Product Requirements Document (PRD) Ver1.0

**Task Management & Productivity Application**

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# Executive Summary

## Product Overview

A free, all-in-one productivity application that combines task management, time tracking, and intelligent planning into a single desktop (and future mobile) platform. Unlike existing solutions that fragment these capabilities across multiple apps, our product provides a unified experience that respects how people actually think and work.

## Problem Statement

Current productivity tools force users to choose between:

* **Time tracking tools** (Toggl) that excel at logging hours but lack robust task management
* **Calendar apps** (Google Calendar) that schedule events but can't filter or organize tasks intelligently
* **Task managers** (Todoist, TickTick) that organize todos but lack time-blocking and tracking
* **Expensive all-in-one tools** (Notion, ClickUp) with paywalls that limit accessibility

Users end up juggling 3-4 apps, losing context, duplicating data, and feeling overwhelmed.

## Solution

A desktop-first application that:

* Captures thoughts instantly without friction
* Offers three flexible task views (list, time-block, filtered)
* Tracks time seamlessly within the workflow
* Provides AI-powered planning suggestions
* Works completely offline and locally by default
* **Costs nothing** - truly free, no feature walls

# Product Vision

## Vision Statement

"Empower everyone to plan thoughtfully and work intentionally, without paying for the privilege."

## Mission

Create a productivity tool that:

* **Respects how people think** - capture now, organize later
* **Adapts to different working styles** - multiple views, flexible scheduling
* **Stays out of the way** - fast, local, offline-first
* **Remains accessible** - free forever, no subscriptions
* **Protects privacy** - local-first data storage

## Core Values

* **Simplicity** - Easy to start, powerful when needed
* **Freedom** - No paywalls, no vendor lock-in
* **Privacy** - Your data stays yours
* **Flexibility** - Work your way, not ours
* **Intelligence** - Smart suggestions, not rigid systems

## Long-Term Vision

* Industry-standard free productivity tool
* Cross-platform (desktop, mobile, web)
* Plugin/extension ecosystem
* Multi-language support
* Collaboration features (team edition)

# Market Analysis

## Competitive Landscape

### Direct Competitors

**. Todoist (Doist)**

* **Strengths:** Clean UI, natural language input, excellent task organization
* **Weaknesses:** No time tracking, no calendar view, premium features locked
* **Our Advantage:** Time tracking + time-blocking integrated, completely free

**2. TickTick**

* **Strengths:** Calendar view, Pomodoro timer, habit tracking
* **Weaknesses:** Cluttered UI, premium calendar features, limited filtering
* **Our Advantage:** Better filtering, cleaner time-block interface, free AI planning

**3. Notion**

* **Strengths:** Incredibly flexible, all-in-one workspace, strong community
* **Weaknesses:** Steep learning curve, overkill for simple task management, requires internet, expensive for advanced features
* **Our Advantage:** Focused experience, offline-first, free, faster for task management

**4. Toggle Track**

* **Strengths:** Best-in-class time tracking, beautiful reports, integrations
* **Weaknesses:** Limited task management, no planning features, premium features costly
* **Our Advantage:** Task management + time tracking in one, free analytics

**5. Google Calendar**

* **Strengths:** Universal, free, reliable sync, integration with Google ecosystem
* **Weaknesses:** No task filtering, basic task management, no time tracking
* **Our Advantage:** Advanced task organization, time tracking, AI planning

### Indirect Competitors

**Microsoft To Do, Apple Reminders, Trello, Asana, Monday.com**

* Serve different primary use cases (team collaboration, project management)
* Often too complex or too simple for individual productivity
* Most have premium tiers or team-focused pricing

# User Research

## Primary User Personas

**Persona 1: Busy Professional Maya**

**Who She Is:**

* Age: 28-45
* Job: Marketing Manager / Software Developer / Designer
* Tech-savvy, uses laptop 8+ hours/day

**Her Goals:**

* Manage multiple projects without dropping balls
* Track work hours for reporting
* Stop switching between 3+ apps
* Actually finish her to-do list

**Her Problems:**

* Paying $20+/month for multiple apps (Todoist + Toggl + Calendar)
* Forgets tasks she thinks of during meetings
* Can't see her whole week at a glance
* Time tracking feels like extra work

**Current Workflow:**

* Google Calendar for meetings
* Todoist for tasks
* Manual spreadsheet for time tracking
* Notes app for random thoughts

**Quote:** *"I just want ONE app that does everything. I'm tired of copying tasks between my calendar, task list, and time tracker."*

**Persona 2: Freelancer Jordan**

**Who They Are:**

* Age: 24-38
* Job: Freelance Writer / Designer / Developer
* Works from home with irregular hours

**Their Goals:**

* Track billable hours accurately per client
* Juggle 3-5 client projects at once
* Stop losing money from untracked time
* Actually invoice on time

**Their Problems:**

* Can't afford $9/month for Toggl (tight budget)
* Losing money from forgotten time tracking
* Everything feels urgent, hard to prioritize
* Working alone = no structure

**Current Workflow:**

* Toggl for time ($9/mo hurts the wallet)
* Trello for tasks (free tier)
* Google Calendar for client calls
* Spreadsheet for invoices

**Quote:** *"Every subscription adds up. I NEED time tracking for invoicing, but $9/month hurts when income is unpredictable."*

**Persona 3: Student Alex**

**Who They Are:**

* Age: 18-26
* Job: University/Graduate Student
* Limited budget
* Studies in bursts, procrastinates often

**Their Goals:**

* Remember all assignment deadlines
* Stop pulling all-nighters
* Track actual study time vs procrastination
* Develop better habits

**Their Problems:**

* Can't afford premium apps (student budget)
* Overwhelmed by competing deadlines
* No idea how long assignments actually take
* Procrastinates until panic mode

**Current Workflow:**

* Google Calendar for class schedule
* Apple Reminders (free)
* Physical planner or notebook
* No time tracking at all

**Quote:** *"I need to see everything at once - assignments, exams, study blocks. Premium apps are completely out of my budget."*

**Persona 4: Parent Pat**

**Who They Are:**

* Age: 32-50
* Job: Part-time worker / Stay-at-home parent
* Manages household + family schedule
* Tech comfort: Medium (not a power user)

**Their Goals:**

* Remember everything (appointments, birthdays, tasks)
* Feel productive and accomplished
* Balance family duties with personal projects
* Stop feeling guilty about unfinished tasks

**Their Problems:**

* Mental overload remembering everything
* Family calendar separate from personal tasks
* Feels unproductive despite working all day
* Forgetting birthdays causes guilt

**Current Workflow:**

* Google Calendar (family shared)
* Physical planner or fridge calendar
* Apple Reminders for shopping
* Note cards for birthdays

**Quote:** *"I just need something SIMPLE to remember everything - appointments, birthdays, household tasks. I'm not a productivity guru."*

## User Pain Points

**💰 Cost Barrier (Everyone)**

* "I'm paying $15-25/month across 3 different apps"
* "Premium features are locked behind paywalls"
* "Can't afford subscriptions on my budget"
* **Why it matters:** Free tier limits are too restrictive, premium is too expensive

**🔀 App Fragmentation (Professionals, Freelancers)**

* "I use 3-4 apps and constantly duplicate data"
* "Context switching wastes time and mental energy"
* "Information is scattered everywhere"
* **Why it matters:** No single app does task management + time tracking + planning well

**⚡ Slow Capture (Everyone)**

* "By the time I fill out all the fields, I've forgotten the details"
* "Can't capture thoughts during meetings without disrupting focus"
* "Mobile apps too slow for quick entry"
* **Why it matters:** Thoughts are lost if capture takes more than 5 seconds

**🤯 Planning Overwhelm (Students, Professionals)**

* "Don't know where to start each day"
* "Can't see the 'big picture' of my week"
* "Constantly underestimate how long things take"
* **Why it matters:** Decision paralysis prevents starting work

**⏱️ Time Blindness (Freelancers, Students)**

* "No awareness of where my time actually goes"
* "Losing billable hours because I forget to track"
* "Work for 'a few minutes' and 3 hours have passed"
* **Why it matters:** Can't improve what you don't measure; losing money

**🎯 Flexibility vs Structure (Everyone)**

* "Tools are either too rigid (must schedule everything) or too loose (just lists)"
* "Not all tasks need time slots - some are just 'someday'"
* "Want guidance but not constraints"
* **Why it matters:** One-size-fits-all doesn't work for different task types

**😰 Guilt & Overwhelm (Students, Parents)**

* "Feel like I should always be doing more"
* "Overdue tasks make me avoid the app"
* "Can't forgive myself for incomplete days"
* **Why it matters:** Tool becomes source of stress instead of help

**🎂 Forgetting Special Dates (Parents, Everyone)**

* "Forget birthdays until the day before (or after)"
* "Remembering causes guilt, forgetting causes worse guilt"
* "Special dates scattered across multiple calendars"
* **Why it matters:** Emotional cost of forgetting important occasions

# Product Strategy

## Value Proposition

**For** knowledge workers, freelancers, and students  
**Who** struggle with fragmented productivity tools and expensive subscriptions  
**Our product** is a free, all-in-one task management and time tracking application  
**That** combines quick capture, flexible planning, and intelligent insights in one offline-first platform  
**Unlike** Todoist, Toggl, and Google Calendar which require multiple apps and subscriptions  
**Our product** provides everything you need in one place, completely free, with your data staying private and local

## Unique Selling Proposition

**Truly Free, Forever**

* No premium tier, no feature walls, no trial periods
* All features available from day one
* Sustainable through donations/sponsorships (future)

**Three Flexible Views, One Source of Truth**

* Master List: See everything chronologically
* Time-Block Planner: Visual 24-hour scheduling with time tracking
* Filtered Board: Focus on specific contexts
* All views sync seamlessly

**Capture First, Organize Later**

* Quick Notes Inbox for instant capture
* Convert to full tasks when ready
* No mandatory fields blocking spontaneity

**Time Tracking That Doesn't Feel Like Work**

* Integrated into your planning workflow
* Start/stop from time-blocks directly
* Automatic duration calculation
* Visual time reports

**AI Planning Assistant (Optional)**

* Generate daily plans based on your habits
* Learn from your completion patterns
* Suggest realistic schedules
* Respect your preferences

**Offline-First Privacy**

* Works completely offline
* Data stored locally by default
* Optional cloud sync (user choice)
* No tracking, no data mining

**Unscheduled Tasks Welcome**

* Not everything needs a time slot
* Sidebar sections for:
  + Date assigned, no time
  + No date, no time (someday/maybe)
* Flexible commitment levels

# User Stories & Use Cases

## User Stories

**Epic 1: Quick Capture**

**Story 1.1: Lightning-Fast Task Capture**

* **As a** busy professional in meetings
* **I want to** capture a task in under 5 seconds
* **So that** I don't lose the thought or disrupt my focus

**Acceptance:**

* Global shortcut (Cmd/Ctrl + Shift + N) opens quick capture
* Type and press Enter to save
* Goes to Quick Notes Inbox
* ✅ P0 (Must Have)

**Story 1.2: Convert Note to Full Task**

* **As a** user reviewing quick notes
* **I want to** convert a note into a full task with one click
* **So that** I can add details when I have time

**Acceptance:**

* "Convert to Task" button on each note
* Opens task form with note content pre-filled
* Can add labels, priority, due date, time estimate
* ✅ P0 (Must Have)

**Epic 2: Task Organization**

**Story 2.1: View All Tasks Chronologically**

* **As a** user planning my week
* **I want to** see all tasks grouped by timeframe
* **So that** I understand what's urgent vs later

**Acceptance:**

* Sections: Overdue, Today, Tomorrow, This Week, Later, Someday
* Shows task title, labels, priority
* Quick actions: Complete, Edit, Delete
* ✅ P0 (Must Have)

**Story 2.2: Drag Tasks into Time Slots**

* **As a** user creating my daily schedule
* **I want to** drag tasks into hourly time blocks
* **So that** I can visually plan when I'll work on each task

**Acceptance:**

* 24-hour vertical timeline (0:00 - 23:59)
* Drag tasks from sidebar onto timeline
* Can resize and move time blocks
* ✅ P0 (Must Have)

**Story 2.3: Select Time Range for Task**

* **As a** user planning with precision
* **I want to** click and drag to select a time range, then assign a task
* **So that** I can quickly create time blocks

**Acceptance:**

* Click and drag on timeline to select range
* Dropdown shows tasks to assign
* Creates time block with exact duration
* ✅ P0 (Must Have)

**Story 2.4: Two-Section Sidebar**

* **As a** user with different task commitment levels
* **I want to** see separate sections for date-assigned and unscheduled tasks
* **So that** I can differentiate "today but not timed" from "someday"

**Acceptance:**

* Section 1: "Scheduled for [Date] (No Time)" - has date, no time
* Section 2: "Unscheduled" - no date or time (someday/maybe)
* Both sections collapsible with count badges
* ✅ P0 (Must Have)

**Story 2.5: Filter Tasks by Multiple Criteria**

* **As a** user focusing on specific work
* **I want to** filter tasks by labels, priority, status
* **So that** I see only relevant tasks

**Acceptance:**

* Filter by: labels, priority, status, category, schedule state
* Save filter presets
* Clear all filters button
* ✅ P0 (Must Have)

**Epic 3: Time Tracking**

**Story 3.1: Start Timer from Time Block**

* **As a** user beginning work
* **I want to** click play on a time block
* **So that** I can start tracking without extra steps

**Acceptance:**

* Play button on each time block
* Shows elapsed time (HH:MM:SS)
* Only one timer runs at a time
* Stop button saves time log
* ✅ P0 (Must Have)

**Story 3.2: Manual Time Entry**

* **As a** user who forgot to start the timer
* **I want to** manually log time spent
* **So that** my records are accurate

**Acceptance:**

* "Add Time Log" in task menu
* Input: start time, end time, date, notes
* Saves to time log history
* ✅ P1 (Should Have)

**Story 3.3: Break Reminders**

* **As a** user prone to overworking
* **I want to** be reminded to take breaks
* **So that** I avoid burnout

**Acceptance:**

* Notification after 2 hours (configurable)
* Snooze options: 5/15/30 min
* Gentle tone and message
* ✅ P1 (Should Have)

**Epic 4: Calendar & Special Dates**

**Story 4.1: Navigate to Date via Calendar**

* **As a** user planning ahead
* **I want to** click on a calendar date
* **So that** I open the time-block planner for that day

**Acceptance:**

* Month view calendar
* Click date → loads Time-Block Planner for that day
* Shows dots for days with tasks
* Shows icons for special dates
* ✅ P0 (Must Have)

**Story 4.2: Add Birthday with Annual Reminder**

* **As a** user who forgets birthdays
* **I want to** store birthdays once
* **So that** I'm reminded every year automatically

**Acceptance:**

* Create entry: name, date, icon (🎂)
* Yearly recurrence by default
* Reminder: 1 day before, 1 week before
* Shows on calendar with icon
* ✅ P1 (Should Have)

**Epic 5: Dashboard & Analytics**

**Story 5.1: See Today's Completion Rate**

* **As a** user wanting daily motivation
* **I want to** see tasks completed today
* **So that** I feel accomplished

**Acceptance:**

* Shows "Today: X/Y tasks completed (75%)"
* Progress bar visual
* Updates in real-time
* ✅ P0 (Must Have)

**Story 5.2: View Time by Category**

* **As a** user analyzing productivity
* **I want to** see a bar chart of time per category
* **So that** I understand where time goes

**Acceptance:**

* Bar chart: categories vs hours
* Selectable: Today/Week/Month
* Click bar to see tasks
* ✅ P1 (Should Have)

**Story 5.3: Generate AI Daily Plan**

* **As a** user overwhelmed with tasks
* **I want to** click a button for AI-suggested schedule
* **So that** I start my day without decision paralysis

**Acceptance:**

* "Generate Daily Plan" button
* AI suggests time blocks based on priorities, deadlines, patterns
* Can accept all, modify, or regenerate
* ✅ P2 (Nice to Have - Optional)

**Epic 6: Notifications**

**Story 6.1: Due Date Reminders**

* **As a** user with upcoming deadlines
* **I want to** receive notifications before tasks are due
* **So that** I don't miss deadlines

**Acceptance:**

* Configurable timing (1 hour/1 day/1 week before)
* Desktop notification with task title
* Click opens task in app
* ✅ P0 (Must Have)

**Story 6.2: Daily Planning Prompt**

* **As a** user who benefits from routine
* **I want to** receive a morning notification to plan
* **So that** I start each day with intention

**Acceptance:**

* Notification at 8 AM (configurable)
* Message: "Ready to plan your day?"
* Click opens Time-Block Planner
* ✅ P1 (Should Have)

## Use Cases

**Use Case 1: Morning Planning Routine**

**Actor:** Busy Professional Maya  
**Trigger:** Opens app Monday 8:00 AM

**Flow:**

1. Dashboard shows: 8 tasks today, 75% completion yesterday
2. Clicks "Generate Daily Plan"
3. AI suggests schedule based on priorities and past patterns
4. Reviews and accepts 4 suggestions, manually adjusts 2
5. Clicks play on first task at 9:00 AM
6. Timer starts tracking

**Result:** Day is planned, timer tracking first task, feels prepared

**Use Case 2: Quick Capture During Meeting**

**Actor:** Busy Professional Maya  
**Trigger:** Client mentions new requirement during video call

**Flow:**

1. Presses Cmd+Shift+N (4 seconds total elapsed)
2. Quick capture modal appears
3. Types: "Update homepage hero image"
4. Presses Enter
5. Returns attention to meeting

**Later:** 6. Opens Quick Notes Inbox 7. Clicks "Convert to Task" 8. Adds: label "Client Work", priority High, due Friday 9. Task appears in Master List

**Result:** Thought captured instantly, converted to actionable task later

**Use Case 3: Weekly Review for Invoicing**

**Actor:** Freelancer Jordan  
**Trigger:** Sunday evening, preparing invoices

**Flow:**

1. Opens Dashboard, selects "This Week"
2. Views bar chart: Client A (15h), Client B (8h), Client C (12h)
3. Clicks "Export Time Logs"
4. Selects date range: Oct 1-7
5. Exports CSV with all time details
6. Uses CSV for invoicing

**Result:** Accurate time logs exported, ready to invoice clients

**Use Case 4: Handling Overdue Tasks**

**Actor:** Student Alex  
**Trigger:** Opens app Monday morning, sees 3 overdue tasks

**Flow:**

1. Master List shows "Overdue" section with red badge (3)
2. Expands section, sees 3 weekend tasks
3. Drags "Submit lab report" to Time-Block: 2:00-5:00 PM today
4. Reschedules other two to this week
5. Starts timer on lab report at 2:00 PM
6. Completes at 4:45 PM, marks done

**Result:** Overdue tasks rescheduled realistically, caught up on critical work

**Use Case 5: Never Forget Birthdays**

**Actor:** Parent Pat  
**Trigger:** Remembers daughter's birthday coming up

**Flow:**

1. Opens Special Dates Manager
2. Clicks "Add Special Date"
3. Creates: "Emma's Birthday" - Oct 15 - 🎂 icon - Yearly
4. Sets reminders: 1 week before, 1 day before
5. Adds more: Anniversary (Oct 22), Mom's Birthday (Nov 3)

**One week later:** 6. Notification: "Emma's Birthday in 7 days" 7. Creates task: "Buy Emma's present" - due Oct 12

**Result:** Never forgets important dates, gets advance warning

**Use Case 6: Focus Time with Filters**

**Actor:** Busy Professional Maya  
**Trigger:** Wants to focus only on high-priority work tasks

**Flow:**

1. Opens Filtered Task Board
2. Selects filters: Label "Work", Priority "High", Status "Todo"
3. Sees only 6 matching tasks (instead of 50 total)
4. Saves as preset: "High-Priority Work"
5. Works through list methodically
6. Marks 4 complete during session

**Result:** Focused work session, progress on important work, saved preset for future

# Feature Requirements

## MVP Features (Must Have for Launch)

**Quick Capture System**

* **Quick Capture Modal**
  + Global keyboard shortcut
  + Input field with auto-focus
  + Enter to save, Esc to cancel
  + Works when app minimized
* **Quick Notes Inbox**
  + List of all captured notes
  + Timestamp on each note
  + Convert to task button
  + Delete button
  + Bulk actions (select multiple)
* **Task Creation**
  + Title (required)
  + Description (optional, rich text)
  + Due date picker
  + Priority selector (Low/Medium/High)
  + Label selector (multi-select)
  + Category selector
  + Time estimate (minutes)
  + Recurrence options (daily/weekly/monthly/yearly/custom)

**2. Master Task List View**

* **Grouped Sections**
  + Overdue (red, collapsible)
  + Today
  + Tomorrow
  + This Week
  + Later (future dates)
  + Someday (no date)
* **Task Display**
  + Title
  + Due date badge
  + Priority indicator (color-coded)
  + Label chips (colored)
  + Time estimate badge
  + Checkbox for completion
* **Quick Actions**
  + Complete/Uncomplete toggle
  + Edit (opens dialog)
  + Delete (with confirmation)
  + Reschedule (date picker)
  + Add to calendar (opens time-block planner)
* **Sorting & Filtering**
  + Sort by: Priority, Due date, Created date
  + Filter by status, labels, categories
  + Search bar

**3. Time-Block Planner View**

* **24-Hour Timeline**
  + Vertical timeline 0:00 - 23:59
  + Hourly gridlines
  + 15-minute snap-to increments (optional)
  + Week selector (< Previous | This Week | Next >)
  + Today highlight
* **Time Blocks**
  + Visual blocks on timeline
  + Show task title, duration, labels
  + Color-coded by category/label
  + Resize by dragging edges
  + Move by dragging block
  + Click to view task details
  + Play button to start timer
  + Running timer indicator (animated)
* **Two-Section Sidebar**
  + **Section 1: "Scheduled for [Date]"**
    - Tasks with date but no time
    - Drag to timeline to add time
    - Count badge
  + **Section 2: "Unscheduled"**
    - Tasks with no date/time
    - Someday/maybe items
    - Drag to timeline assigns date+time
    - Count badge
* **Time Range Selection**
  + Click and drag on timeline to select range
  + Popup shows selected duration
  + Dropdown to assign task
  + "Create new task" option
* **Conflict Detection**
  + Visual warning for overlapping blocks
  + Suggestion to adjust

**4. Filtered Task Board View**

* **Filter Panel**
  + Label filter (multi-select, AND/OR toggle)
  + Priority filter (checkboxes)
  + Status filter (Todo/In Progress/Done/Overdue)
  + Category filter
  + Schedule state (Scheduled/Date-only/Unscheduled)
  + Date range selector
* **Filter Presets**
  + Save current filters with name
  + Dropdown to load saved presets
  + Edit/delete presets
  + Default presets: "Today", "This Week", "High Priority"
* **Filtered Results**
  + Display matching tasks
  + Same task card design as Master List
  + Count of results shown
  + "Clear all filters" button

**5. Calendar View**

* **Month View**
  + Standard calendar grid
  + Current month highlighted
  + Navigation: < Previous | Month Year | Next >
  + Jump to date (date picker)
* **Date Indicators**
  + Dot for days with tasks (color intensity = density)
  + Special date icons (🎂, 💝, custom)
  + Hover tooltip shows summary
* **Click to Navigate**
  + Click any date → opens Time-Block Planner for that day
* **Special Dates Display**
  + Icons on relevant dates
  + Hover shows event name

**6. Special Dates Manager**

* **List View**
  + All special dates listed
  + Sort by: Date, Name, Type
  + Filter by type
  + Search bar
* **Create/Edit Special Date**
  + Name field
  + Date picker
  + Type selector (Birthday/Anniversary/Holiday/Custom)
  + Icon selector (emoji picker)
  + Recurrence options (None/Yearly/Monthly/Custom)
  + Reminder settings (checkboxes: 1 week before, 1 day before, custom)
* **Integration**
  + Shows on Calendar View
  + Shows on Time-Block Planner
  + Notifications on reminder days

**7. Time Tracking**

* **Timer Controls**
  + Start/Stop/Pause buttons
  + Display elapsed time (HH:MM:SS)
  + Running timer persists across app restarts
  + Only one timer at a time
* **Manual Time Entry**
  + "Log Time" option in task menu
  + Start time, End time (or duration)
  + Date selector
  + Notes field
  + Save creates time log entry
* **Time Log History**
  + Per-task time log list
  + Shows: Date, Start, End, Duration, Notes
  + Edit/delete logs
  + Export logs

**8. Dashboard**

* **Overview Cards**
  + Today's completion: X/Y tasks (percentage, progress bar)
  + This week's tracked time: HH hours
  + Current streak: X days
  + Next deadline: Task name + days until
* **Task Status Chart**
  + Pie chart: Complete/Incomplete/Overdue percentages
  + Click segment to filter tasks
* **Time Distribution Chart**
  + Bar chart: Categories on X-axis, Hours on Y-axis
  + Time range selector: Today/Week/Month
  + Hover for exact values
* **Completion Trend**
  + Line chart: Days on X-axis, Completion % on Y-axis
  + Time range: 7/30/90 days
* **Quick Actions**
  + "Add Task" button
  + "Plan Today" button (goes to Time-Block Planner)
  + "Generate AI Plan" button (if enabled)

**9. Notifications**

* **System Notifications**
  + Task due reminders
  + Overdue notifications
  + Break reminders
  + Special date reminders
  + Daily planning prompt
* **Notification Settings**
  + Enable/disable per type
  + Default reminder timings
  + Do Not Disturb hours
  + Sound on/off

**10. Settings & Preferences**

* **Appearance**
  + Theme: Light/Dark/System
  + Accent color picker
  + Font size
* **General**
  + Default view on startup
  + Time format (12/24 hour)
  + Week starts on (Sunday/Monday)
  + Date format
* **Notifications**
  + Enable/disable by type
  + Default reminder timings
  + Quiet hours
* **Time Tracking**
  + Pomodoro duration (default 25 min)
  + Break reminder interval (default 2 hours)
  + Auto-start timer on task open (toggle)
* **AI Planning** (if enabled)
  + Enable/disable AI features
  + AI provider (OpenAI/Local LLM)
  + API key (for OpenAI)
  + Work hours (start/end time per day)
* **Data**
  + Export all data (JSON)
  + Import data
  + Clear all data (with confirmation)
  + Backup/restore

## Phase 2 Features

**1. Mobile Applications**

* iOS and Android apps
* Quick capture optimized for mobile
* Today view as primary screen
* Voice input integration
* Push notifications
* Home screen widgets
* Biometric authentication

**2. Cloud Sync (Optional)**

* User account creation
* End-to-end encryption
* Sync across devices
* Conflict resolution
* Offline queue
* Sync status indicator

**3. Advanced Analytics**

* Productivity heatmap (calendar style)
* Category comparison over time
* Task completion velocity
* Time estimation accuracy
* Peak productivity hours analysis
* Weekly/monthly reports (PDF export)

**4. Collaboration Features**

* Share tasks with others
* Collaborative time-blocking
* Team dashboard
* Shared labels/categories
* Activity feed

**5. Integrations**

* Calendar sync (Google Calendar, Outlook)
* Import from other task managers
* Export to various formats
* API for third-party integrations
* Zapier integration

**6. Advanced AI Features**

* Smart task suggestions
* Automatic time estimation
* Priority recommendations
* Habit pattern recognition
* Burnout detection
* Weekly review summaries

**7. Customization**

* Custom themes
* Layout customization
* Workflow templates
* Custom fields for tasks
* Keyboard shortcuts customization
* Plugin system

## Feature Prioritization Framework

**P0 - Must Have (MVP Blockers):**

* Quick capture
* Master Task List
* Time-Block Planner with 24-hour view
* Two-section sidebar
* Time tracking (basic start/stop)
* Calendar navigation
* Dashboard (basic overview)
* Settings (basic)

**P1 - Should Have (Launch window):**

* Filtered Task Board
* Special Dates Manager
* Advanced filtering
* Manual time entry
* Break reminders
* Rich text editor for descriptions
* Export data

**P2 - Nice to Have (Post-launch):**

* AI planning
* Pomodoro timer
* Productivity heatmap
* Voice input
* Advanced analytics
* Custom themes

**P3 - Future:**

* Mobile apps
* Cloud sync
* Collaboration
* Integrations
* Plugin system

# Roadmap & Prioritization

Development Roadmap

# Risk & Mitigation

## Technical Risks

**Risk 1: Performance Issues with Large Datasets**

**Severity:** High  
**Probability:** Medium  
**Impact:** User frustration, poor reviews, abandonment

**Description:**

* Users with 1000+ tasks may experience slow loading
* Timeline rendering with 100+ time blocks could lag
* Database queries may timeout

**Mitigation Strategies:**

1. **Preventive:**
   * Implement pagination (load 50 tasks at a time)
   * Virtual scrolling for long lists
   * Database query optimization (proper indexing)
   * Load only current week's time blocks by default
   * Use React.memo and useMemo for expensive renders
   * Debounce search and filter operations
2. **Detective:**
   * Performance monitoring in production
   * Alert when load times exceed 3 seconds
   * User feedback on performance
3. **Corrective:**
   * Performance profiling tools (React DevTools, Chrome DevTools)
   * Archive old completed tasks (6+ months)
   * Optimize database schema based on real usage

**Contingency Plan:**

* Implement task archiving feature
* Add "performance mode" toggle (reduces animations)

**Risk 2: Electron App Size & Installation Issues**

**Severity:** Medium  
**Probability:** Medium  
**Impact:** Reduced downloads, user complaints

**Description:**

* Electron apps are 80-150 MB (large download)
* Users may be hesitant to install
* Some corporate environments block installations

**Mitigation Strategies:**

1. **Preventive:**
   * Optimize bundle size (tree-shaking, code splitting)
   * Compress assets
   * Offer portable version (no installation required)
   * Clear communication about file size on download page
2. **Alternative:**
   * Provide web version for users who can't/won't install
   * PWA (Progressive Web App) as lighter alternative

**Contingency Plan:**

* If installation is major barrier, prioritize web version earlier

**Risk 3: Cross-Platform Compatibility Issues**

**Severity:** Medium  
**Probability:** Medium  
**Impact:** Poor experience on some platforms, negative reviews

**Description:**

* Electron apps may behave differently on Windows/Mac/Linux
* Native features (notifications, shortcuts) vary by OS
* Different file path conventions

**Mitigation Strategies:**

1. **Preventive:**
   * Test on all three platforms during development
   * Use Electron's platform detection and conditional logic
   * Follow OS-specific UI conventions (menu bar vs system tray)
   * Continuous integration tests on all platforms
2. **Detective:**
   * Beta testing on all platforms
   * Monitor bug reports by OS
3. **Corrective:**
   * Platform-specific bug fixes
   * Dedicated testing for each OS release

**Contingency Plan:**

* If one platform is problematic, clearly label as "beta" for that OS

**Risk 4: AI Integration Costs & Reliability**

**Severity:** Medium  
**Probability:** Medium  
**Impact:** Unexpected costs, feature failure

**Description:**

* OpenAI API costs can scale unexpectedly
* API rate limits may be hit during high usage
* API downtime affects feature availability
* Local LLM may be too slow or inaccurate

**Mitigation Strategies:**

1. **Preventive:**
   * Make AI features optional (not core to app)
   * Implement rate limiting (1 plan generation per 5 minutes)
   * Offer local LLM alternative (Ollama)
   * Cache AI responses for similar contexts
   * Set spending alerts on OpenAI account
2. **Detective:**
   * Monitor API usage and costs daily
   * Track AI feature usage (% of users enabling it)
3. **Corrective:**
   * Fallback to rule-based suggestions if API unavailable
   * User brings own API key option
   * Prompt optimization to reduce token usage

**Contingency Plan:**

* If costs become unsustainable, require users to provide their own API keys

**Risk 5: Data Loss or Corruption**

**Severity:** Critical  
**Probability:** Low  
**Impact:** User trust destroyed, app abandonment, negative publicity

**Description:**

* Database corruption could lose user data
* App crash during write operation
* User accidentally deletes important data

**Mitigation Strategies:**

1. **Preventive:**
   * PostgreSQL's ACID compliance protects against corruption
   * Implement automatic local backups (daily)
   * Write operations wrapped in database transactions
   * Confirmation dialogs for destructive actions
   * Soft delete (move to trash, purge after 30 days)
   * Export functionality for user-controlled backups
2. **Detective:**
   * Database integrity checks on startup
   * Monitor for write errors
   * User reports of missing data
3. **Corrective:**
   * Restore from automatic backup
   * Database repair tools
   * Manual data recovery assistance

**Contingency Plan:**

* Dedicated support for data recovery cases
* Clear backup/restore documentation

## Product Risks

**Risk 6: Low User Adoption**

**Severity:** High  
**Probability:** Medium  
**Impact:** Product failure, wasted effort

**Description:**

* Users don't discover the app
* Users try but don't understand value
* Users download but don't return

**Mitigation Strategies:**

1. **Preventive:**
   * Strong Product Hunt launch strategy
   * Clear value proposition on landing page
   * Demo video showing key workflows
   * Onboarding tutorial on first launch
   * Growth loops (referral incentives, social sharing)
2. **Detective:**
   * Track download → activation → retention funnel
   * Exit surveys for churned users
   * Analytics on feature usage
3. **Corrective:**
   * Iterate on onboarding based on feedback
   * Add more marketing channels
   * Content marketing (blog posts, tutorials)
   * Partnership with productivity influencers

**Contingency Plan:**

* If organic growth is slow, consider limited paid advertising
* Pivot messaging/positioning based on user feedback

**Risk 7: Feature Bloat and Complexity Creep**

**Severity:** Medium  
**Probability:** High  
**Impact:** App becomes confusing, loses "simple" advantage

**Description:**

* Adding too many features dilutes focus
* UI becomes cluttered
* New users overwhelmed
* Core experience suffers

**Mitigation Strategies:**

1. **Preventive:**
   * Strict feature prioritization (MoSCoW method)
   * User research before adding features
   * "Does this serve our core value proposition?" test
   * Progressive disclosure (hide advanced features)
   * Settings for power users, simple defaults
2. **Detective:**
   * Monitor feature usage (identify unused features)
   * User feedback on complexity
   * Usability testing with new users
3. **Corrective:**
   * Remove rarely-used features
   * Simplify workflows based on feedback
   * Better information architecture

**Contingency Plan:**

* Annual "spring cleaning" to remove/simplify features

**Risk 8: Competition from Established Players**

**Severity:** Medium  
**Probability:** High  
**Impact:** Harder to differentiate, slower growth

**Description:**

* Todoist, TickTick, Notion could add free time-tracking
* Google could improve Calendar's task management
* New well-funded competitor launches

**Mitigation Strategies:**

1. **Preventive:**
   * Build loyal community early
   * Focus on unique combinations (all-in-one + free + offline)
   * Move fast, iterate quickly
   * Open-source consideration (harder to compete with)
   * Superior user experience, not just features
2. **Detective:**
   * Monitor competitors' product updates
   * Track competitive mentions in user feedback
3. **Corrective:**
   * Double down on differentiators
   * Find underserved niches
   * Consider partnerships instead of competition

**Contingency Plan:**

* If directly outcompeted, pivot to niche audience (e.g., freelancers only)

**Risk 9: Monetization Challenges**

**Severity:** Medium  
**Probability:** Medium  
**Impact:** Unsustainable development, project abandonment

**Description:**

* "Free forever" promise limits monetization
* Development and infrastructure costs
* Cannot justify continued investment

**Mitigation Strategies:**

1. **Preventive:**
   * Keep costs minimal (local-first = no server costs for users)
   * Optional donations/sponsorships (Patreon, GitHub Sponsors)
   * "Team Edition" with collaboration features (paid)
   * Keep personal edition always free (promise)
   * Grants and open-source sponsorships
2. **Sustainable Models:**
   * Freemium: Personal free, Team paid ($5/user/month)
   * Open core: Base free, advanced plugins paid
   * Sponsorships: Feature sponsors (ethical companies)
   * Services: Paid consulting, custom deployments

**Contingency Plan:**

* If unsustainable, open-source the project and hand off to community

# Summary

This Product Requirements Document defines a free, all-in-one productivity application that combines task management, time-blocking, and time tracking in a single offline-first platform.

**Key Differentiators:**

* Completely free with all features
* Three flexible task views (list, time-block, filtered)
* Integrated time tracking within planning workflow
* Quick capture for spontaneous thoughts
* Optional AI-powered planning
* Offline-first, privacy-focused architecture

**Target Users:**

* Busy professionals juggling multiple projects
* Freelancers tracking billable hours
* Students managing coursework and deadlines
* Parents organizing family schedules