TRIPPLANNR — Updated Product Requirements Document (PRD)

Version: MVP 2.0 (Native iOS Pivot)

Owner: Marlon

Platform: Native iOS App (SwiftUI)

Backend: Firebase (Firestore + Functions optional), Google Places API, Gemini/Claude optional for text generation

Primary Objective: Enable groups to choose a meetup location in under 60 seconds.

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1. Product Overview

TripPlannr is a native iOS app that allows groups to quickly choose a place to meet—usually for food, drinks, coffee, or sightseeing—with minimal effort. The app is activated when a user shares a TripPlannr link with their friends. Friends tap the link, enter their name, optionally add preferences, and submit a one-time location. Once enough people have joined, the app recommends the top three fair, relevant meetup spots and generates a poll so the group can democratically choose.

This app completely avoids heavy Apple API usage (iMessage extensions, Find My entitlements) and focuses on a smooth, fast in-app flow.

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2. Core Principles of the MVP

1. **Decide in under 60 seconds.**
2. **One-time location sharing, not tracking.**
3. **No accounts required.**

4. **Minimal questionnaire.**
5. **Three venue recommendations, max.**
6. **Drag-up/drag-down interface (map + list).**
7. **Real-time group session via link.**

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3. User Flow

Step 1 — Host creates a session

- Host opens the app
- Taps “Start a Trip”
- Chooses broad category:
    - Food
    - Drinks
    - Coffee/Tea
    - Dessert
    - Scenic Spot
    - No preference
- App generates a **trip link** to share with friends

Step 2 — Friends join via link

- Friends tap the link

- Are taken into the app (universal link)
- They enter:
    - Name
    - Auto avatar is assigned
    - One-time location permission
    - Optional preferences:
        - Activity type
        - Diet
        - Price sensitivity
        - Travel mode (walk, drive, Uber)

Step 3 — Group session screen

UI is split into two panels:

Top Panel:

Map

Shows:

- Participants (one-time location snapshot markers)
- Drag-down mode (expanded map)
- After recommendations: venue pins appear

Bottom Panel:

Group List

Shows:

- Participant name
- Avatar
- Their preferences
- Travel mode icon
- Drag-up mode shows full poll/options list

Updates in real-time as people join.

Step 4 — Host triggers “Generate Places”

Once either:

- Everyone has joined, or
- Minimum 3 members joined, or
- Timeout reached (2-minute auto-detect)

The app:

- Computes midpoint/fairness
- Calls Google Places API for candidates
- Ranks by:
    - Distance fairness
    - Relevance
    - Price
    - Rating
    - Availability
- Selects **top 3**

Step 5 — Poll appears

- A clean, simple 3-option poll pops up
- Each option includes:
    - Name
    - Rating
    - Price
    - Distance for each user (relative, not exact)
    - Short vibe description

Step 6 — Group votes

- Majority wins
- Host can break ties
- Final result displayed

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4. Technical Architecture (MVP)

4.1 Frontend

Native iOS App (SwiftUI)

- Core views:
    - Home Screen (Start Session)
    - Join Session (via link)

    - Group Session (map + list)
    - Poll View
    - Place Details Modal
- Uses:
    - MapleKit
    - CoreLocation for one-time permission
    - SwiftUI bottom sheet for drag-up panel

4.2 Backend

Use Firebase:

Firestore

- Session documents:
    - Host
    - Timestamp
    - Category
    - Options (optional)
    - Poll state
- Participants subcollection:
    - Name
    - Preferences
    - One-time location

Firebase Functions (optional)

- Trigger venue generation
- Handle poll logic

4.3 External APIs

- **Google Places API**
    - Nearby Search
    - Text Search
    - Place Details
- Optional: Clifford AI (Gemini/Claude) for short summaries

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5. Recommendation Engine Logic

Input:

- Participant locations
- Preferences
- Category
- Travel modes

Processing:

1. Compute centroid (simple or weighted)

2. Query Google Places (radius based)
3. Score each place using:
    - Fairness score (minimizing max travel differential)
    - Relevance score (matching activity/prefs)
    - Rating
    - Price
    - Hours
4. Select top 3

Output:

- 3 recommended venues
- Metadata for poll
- Pin positions for map

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6. Poll Logic

Poll supports:

- Multiple votes
- Host tie-breaking
- Live updates
- Locking results
- Optional recount / recompute button

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7. Privacy & Data Policy

- One-time location
- Location deleted when trip ends
- No tracking
- No background location
- No chat access
- No account needed

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8. Non-Goals for MVP

- Continuous GPS tracking
- iMessage integration
- Calendar sync
- Payment integration
- Ride-sharing pairing
- Multi-stop itineraries
- Advanced AI reasoning

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9. Success Metrics (MVP)

Quantitative:

- 90% session creation success
- <10 second venue generation
- <3 taps to join trip
- 80% users complete flow once joined

Qualitative:

- “This was faster than deciding ourselves.”
- “This is easier than texting.”