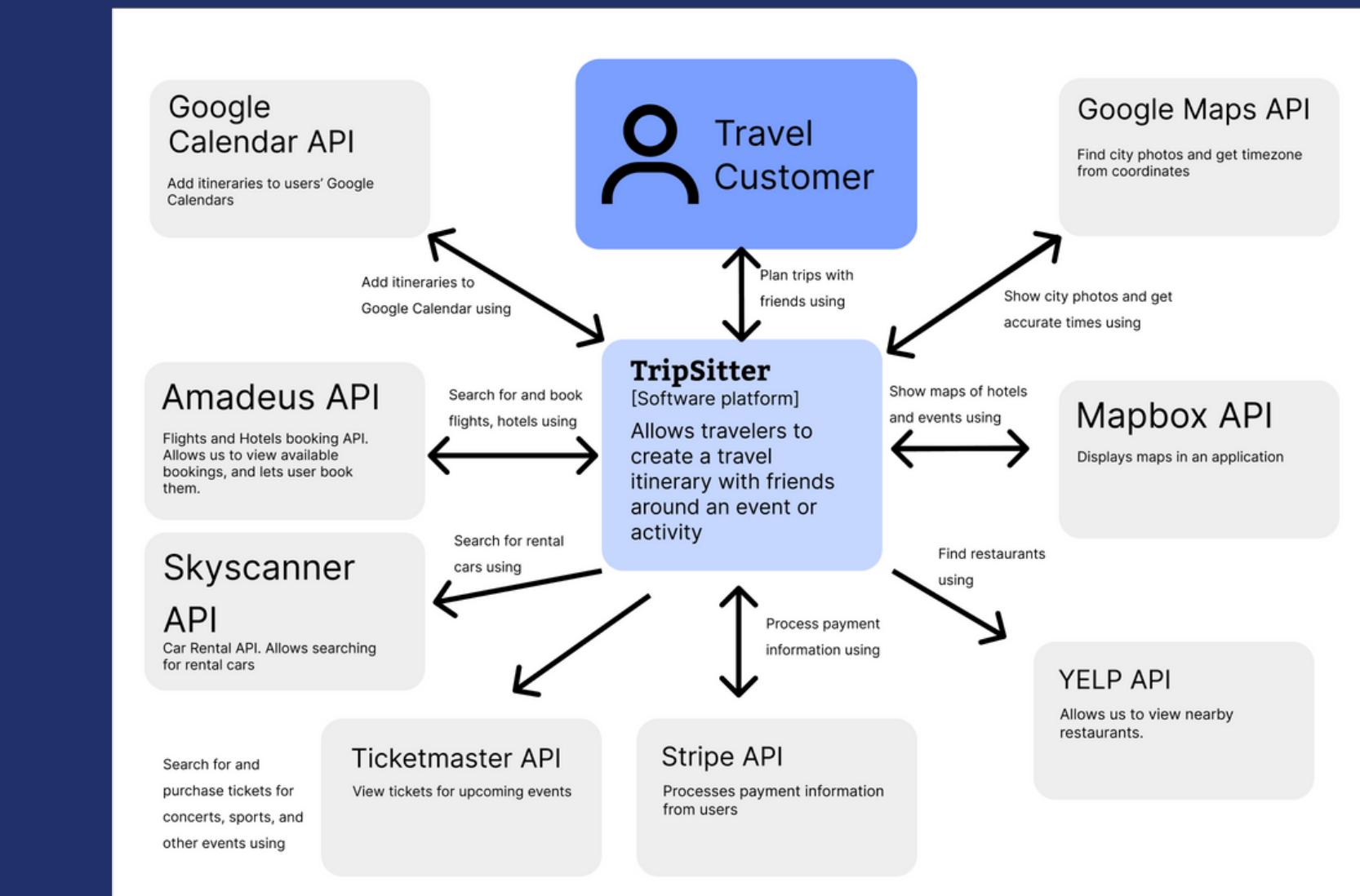
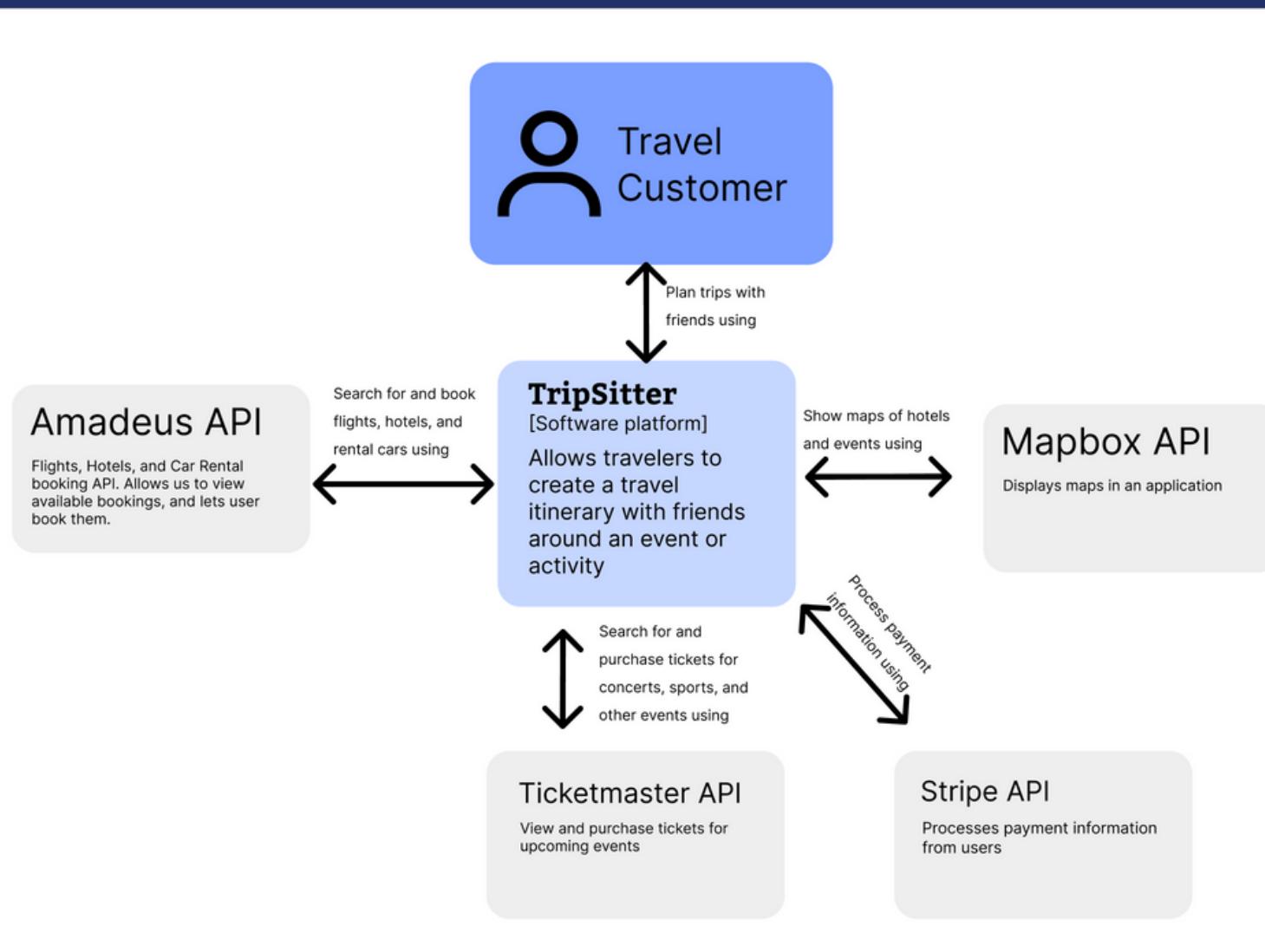
Added for booking flights
(birth date, phone number, etc)

MINOR UI TWEAKS

Modifications from initial wireframes based on user feedback



SYSTEM ARCHITECTURE

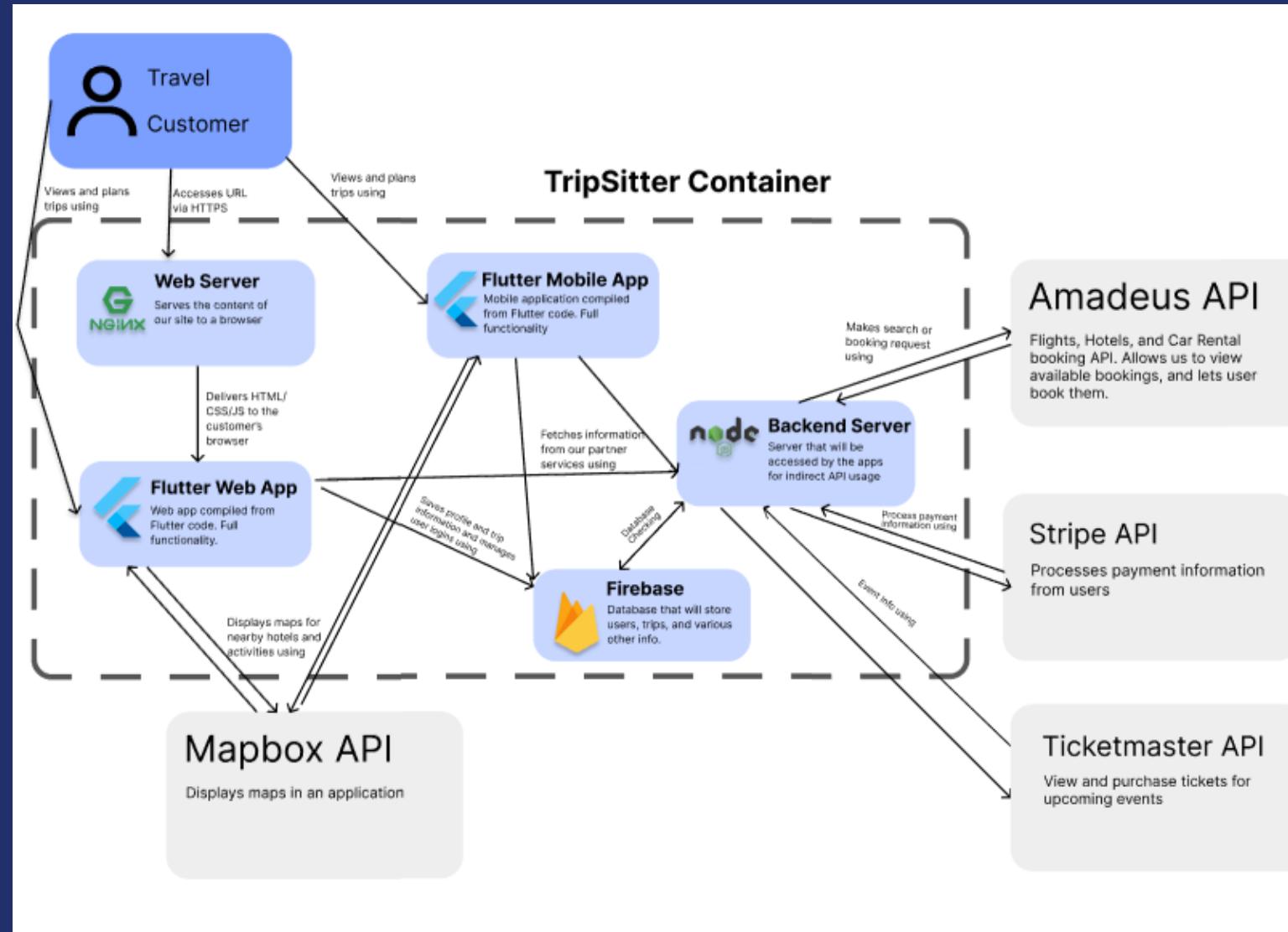


**OLD SYSTEM CONTEXT DIAGRAM
(4 APIS)**

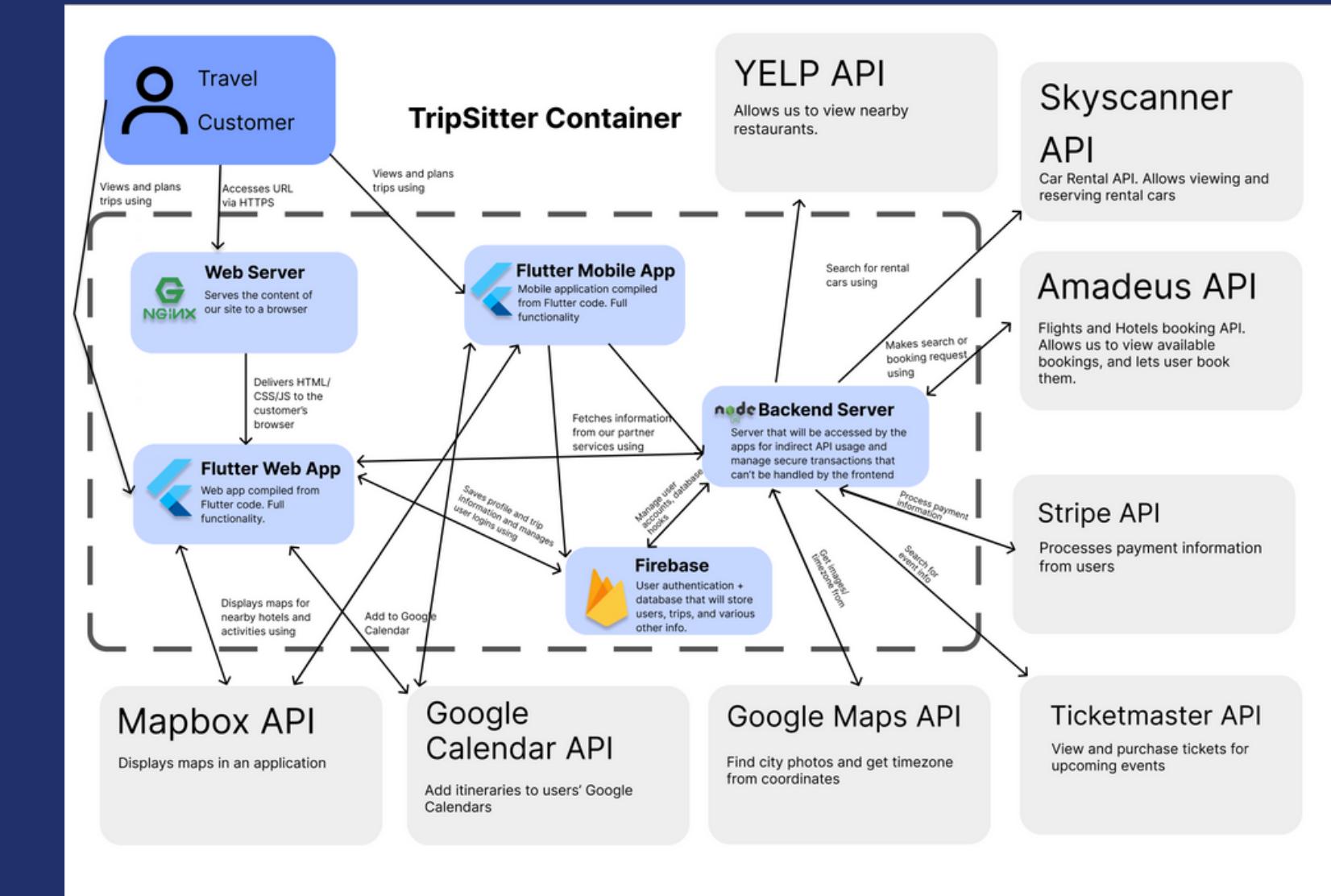
**NEW SYSTEM CONTEXT DIAGRAM
(8 APIS)**



SYSTEM ARCHITECTURE



OLD CONTAINER DIAGRAM

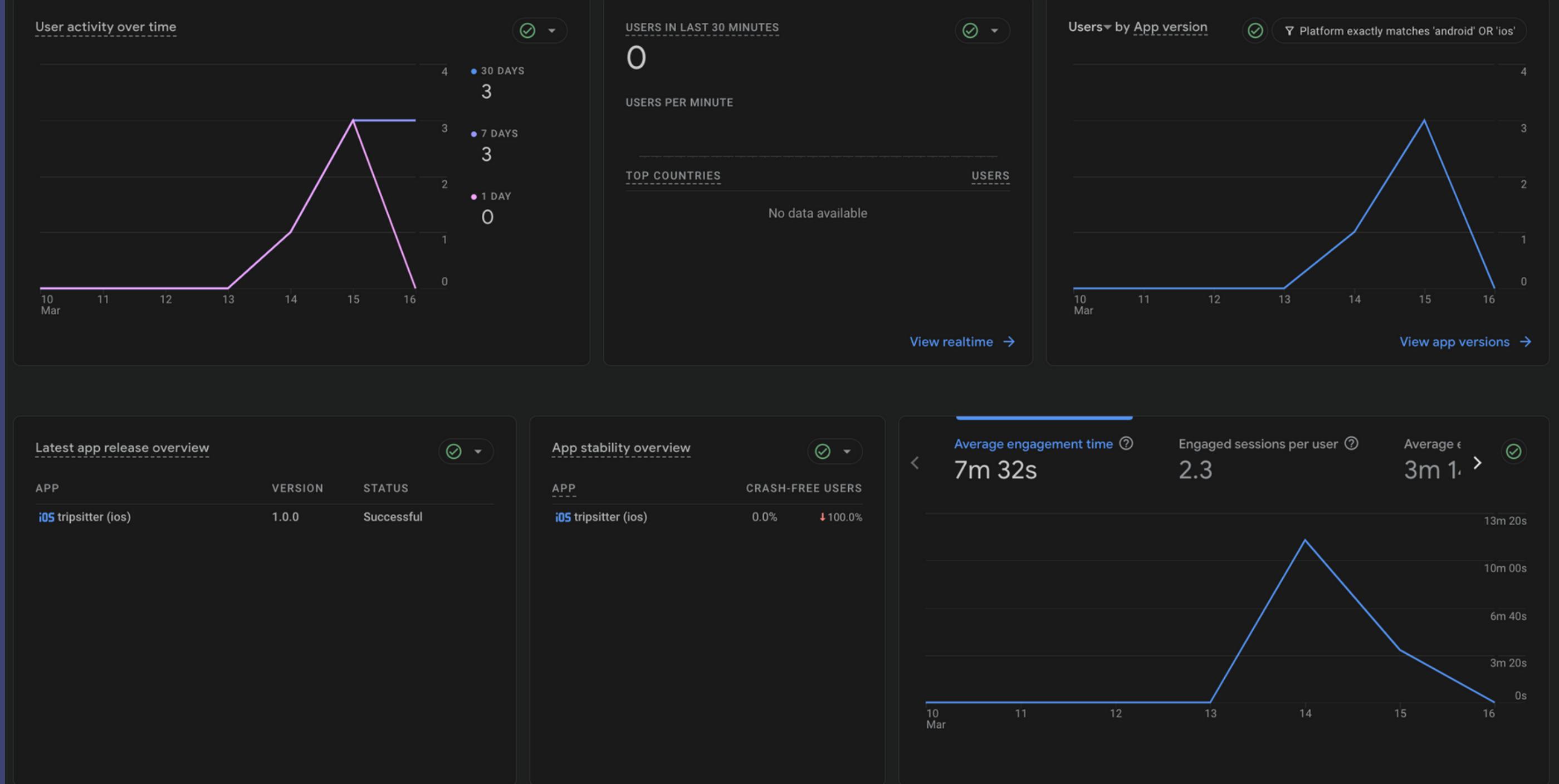


NEW CONTAINER DIAGRAM



Tripsitter

USER METRICS

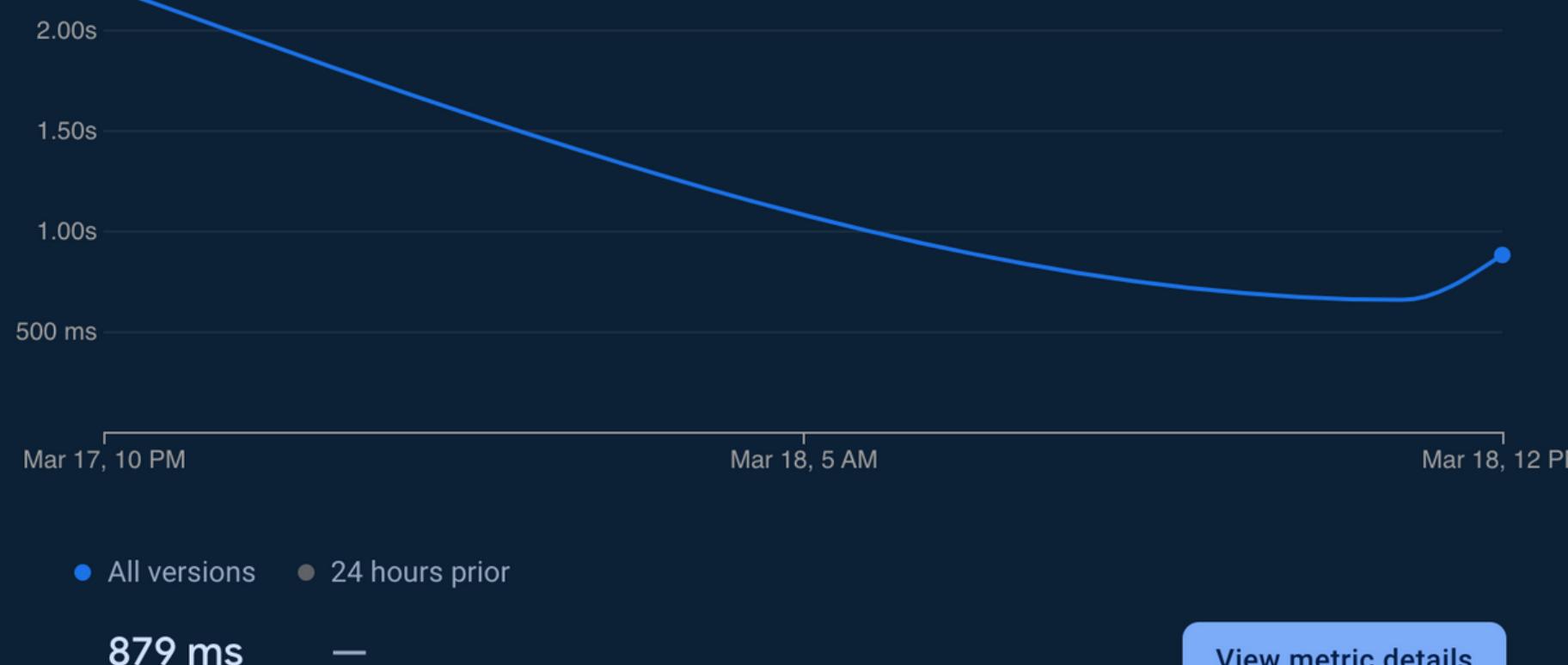




PERFORMANCE METRICS

First paint for localhost/**

First paint (879 ms) is **60% faster** compared to 14 hours prior



First paint ↓
localhost/**

-60% 879 ms

Response time ↓
api.mapbox.com/**

-62% 66 ms

Duration
get-flights

+0% 10.86s

Duration
get-rental-cars

+0% 195 ms

Select a metric



Select a metric



WHAT WENT WELL?



USER STORIES

Gave us a specific list of features to implement

WIREFRAMES/MOCKUPS

Provided a base approved by everyone to build the project around

ARCHITECTURE DIAGRAMS

Allowed us to visualize all of our different systems and how they interact



VERSION CONTROL

Very helpful, but lost of merge conflicts given the complexity of the app

PROJECT MANAGEMENT

Trello frequently fell behind actual status of the project

TESTING

Found several bugs after features were “complete”



WHAT TO IMPROVE?



FUTURE FEATURES

MULTIPLE ARRIVAL DATES

Users would be able to set their arrival date different from other users

DIRECT RENTAL CAR BOOKING

Allow users to book rental cars directly through Tripsitter instead of linking to the external website

PUSH NOTIFICATIONS

Tripsitter would be able to send push notifications when a change is made to the trip or when the trip date is close



LIVE DEMO

tripsitter-travel.web.app