

# Urge Tracker App - Product Requirements Document

## 1. Executive Summary

### Product Vision

An intelligent urge tracking application that helps users identify patterns and triggers in their urges through structured data collection and insightful analytics. By capturing contextual information during each urge episode, users gain actionable insights into their behavioral patterns, empowering them to make informed decisions about managing their urges.

### Target Users

- Individuals working on behavioral change (substance use, eating behaviors, compulsive behaviors)
- People in recovery programs or therapy
- Anyone seeking to understand and manage recurring urges

### Success Metrics

- User retention: 40% of users return after 7 days, 25% after 30 days
  - Average entries per active user: 10+ per week
  - Time to complete entry: Under 60 seconds
  - User satisfaction score: 4+ stars (out of 5)
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## 2. User Stories & Use Cases

### Primary User Personas

#### Persona 1: Sarah, Recovery Journey

- 32 years old, 6 months into recovery
- Uses app multiple times daily during vulnerable moments
- Wants to understand what triggers her urges
- Needs quick, discreet logging capability

#### Persona 2: Michael, Behavioral Change

- 28 years old, working on compulsive behaviors
- Reviews patterns weekly with therapist

- Wants data to share with healthcare provider
- Needs export functionality

## Core User Stories

### Logging Urges

- As a user, I want to quickly log an urge in under 60 seconds so I can capture information in the moment
- As a user, I want to log an urge even without internet connection so I never miss recording an episode
- As a user, I want to edit or delete past entries so I can correct mistakes

### Understanding Patterns

- As a user, I want to see what percentage of my urges happen at specific locations so I can identify environmental triggers
- As a user, I want to understand the relationship between my emotions and physical sensations so I can recognize warning signs
- As a user, I want to see my success rate in processing urges over time so I can track my progress

### Taking Action

- As a user, I want to be reminded of my patterns during high-risk times so I can be proactive
  - As a user, I want to export my data so I can share it with my therapist
  - As a user, I want my data to be private and secure so I feel safe being honest
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## 3. Detailed Feature Requirements

### 3.1 MVP Features (Phase 1)

#### Feature: Urge Entry Form

**Description:** Quick-access form to log urge episodes with contextual data

#### Required Fields:

- Date/Time (auto-populated, editable)
- Location (dropdown: Home, Work, School, Friend's Place, Public Space, Vehicle, Other)
- Emotional State (multi-select: Stressed, Anxious, Bored, Sad, Angry, Lonely, Happy, Excited, Tired, Other)
- Physical Sensations (multi-select: Chest tightness, Racing heart, Restlessness, Tension in shoulders/neck, Sweating, Trembling, Stomach discomfort, Headache, Numbness, Other)

- Action Taken (radio button: Processed the urge, Gave in to urge, Partially gave in)
- Notes (optional text field, 500 character limit)

### **Acceptance Criteria:**

- Form loads in under 2 seconds
- All required fields must be completed to submit
- Entry saves to local storage if offline
- Confirmation message displays after successful submission
- User can exit form without saving (with confirmation prompt if fields are filled)

### **Feature: Basic Analytics Dashboard**

**Description:** Visual representation of urge patterns based on logged data

#### **Components:**

##### **1. Location Breakdown**

- Pie chart showing percentage by location
- Display percentages only if 5+ entries logged

##### **2. Time Pattern Analysis**

- Bar chart showing urges by hour of day
- Heat map showing day of week + time of day (once 20+ entries)

##### **3. Emotion Correlations**

- Top 3 emotions with percentages
- Show relationship with physical sensations

##### **4. Success Rate**

- Percentage of times urge was processed vs. acted upon
- Trend line showing improvement over time

##### **5. Quick Stats Summary**

- Total urges logged
- Current streak (days since last "gave in")
- Most common trigger combination

### **Acceptance Criteria:**

- Dashboard loads in under 3 seconds
- Charts update in real-time after new entry
- Empty states show encouraging messages for new users
- Minimum data requirements met before showing percentages
- All visualizations are colorblind-friendly

### **Feature: Entry History**

**Description:** Chronological list of all logged urges with search and filter

### **Functionality:**

- Reverse chronological list (newest first)
- Each entry shows: date/time, location, top emotion, action taken
- Tap entry to view full details
- Swipe to delete (with confirmation)
- Edit any past entry
- Filter by: date range, location, emotion, action taken
- Search notes field

### **Acceptance Criteria:**

- List loads first 50 entries in under 2 seconds
  - Infinite scroll loads 50 more entries at a time
  - Delete requires confirmation prompt
  - Edits save immediately with visual feedback
  - Search returns results as user types (debounced)
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## **3.2 Phase 2 Features (Enhanced Analytics)**

### **Feature: Pattern Insights**

**Description:** AI-generated insights highlighting meaningful patterns

### **Insights Include:**

- "You're 3x more likely to have an urge on Sunday evenings"
- "80% of your work-related stress urges happen after 3pm"
- "When you feel lonely + restless, you give in 60% of the time"
- "Your success rate has improved 25% this month"

#### **Acceptance Criteria:**

- Insights require minimum 30 entries
- Update weekly
- Maximum 5 insights shown at a time
- User can dismiss insights
- Insights are actionable and judgment-free in tone

#### **Feature: Trigger Profiles**

**Description:** Deep-dive analysis of specific trigger combinations

#### **Functionality:**

- Identify top 5 trigger combinations (emotion + sensation + location)
- Show success rate for each combination
- Display warning signs that precede urges
- Suggest patterns user may not have noticed

#### **Feature: Progress Tracking**

**Description:** Long-term trend visualization

#### **Components:**

- Weekly/monthly urge frequency graphs
- Success rate trends over time
- Longest streak tracking
- Milestone celebrations (7 days, 30 days, 90 days processed)

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### **3.3 Phase 3 Features (Proactive Support)**

#### **Feature: Smart Notifications**

**Description:** Predictive alerts based on user's patterns

**Functionality:**

- Alert during high-risk time windows (e.g., "You often experience urges around this time on Sundays")
- Location-based reminders (optional, requires GPS permission)
- Gentle check-ins after high-risk periods
- Customizable notification frequency

**Acceptance Criteria:**

- User must opt-in to notifications
- Maximum 3 notifications per day
- User can snooze or disable anytime
- Notifications are encouraging, never judgmental

**Feature: Coping Strategies Library**

**Description:** Personalized suggestions based on trigger profile

**Functionality:**

- Curated list of evidence-based coping techniques
- Matched to specific emotion/sensation combinations
- User can save favorites
- Quick access from entry form ("Need help now?" button)
- Track which strategies are most effective for user

**Feature: Data Export & Sharing**

**Description:** Export capabilities for personal records or healthcare providers

**Formats:**

- PDF summary report (visual charts + insights)
- CSV raw data export
- Secure sharing link (password protected, expires after 7 days)

**Acceptance Criteria:**

- Export includes user-selected date range
  - PDF is professionally formatted
  - CSV includes all data fields
  - HIPAA-compliant sharing mechanism
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## 4. Technical Requirements

### 4.1 Platform

- **Primary:** Native mobile app (iOS and Android)
- **Secondary:** Responsive web app (Phase 2)

### 4.2 Technical Stack (Recommended)

- **Frontend:** React Native (cross-platform)
- **Backend:** Node.js with Express
- **Database:** PostgreSQL (relational data for analytics)
- **Analytics:** Custom analytics engine for pattern recognition
- **Hosting:** AWS or Google Cloud Platform
- **Authentication:** OAuth 2.0 + optional biometric

### 4.3 Data Storage & Security

- End-to-end encryption for all user data
- Local data persistence (offline capability)
- Automatic cloud backup (encrypted)
- Data retention: User-controlled (can delete all data anytime)
- Compliance: HIPAA-compliant data handling, GDPR-compliant

### 4.4 Performance Requirements

- App launch time: Under 3 seconds
- Entry submission: Under 1 second (with offline support)
- Dashboard load: Under 3 seconds
- Offline mode: Full logging capability, sync when online

- Support 10,000+ entries per user without performance degradation

## 4.5 Accessibility Requirements

- WCAG 2.1 AA compliance
  - Screen reader support
  - Adjustable text sizes
  - High contrast mode
  - Voice input option for entry form
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## 5. User Interface & Experience

### 5.1 Information Architecture

Home (Dashboard)

- |— Quick Log Button (floating action button)
- |— Today's Summary
- |— Analytics Overview
- |— Recent Entries (last 5)

Analytics

- |— Patterns Tab
- |— Insights Tab
- |— Progress Tab

History

- |— All Entries (filterable)
- |— Search

Profile/Settings

- |— Account Settings
- |— Notification Preferences
- |— Data Export
- |— Privacy Settings
- |— Help & Support

### 5.2 Key User Flows

#### Flow 1: First-Time User

1. Download app

2. Brief onboarding (3 screens explaining value)
3. Optional account creation (can skip, use locally)
4. Quick tutorial of entry form
5. Log first urge
6. See "Need at least 5 entries to see patterns" message

### **Flow 2: Quick Logging**

1. Open app (or tap widget/notification)
2. Quick Log button prominently displayed
3. Fill required fields (60 seconds)
4. Submit
5. See confirmation + quick insight if available
6. Return to previous activity

### **Flow 3: Pattern Discovery**

1. User opens Analytics tab
2. See visual breakdown of patterns
3. Tap on specific insight for details
4. View related entries
5. Optional: Set reminder for high-risk times

### **5.3 Design Principles**

- **Speed First:** Every action should feel instant
  - **Non-Judgmental:** Language is supportive, never shaming
  - **Privacy-Focused:** Clear about what data is stored and how
  - **Minimal Friction:** Reduce steps to log an urge
  - **Celebration of Progress:** Highlight wins and improvements
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## 6. Edge Cases & Error Handling

### Edge Cases

#### Incomplete Data:

- If user has fewer than 5 entries, show encouraging "Keep logging" message instead of percentages
- If user only logs one location/emotion, acknowledge pattern but encourage diverse logging

#### Conflicting Patterns:

- If data shows no clear patterns, provide message: "Your urges vary significantly - this randomness is itself useful information"

#### Long Gaps in Logging:

- If user hasn't logged in 14+ days, show welcome back message
- Don't make user feel guilty about gaps
- Optionally ask if they'd like to log anything from the gap period

#### Time Zone Changes:

- Detect timezone changes and adjust historical data display
- Ask user if they're traveling (affects location-based insights)

#### Accidental Submissions:

- Allow immediate "Undo" option after submission (5-second window)
- Easy edit access from confirmation screen

### Error Handling

#### Offline Mode:

- Clear indicator when offline
- All entries saved locally
- Sync icon shows when data is syncing
- Conflict resolution if edited same entry on multiple devices

#### Failed Submissions:

- Retry automatically up to 3 times
- Show error message with option to save draft

- Never lose user's entered data

### **Data Sync Conflicts:**

- Use timestamp to determine most recent version
- Show user both versions if major differences
- Allow user to choose which to keep

### **Analytics Calculation Errors:**

- Graceful degradation: show what can be calculated
  - Error message: "Some insights temporarily unavailable"
  - Log errors for backend investigation
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## **7. Privacy & Compliance**

### **Data Collection**

#### **Collected:**

- Urge log data (time, location, emotions, sensations, actions)
- Usage analytics (feature usage, crash reports)
- Account information (email, if provided)

#### **Not Collected:**

- No selling of user data
- No third-party advertising data sharing
- No GPS coordinates (only named locations)

### **User Rights**

- Right to export all data
- Right to delete account and all data
- Right to use app anonymously (no account required)
- Transparent privacy policy in plain language

### **Security Measures**

- Data encrypted at rest and in transit

- Regular security audits
- Password requirements (if account created)
- Optional biometric authentication
- Automatic logout after inactivity
- No screenshots allowed on entry/history screens (configurable)

## Compliance

- HIPAA compliance for healthcare data
  - GDPR compliance for EU users
  - COPPA compliance (13+ age requirement)
  - State-specific privacy laws (CCPA, etc.)
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## 8. Success Metrics & KPIs

### Engagement Metrics

- **Daily Active Users (DAU)**
- **Weekly Active Users (WAU)**
- **Monthly Active Users (MAU)**
- **Average entries per user per week** (target: 10+)
- **User retention:** D1 (60%), D7 (40%), D30 (25%)

### Quality Metrics

- **Entry completion rate** (target: 95%+)
- **Time to complete entry** (target: <60 seconds)
- **Analytics engagement:** % users who view analytics weekly (target: 60%)
- **Feature adoption rate:** % users who use each feature

### Outcome Metrics

- **User-reported improvement** (via in-app survey)
- **Success rate improvement** (% processed vs. gave in over time)
- **Streak length trends** (average longest streak)

## Technical Metrics

- **App crash rate** (target: <1%)
  - **Average load times** (all screens <3 seconds)
  - **Offline functionality success rate** (target: 99%+)
  - **Data sync success rate** (target: 99.9%+)
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## 9. Dependencies & Constraints

### Dependencies

- React Native framework and libraries
- Cloud infrastructure provider (AWS/GCP)
- Analytics calculation engine
- Push notification service (Firebase Cloud Messaging)
- Secure authentication provider

### Constraints

- Must work offline (core functionality)
- Must handle 10,000+ entries per user
- Must comply with healthcare data regulations
- Must be accessible (WCAG AA)
- Budget: [To be determined]
- Timeline: [To be determined]

### Technical Constraints

- iOS 14+ and Android 10+ minimum versions
  - Requires minimum 100MB storage on device
  - Backend must scale to 100,000+ users
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## **10. Timeline & Prioritization**

### **Phase 1: MVP (Months 1-3)**

#### **Must Have:**

- Urge entry form
- Basic analytics dashboard
- Entry history with edit/delete
- Offline functionality
- Data encryption

#### **Nice to Have:**

- Account creation (can launch with local-only)
- Basic filtering

### **Phase 2: Enhanced Analytics (Months 4-6)**

#### **Must Have:**

- Pattern insights
- Trigger profiles
- Progress tracking
- Account sync across devices

#### **Nice to Have:**

- Custom categories
- Note templates

### **Phase 3: Proactive Support (Months 7-9)**

#### **Must Have:**

- Smart notifications
- Data export (PDF + CSV)
- Coping strategies library

#### **Nice to Have:**

- Integration with therapy apps

- Community features (anonymized)

## Post-Launch Iterations

- User feedback integration
  - A/B testing for onboarding
  - Additional analytics features
  - Therapist portal (separate product)
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## 11. Open Questions & Decisions Needed

1. **Monetization Strategy:** Free with optional premium features? One-time purchase? Subscription?
  2. **Account Requirement:** Launch with optional or required account creation?
  3. **Customization Level:** Allow users to create custom emotions/sensations, or keep predefined list?
  4. **Social Features:** Any anonymized community support features?
  5. **Integration:** Should we integrate with Apple Health, therapy platforms, or other wellness apps?
  6. **Localization:** Launch in English only, or multiple languages from start?
  7. **Age Verification:** How to verify users are 13+ (COPPA compliance)?
  8. **Clinical Validation:** Partner with researchers to validate effectiveness?
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## 12. Risks & Mitigation

### Risk: Low User Engagement

#### Mitigation:

- Fast, frictionless logging experience
- Immediate value (insights after 5 entries)
- Positive reinforcement and progress celebration
- Optional reminders without being pushy

### Risk: Privacy Concerns

#### Mitigation:

- Transparent privacy policy

- Local-first option (no account required)
- Clear data control options
- Regular security audits
- No data selling commitment

### **Risk: Technical Complexity of Pattern Recognition**

#### **Mitigation:**

- Start with simple percentage-based analytics
- Iteratively add more sophisticated analysis
- Partner with data scientists if needed
- Set realistic expectations for minimum data needed

### **Risk: Misuse or Harmful Outcomes**

#### **Mitigation:**

- Crisis resources prominently displayed
  - Disclaimers that app is not treatment replacement
  - Age restrictions (13+)
  - Ability to disable certain features if triggering
  - Monitoring user feedback for concerns
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## **13. Future Considerations**

- Integration with wearables for automatic physical sensation detection
  - Voice logging for hands-free entry
  - Therapist dashboard for collaborative tracking
  - AI-powered personalized coping strategy recommendations
  - Peer support features (carefully moderated)
  - Research partnerships for effectiveness studies
  - White-label version for treatment centers
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## **Document Control**

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