Ping Local Consumer App - Complete Feature Documentation

Version: 1.0.0 **Platform:** iOS & Android (React Native / Expo) **Last Updated:** January 2025

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1. App Overview

Ping Local is a consumer-facing mobile application that connects users with exclusive offers and promotions from local independent businesses. The app enables users to discover local businesses, claim exclusive deals, redeem offers via QR codes, and earn loyalty points.

Core Value Proposition

- Discover local independent businesses
- Access exclusive offers and promotions
- Earn loyalty points for every purchase
- Support local community businesses

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2. Authentication & User Management

2.1 Welcome Screen

- App branding and introduction
- Options to Sign Up or Log In
- Clean, branded visual design

2.2 User Registration (Sign Up)

- **Required Fields:**
  - First Name

- Surname
- Email Address
- Password (minimum 8 characters)
- Email validation
- Password strength requirements
- Automatic user profile creation in database

2.3 Login

- Email and password authentication
- Secure sign-in via Supabase Auth
- Session persistence
- Error handling with user-friendly messages

2.4 Email Verification

- Verification email sent on signup
- Email confirmation link/code system
- Resend verification option
- Navigation to onboarding after verification

2.5 Password Recovery

- "Forgot Password" flow
- Email-based password reset
- 6-digit OTP code verification
- Secure password update

2.6 Session Management

- Automatic session persistence
- Auth state listening
- Secure sign-out functionality
- Session refresh handling

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3. Onboarding Experience

3.1 Onboarding Carousel

A 4-slide interactive onboarding tutorial introducing users to the app:

Slide 1: "Discover"

- Introduction to finding local independents
- "The best of Wirral's independents - tailored just for you"

Slide 2: "Love"

- Emphasis on community connection
- "Hidden gems, real smiles, warm welcomes, and stories to share"

Slide 3: "Support"

- Encouragement to support local businesses
- "You've made a choice to support real people"

Slide 4: "Don't Miss Out"

- Push notification permission request
- "Be first to hear about exclusive promotions"

3.2 Onboarding Features

- Horizontal swipeable carousel
- Progress dots indicator
- Back/Next navigation
- Push notification permission request on final slide
- One-time display (tracked in database)
- Replay option available in Settings

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4. Main Navigation Structure

4.1 Bottom Tab Navigation

The app uses a 5-tab bottom navigation bar:

Tab	Icon	Purpose
Feed	Home icon	Main offer feed/homepage
Favourites	Heart icon	Saved offers and businesses
Claimed	Central button (elevated)	Claimed offers awaiting redemption
Businesses	Directory icon	Business directory/search
Account	Profile icon	User profile and settings

4.2 Navigation Features

- Custom tab bar design with elevated center button
- Tab bar hides during QR redemption flow
- Stack navigation within each tab
- Deep linking support

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5. Home / Feed Screen

5.1 Main Features

- **Header Section:**

  - User greeting with first name
  - Loyalty tier icon (displayed as avatar)
  - Current tier name display
  - Notification bell with unread count badge
  - Settings gear icon

- **Filter Bar:**

  - Location button (opens slide-out modal)
  - "Showing: [location]" indicator
  - Filter button with active count badge

- **Location Modal:**

  - Slide-out panel from left
  - List of available location areas
  - "All Locations" option
  - Only shows locations with active offers

- **Filter Modal:**

  - Slide-out panel from left
  - Categories section (single-select pills based on business categories)
  - Tags section (multi-select pills)
  - Clear All Filters button
  - Dynamic filtering (unavailable options are greyed out)

- **Sort Options:**

  - Newest (default)
  - Ending Soon
  - Closest to Me (requires location permission)

5.2 Offer Display

- **Offer Feed:**

  - Vertical scrolling list of offer cards
  - Pagination (loads 20 offers per page)
  - Load more on scroll

- **Offer Cards:**

  - Business featured image
  - Offer name and summary
  - Business name and location
  - Price/discount information
  - "Pay up front" or "Pay on the day" indicator
  - Category tags
  - Favourite heart button

- **Map View Button:**

  - Floating action button (bottom right)
  - Opens interactive map view with business locations

5.3 Pull-to-Refresh

- Refresh offer list
- Update notification count
- Sync with latest data

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6. Business Directory

6.1 Directory Screen

- Searchable list of all local businesses
- Filter by category

- Business cards with:
    - Featured image
    - Business name
    - Category
    - Location
    - Description summary

6.2 Business Detail Screen

- **Header Section:**

    - Large featured image/gallery
    - Business name and category
    - Location with map link

- **Information Sections:**

    - Full description
    - Opening times
    - Contact information (phone, website)
    - Address with directions

- **Business Offers:**

    - List of all current offers from this business
    - Quick claim access

- **Actions:**

    - Add to favourites
    - View on map
    - Call business
    - Visit website

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7. Offers & Promotions System

7.1 Offer Types

Pay Up Front Offers:

- Payment required at claim time
- Processed through Stripe
- Instant purchase token generation
- Points awarded immediately

Pay on the Day Offers:

- Free to claim
- Payment made directly at business
- Bill amount entered by business at redemption
- Points awarded after redemption based on bill

7.2 Offer Detail Screen

- **Visual Header:**

- Image gallery with swipeable images
- Pagination dots

- **Offer Information:**

  - Offer name
  - Full description
  - Special notes/terms
  - Price and discount details
  - Quantity available (if limited)
  - Expiry date (if applicable)
  - Business policy

- **Business Details:**

  - Business name (clickable to profile)
  - Location
  - Category

- **Booking Information:**

  - Booking type indicator (if required)
  - External booking link/call button

- **Actions:**

  - "Claim Offer" / "Buy Now" button
  - Add to favourites
  - Share offer

7.3 Offer Statuses

- **Live:** Available for claiming
- **Sold Out:** Quantity limit reached
- **Expired:** Past end date
- **One Per Customer:** Claim restrictions apply

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8. Offer Claiming Flow

8.1 Standard Claim Flow (Pay on the Day)

1. User taps "Claim Offer"
2. Terms acceptance (if applicable)
3. Purchase token created
4. Offer added to Claimed list
5. Ready for redemption

8.2 Payment Flow (Pay Up Front)

1. User taps "Buy Now"
2. Stripe payment sheet displayed
3. Card payment processed
4. Purchase token created with payment record
5. Points awarded immediately
6. Confirmation screen shown

8.3 Slot Booking Flow

For offers requiring time slot reservation:

Slot Booking Screen:

- Calendar strip (30-day view)
- Available dates highlighted
- Time slot selection grid
- Spots remaining indicator
- Party size selector (+/- buttons)
- Selected slot summary
- Continue to claim button

8.4 External Booking Flow

For offers requiring external booking:

- Booking confirmation screen
- External website/phone launch
- Booking date selection
- Confirmation checkbox
- Reminder scheduling option

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9. Claimed Offers Management

9.1 Claimed Screen

- List of all claimed (unredeemed) offers
- Each claimed offer card shows:
  - Offer name
  - Business name
  - Claim date
  - Expiry date (if applicable)
  - Booking date/time (if booked)
  - Status indicator

9.2 Claimed Offer Actions

- **View Details:** Full offer information
- **Redeem Now:** Launch QR code screen
- **View Booking:** See slot/booking details
- **Cancel:** Remove claim (where permitted)

9.3 Offer States

- **Active:** Ready to redeem
- **Pending Booking:** Awaiting slot confirmation
- **Expired:** Past redemption window
- **Redeemed:** Successfully used

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10. QR Code Redemption System

10.1 QR Code Screen

- **Display Elements:**

    - Large QR code (purchase token ID encoded)
    - Pulsing animation effect
    - "Waiting to be scanned" indicator
    - Offer name display
    - Business name display
    - Help instructions

- **Technical Features:**

    - Redemption token created on screen open
    - Real-time Supabase subscription
    - Auto-cleanup on exit (if not scanned)
    - Screen brightness optimization recommended

10.2 Redemption Flow

Standard Redemption:

1. User opens QR screen
2. Redemption token created in database
3. Staff scans QR code
4. Status updates in real-time
5. Navigate to success screen

Pay on the Day Flow:

1. Staff scans QR code
2. Staff enters bill amount
3. User sees Bill Confirmation screen
4. User confirms bill amount
5. Points calculated and awarded
6. Success screen displayed

10.3 Bill Confirmation Screen

- Bill amount display (entered by business)
- Points to be earned calculation
- Offer and business details
- Confirm button
- Dispute option
- Real-time loyalty points calculation

10.4 Redemption Success Screen

- Animated success graphic
- "Redeemed!" confirmation
- Offer and business name
- Thank you message
- Done button (returns to Claimed list)

11. Favourites System

11.1 Favourites Screen

- **Segmented Tabs:**
    - Offers tab
    - Businesses tab

- **Favourite Offers:**
    - Grid/list of favourited offers
    - Quick access to offer details
    - Easy unfavourite action

- **Favourite Businesses:**
    - List of favourited businesses
    - Quick access to business profile
    - See all offers from business

11.2 Favourite Actions

- Heart icon toggle on offer cards
- Heart icon on business profiles
- Persisted to database
- Synced across sessions

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12. Loyalty Points & Tiers

12.1 Points System

- **Earning Rate:** 10 points per 10p spent (equivalent to 100 points per £1)
- **Pay Up Front:** Points awarded at purchase
- **Pay on Day:** Points awarded after bill confirmation

12.2 Loyalty Tiers

Tier	Points Required	Benefits
Ping Local Member	0 - 10	Basic access, earn points
Ping Local Hero	10 - 1,200	Early access, priority support
Ping Local Champion	1,200 - 10,000	Exclusive deals, monthly bonus
Ping Local Legend	10,000+	VIP access, double points days, concierge

12.3 Loyalty Tiers Screen

- Visual tier progression display
- Current tier highlight
- Points to next tier
- Tier benefits explanation
- "How Points Work" section

12.4 Level Up Celebrations

- Tier upgrade notifications
- Visual celebration on level up
- New benefits highlighted

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13. Notifications System

13.1 Push Notifications

- **Types:**

    - New offer alerts
    - Redemption confirmations
    - Loyalty points earned
    - Tier upgrades
    - System announcements
    - Booking reminders

- **Management:**

    - Permission request during onboarding
    - Toggle in Settings
    - Stored in database (activate_notifications)

13.2 In-App Notifications

- **Notifications Screen:**

    - Chronological list of all notifications
    - Unread indicator (blue dot)
    - Category icons (offer, points, system)
    - Time stamps ("2 hours ago")
    - Pull-to-refresh

- **Notification Detail:**

    - Full notification content
    - Related actions (view offer, etc.)
    - Mark as read

13.3 Notification Badge

- Header badge with unread count
- Real-time updates via Supabase subscriptions
- Visible across all screens

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14. Account & Settings

14.1 Account Screen

- **Profile Section:**

    - Tier icon (displayed as avatar)
    - User name display

- Join date
- Current tier title ("You're a [Tier]!")
- Progress bar to next tier
- Current points and points needed for next tier

- **Quick Stats:**

  - Pings Claimed (total offers claimed)
  - Pings Shared (offers shared with others)

- **Quick Access Cards:**

  - Loyalty Scheme card (links to tier information)
  - FAQs card

- **Redeemed Promotions:**

  - List of recently redeemed offers
  - Shows offer name, business, and redemption date

14.2 Edit Profile Screen

- First name (editable)
- Surname (editable)
- Phone number (optional)
- Email (read-only, contact support to change)
- Save changes with validation

14.3 Settings Screen

Account Section:

- Edit Profile
- Change Password
- Notification Preferences

Notifications Section:

- Push Notifications toggle

Privacy Section:

- Location Services toggle
- Privacy Policy link
- Terms of Service link

Support Section:

- FAQs screen
- Contact Support (email)
- Replay Onboarding

Account Actions:

- Sign Out (with confirmation)
- Delete Account (with warning, redirects to support email)

14.4 FAQs Screen

- Categorized FAQ sections:

- - Getting Started
  - Loyalty Points
  - Payments
  - Account
  - Troubleshooting
- Expandable/collapsible answers
- Contact support option

14.5 Notification Preferences

- Granular notification type controls
- Push notification master toggle
- Email notification preferences

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15. Map Integration

15.1 Map Screen

- Interactive map view
- Business location markers
- User location (with permission)
- Cluster markers for dense areas

15.2 Map Features

- Business marker taps open preview
- Navigate to business details
- Filter by category
- Distance from user
- Directions integration

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16. Backend Integration

16.1 Supabase Services

- **Authentication:** User signup, login, password reset
- **Database:** PostgreSQL for all data storage
- **Real-time:** Live subscriptions for redemption flow
- **Edge Functions:** Push notification sending

16.2 Stripe Integration

- Secure payment processing
- Card payments for "Pay up front" offers
- Apple Pay / Google Pay support
- Payment sheet integration

16.3 Database Tables

Table	Purpose
users	User profiles and preferences
businesses	Business listings

`offers`	Promotions and deals
`purchase_tokens`	Claimed offer records
`redemption_tokens`	Redemption tracking
`offer_slots`	Booking slots
`favourites`	User favourites
`notifications`	In-app notifications
`loyalty_points`	Points history
`image_gallery`	Offer/business images

16.4 Real-time Features

- Redemption status updates
- Notification count updates
- Offer availability changes

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17. Technical Architecture

17.1 Technology Stack

- **Framework:** React Native with Expo
- **Navigation:** React Navigation v6
- **State Management:** React Context API
- **Backend:** Supabase (Auth, Database, Real-time, Edge Functions)
- **Payments:** Stripe
- **Maps:** React Native Maps
- **QR Codes:** react-native-qrcode-svg

17.2 Key Dependencies

- `@react-navigation/native` - Navigation
- `@react-navigation/bottom-tabs` - Tab navigation
- `@react-navigation/stack` - Stack navigation
- `@supabase/supabase-js` - Backend services
- `@stripe/stripe-react-native` - Payments
- `expo-notifications` - Push notifications
- `expo-location` - Location services
- `react-native-maps` - Map views
- `react-native-qrcode-svg` - QR code generation
- `@react-native-async-storage/async-storage` - Local storage

17.3 Context Providers

- **AuthContext:** User authentication state
- **NotificationContext:** Notification count and management

17.4 Navigation Structure

```
RootNavigator
├── AuthStack (unauthenticated)
│   ├── Welcome
│   ├── Login
│   ├── SignUp
│   ├── Verification
│   ├── ForgotPassword
│   └── ResetPassword
├── Onboarding (post-verification)
└── MainTabs (authenticated)
    ├── Feed Stack
    │   ├── Home
    │   ├── OfferDetail
    │   ├── BusinessDetail
    │   ├── SlotBooking
    │   ├── Claim
    │   └── Settings/Notifications
    ├── Favourites Stack
    │   ├── Favourites
    │   └── OfferDetail/BusinessDetail
    ├── Claimed Stack
    │   ├── ClaimedMain
    │   ├── QRCode
    │   ├── BillConfirmation
    │   └── RedemptionSuccess
    ├── Businesses Stack
    │   ├── Directory
    │   ├── BusinessDetail
    │   └── Map
    └── Account Stack
        ├── Account
        ├── Settings
        ├── EditProfile
        ├── Notifications
        ├── NotificationDetail
        ├── NotificationPreferences
        ├── FAQs
        ├── LoyaltyTiers
        └── OnboardingReplay
```

Summary

The Ping Local Consumer App is a comprehensive mobile platform that provides:

- **User-friendly authentication** with email verification and password recovery
- **Engaging onboarding** with notification permission handling
- **Rich offer discovery** through feeds, search, and maps
- **Flexible claiming** supporting both payment types and bookings
- **Seamless redemption** via real-time QR code scanning
- **Rewarding loyalty program** with tier progression
- **Comprehensive notifications** keeping users informed

- **Full account management** with profile editing and preferences

The app is built on modern, scalable technology and provides a polished user experience for discovering and supporting local independent businesses.

Document prepared for client review - Ping Local Consumer App v1.0.0