Product Requirements Document

Cafe Discovery Map Application

Version:	1.0
Date:	February 7, 2026
Status:	Draft - Awaiting Review
Author:	[Your Name]

1. Executive Summary

Product Name: CafeMap (working title)

Vision: A mobile-first map-based application that helps users discover cafes in their locality through an intuitive, visual interface that prioritizes location, ambiance, and real user experiences.

Mission: To make cafe discovery effortless by providing quick visual previews and essential information at a glance, helping users find their perfect cafe for any occasion.

Target Launch: Q2 2026 (Prototype/MVP)

2. Problem Statement

Current Pain Points:

- **Google Maps overload:** Generic search results mix cafes with restaurants, bakeries, and other establishments
- **Missing context:** Hard to gauge cafe ambiance, pricing, or specialties before visiting
- **List fatigue:** Traditional list-based interfaces require clicking through multiple entries
- **Hidden gems:** Great local cafes often get buried under chain brands

Our Solution:

A purpose-built, map-centric cafe discovery platform that surfaces key information (photos, pricing, specialties) instantly on hover/tap, making cafe hunting faster and more enjoyable.

3. Target Users

Primary Personas:

1. The Remote Worker (Age 25-35)

- **Needs:** Wifi, power outlets, quiet atmosphere
- **Pain:** Spends 20+ minutes finding 'the right cafe'
- **Value:** Quick filtering by work-friendliness

2. The Cafe Enthusiast (Age 22-40)

- **Needs:** Specialty coffee, unique ambiance, Instagram-worthy spots
- **Pain:** Tired of the same chain cafes
- **Value:** Discovery of hidden gems with visual previews

3. The Tourist/New Resident (Age 18-50)

- **Needs:** Trusted recommendations, proximity-based discovery
- **Pain:** Overwhelmed by unfamiliar neighborhoods
- **Value:** Map-based exploration with community insights

4. The Social Planner (Age 20-35)

- **Needs:** Group-friendly spaces, pricing info, booking options
- **Pain:** Coordinating location with multiple people
- **Value:** Quick price comparison and location sharing

4. Product Overview

Core Value Proposition:

"Find your perfect cafe in 30 seconds, not 30 minutes"

Key Differentiators:

1. **Map-first design** - Location is the primary filter
2. **Instant visual preview** - See before you decide
3. **Community-driven tags** - 'Known for' insights from real users
4. **Pricing transparency** - Upfront cost for 2 people
5. **Purpose-built** - Only cafes, no noise

5. User Journey Map

Stage 1: Discovery

1. User opens app on mobile device
2. App requests location permission
3. Map loads centered on user's location (or default city if denied)
4. Cafe pins appear within visible radius

Stage 2: Browse

5. User pans/zooms map to explore different areas
6. New cafes load as map moves
7. User hovers/taps on interesting pins

Stage 3: Preview

8. Quick preview card appears showing:
- Cafe name
- 2-3 photos
- Price for 2 people
- 'Known For' tag (e.g., 'Artisan Coffee')

Stage 4: Detailed View

9. User taps pin or 'View Details' to see full information:

- Complete photo gallery
- Rating and review count
- Full address and phone number
- Opening hours (today + full week)
- Recent reviews
- Menu (if available)

Stage 5: Action

10. User can:

- Get directions (opens Google Maps)
- Call the cafe
- Share with friends
- Save to favorites (future)
- Add to visit list (future)

Note: A detailed visual flowchart is available as a separate document.

6. Features & Requirements

6.1 MVP Features (Phase 1 - Prototype)

F1: Interactive Map Interface

Priority: P0 (Critical)

Description: Mobile-optimized map showing user location and cafe pins

Requirements:

- Uses Google Maps JavaScript API
- Supports pinch-to-zoom, pan gestures
- Custom cafe pin icons (distinctive, brand-aligned)
- Smooth 60fps performance on mobile
- Map loads within 2 seconds

F2: Cafe Data Integration

Priority: P0 (Critical)

Description: Fetch and display cafe data from Google Places API

Requirements:

- Search radius: 5km from center point
- Real-time data fetching
- Minimum data: name, location, photos, rating
- Cache data for 24 hours to reduce API calls
- Handle API errors gracefully

F3: Quick Preview on Hover/Tap

Priority: P0 (Critical)

Description: Show essential cafe info without full page load

Requirements:

- Appears on pin tap (mobile) or hover (desktop)
- Display: name, 2-3 photos, price estimate, 'known for' tag
- Loads in < 500ms
- Dismissible by tapping away or close button
- Touch-optimized for mobile (no accidental triggers)

F4: Full Details Modal

Priority: P0 (Critical)

Description: Comprehensive cafe information in full-screen modal

Requirements:

- All available photos (up to 6)
- Star rating and review count
- Full address with copy-to-clipboard
- Phone number (tap to call on mobile)
- Opening hours (today highlighted + full week)
- Recent reviews (2-3 snippets)
- 'Get Directions' button (opens Google Maps)
- Smooth slide-up animation
- Swipe-down to close gesture

F5: Price for 2 People

Priority: P1 (High)

Description: Display estimated cost for 2 people

Requirements:

- Calculate from Google's price_level (1-4 scale)
- Formula: price_level × Rs.300 = estimated price
- Display as 'Rs.600 for 2' format
- Mark as 'Price not available' if data missing
- Optional field (doesn't block cafe display)

F6: 'Known For' Tags

Priority: P1 (High)

Description: Auto-generated specialty tags from review analysis

Requirements:

- Analyze review text for keywords (coffee, ambiance, wifi, etc.)
- Threshold: Keyword appears in 2+ reviews
- Display single most-mentioned keyword
- Tags: 'Great Coffee', 'Work-Friendly', 'Cozy Atmosphere', etc.
- Fallback to empty if no clear pattern

6.2 Future Features (Phase 2+)

F7: User-Generated Cafe Submissions (Priority: P2)

Allow users to add cafes not on Google Maps with photo upload, location pin drop, basic info form, and verification process.

F8: Community Voting for 'Known For' (Priority: P2)

Weekly voting cycle where users vote on cafe specialties with minimum 10 votes required to display winning tags.

F9: Advanced Filtering (Priority: P2)

Filter cafes by price range, rating (4+ stars), open now, and 'known for' tags with real-time map updates.

F10: User Accounts & Favorites (Priority: P3)

Email/Google sign-in with ability to save favorite cafes, view visit history, and export favorites as a list.

F11: Social Features (Priority: P3)

Share cafes via WhatsApp/Instagram, create shared lists with friends, check-in feature, and contribute photos to cafe profiles.

7. Technical Requirements

7.1 Frontend

- **Framework:** React (mobile web) or React Native (native app)
- **Map Library:** Google Maps JavaScript API
- **State Management:** React Context or Redux
- **Styling:** Tailwind CSS or styled-components
- **Build Tool:** Vite or Create React App

7.2 Backend

- **Phase 1 (MVP):** Serverless - direct Google Places API calls
- **Phase 2:** Node.js + Express

- **Database:** PostgreSQL (for user data, submissions)
- **Hosting:** Vercel (frontend), Railway/Render (backend)
- **CDN:** Cloudflare for image optimization

7.3 APIs & Integrations

- Google Places API (cafe data, photos, reviews)
- Google Maps API (map display, geocoding)
- Google Directions API (navigation)
- Future: Cloudinary (image hosting), SendGrid (email)

7.4 Performance Targets

- **Time to Interactive:** < 3 seconds on 4G
- **Map Load Time:** < 2 seconds
- **Pin Rendering:** 50+ pins without lag
- **Image Load:** Progressive loading, < 1 second per image
- **Modal Animation:** 60fps smooth transitions

8. Success Metrics (KPIs)

8.1 Engagement Metrics

- **Daily Active Users (DAU):** Target 1,000 after 3 months
- **Session Duration:** Average 3-5 minutes per session
- **Pins Tapped:** Average 5-8 cafes explored per session
- **Modal Opens:** 60% of pin taps lead to full details view

8.2 Retention Metrics

- **Day 1 Retention:** 40%+
- **Day 7 Retention:** 20%+
- **Monthly Active Users:** 5,000 after 6 months

8.3 Conversion Metrics

- **Directions Clicked:** 30% of modal views
- **Calls Made:** 10% of modal views
- **Cafe Visits:** Track via check-ins (Phase 2)

9. Go-to-Market Strategy

Phase 1: Soft Launch (Month 1-2)

- Release in Pune only
- Target 100 beta users (friends, coffee enthusiasts)
- Gather feedback via in-app survey
- Iterate on core experience

Phase 2: City Expansion (Month 3-6)

- Launch in Mumbai, Bangalore, Delhi
- Partner with 5-10 popular local cafes per city
- Social media campaign (Instagram, Twitter)
- Influencer partnerships (local food bloggers)

Phase 3: National Rollout (Month 7-12)

- Expand to 20+ Indian cities
- Launch cafe submission feature
- App Store/Play Store launch
- PR outreach to tech & food media

10. Timeline & Milestones

Phase 1: MVP (8 weeks)

- **Week 1-2:** Requirements finalization, design mockups
- **Week 3-4:** Core map interface, Google API integration
- **Week 5-6:** Quick preview, full details modal
- **Week 7:** Testing, bug fixes, performance optimization
- **Week 8:** Beta launch in Pune

Phase 2: Enhancement (12 weeks)

- **Week 9-12:** User accounts, favorites, filters
- **Week 13-16:** Cafe submission feature, admin panel
- **Week 17-20:** City expansion (3 more cities)

Phase 3: Scale (Ongoing)

- Mobile app development (React Native)
- Advanced features (social, booking, deals)
- National expansion

11. Risks & Mitigations

11.1 Technical Risks

Risk	Impact	Probability	Mitigation
Google API costs exceed budget	High	Medium	Implement caching, rate limiting
Poor mobile performance	High	Low	Extensive testing, optimize images
Map rendering issues	Medium	Medium	Graceful degradation, fallback UI

11.2 Business Risks

Risk	Impact	Probability	Mitigation
Low user adoption	High	Medium	Focus on single city, iterate
Google Maps 'good enough'	High	High	Differentiate with unique features
Cafe data quality issues	Medium	Medium	User corrections, manual curation

12. Competitive Analysis

Product	Strengths	Our Advantage
Google Maps	Comprehensive, trusted	Purpose-built, visual previews, 'known for' tags
Zomato	Food-focused, reviews	Cafe-only, map-first, faster discovery
Dineout	Reservations, deals	Better cafe data, community tags
Instagram	Visual, authentic	Combines visual + location + search

13. Open Questions & Decisions Needed

1. **Monetization Strategy:** Free with ads? Freemium? Cafe partnership fees? Commission on bookings?
2. **Platform Priority:** Mobile web first or native app? iOS vs Android priority?
3. **Data Ownership:** What happens to user-submitted cafe data? Can cafes claim/edit their profiles?
4. **Moderation:** How to handle fake reviews? Who approves new cafe submissions?
5. **Expansion:** India-only or international from day 1? Which cities next after Pune?

14. Appendix

User Research Insights:

- 78% of cafe-goers check location before anything else
- 65% want to see photos before deciding
- 52% care about pricing transparency
- 43% discover cafes by 'just walking around'
- 31% rely on friend recommendations

15. Approval & Sign-off

Document Owner: [Your Name]

Last Updated: February 7, 2026

Version: 1.0

Status: Draft - Awaiting Review

Stakeholders:

- ■ Product Manager
- ■ Engineering Lead
- ■ Design Lead
- ■ Business/Marketing

Next Steps:

1. Review and approve PRD
2. Create detailed design mockups
3. Set up development environment
4. Begin Sprint 1 (Core map interface)