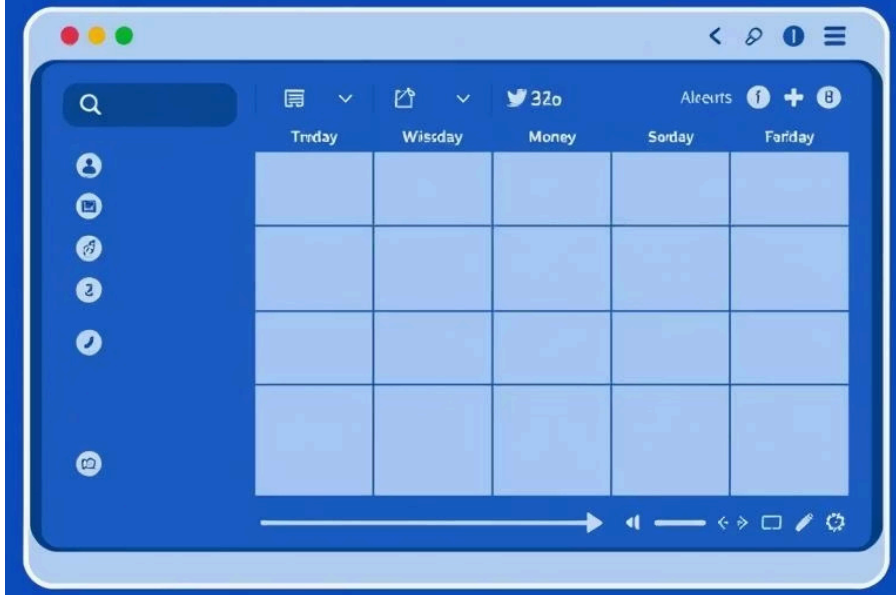
Digital Screen Planner

From Mindless Scrolling to Mindful Planning



The Challenge: Digital Distraction & Disconnect

Passive Screen Timers

Existing tools offer data without actionable insights, leading to guilt without behavioral change.

Lack of Intention

Reactive device use without clear goals fuels distraction and wasted time for students and professionals.

No Feedback Loop

Users can't compare digital goals against outcomes, hindering progress in developing focus.

Our Innovative Approach: Beyond Basic Tracking

The Digital Screen Planner intervenes actively, bridging the gap between **Intention** and **Reality**.

Traditional Tools: Limited Scope

- **Digital Wellbeing/Screen Time:** Rich data, but no framework for proactive change.
- **Forest App:** Great for focus sprints, but doesn't analyze distraction patterns.
- **Note-Taking Apps:** Focus on information capture, not mindful habit planning.

Our Distinctive Solution: Empowering Focus

- **Mindfulness First:** A core journal for reflecting on digital habits.
- **Proactive Planning:** Schedule screen time with purpose, not just passively track it.
- **Data-Driven Insight:** Unique "Distraction Score" quantifies focus levels.
- **Secure & Private:** All user data is encrypted and kept confidential.

Key Features: Empowering Your Digital Focus

Secure User Accounts

Registration, login, and persistent sessions ensure your data is always safe and accessible.

Reactive Session Journaling

Compare intentions with actual outcomes, generating a "Distraction Score" for insight.

Proactive Intentions

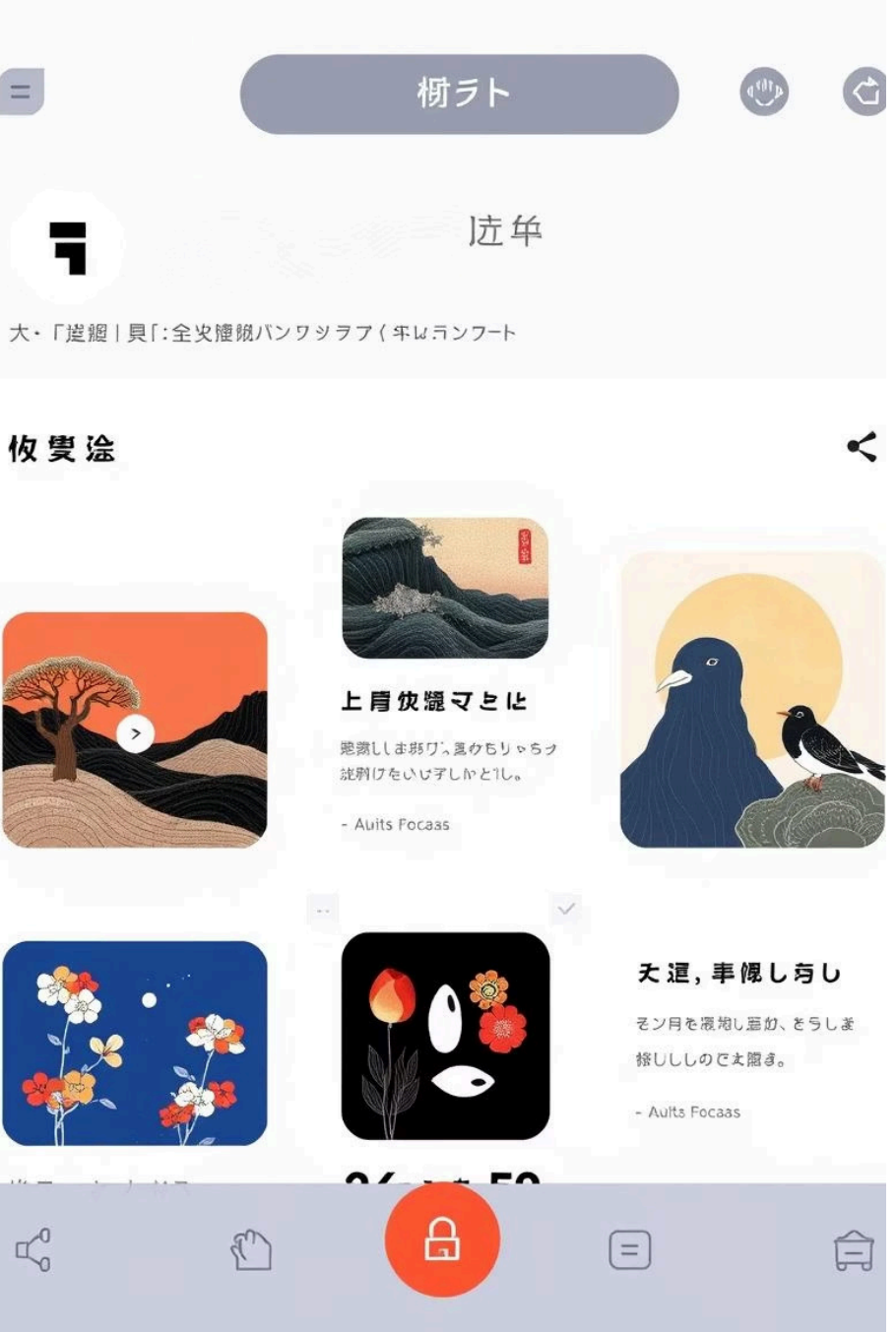
Plan future device use to cultivate healthy habits, launching directly into Focus Mode.

Focus Mode

A minimalist, distraction-free environment with a live countdown to keep you accountable.

System Architecture Overview

This layered architecture ensures efficient data flow and a responsive user experience, making mindful digital planning seamless.



Frontend Architecture: The User Experience

Our frontend is designed for a clean, intuitive, and highly responsive user experience.

- **Modern Web Technologies:** Built with semantic HTML5, modern CSS3, and vanilla JavaScript for a professional UI.
- **Dynamic UI:** Utilizes JavaScript's Fetch API for AJAX communication, enabling instant updates for a seamless single-page application feel.
- **Enhanced Experience:** Features a stunning dark mode, card-based layout, and minimalist "Focus Mode" to aid concentration.

Backend Architecture: Powering the Core

The backend is built on a robust Python Flask server, leveraging key libraries for secure and efficient operations.

- **Python Flask Server:** Handles all application logic, routing, and API endpoints for a solid foundation.
- **Flask-SQLAlchemy:** Serves as the Object-Relational Mapper (ORM) for elegant and secure database interaction.
- **Flask-Login:** Manages user sessions and secures routes, ensuring your private data remains private.
- **Werkzeug:** Provides robust password hashing (pbkdf2:sha256) for top-tier user security.
- **SQLite Database:** A lightweight, file-based database chosen for rapid development and easy setup.
- **API Endpoints:** Clearly defined APIs for seamless communication between frontend and backend, ensuring data integrity.

System Workflow: A Seamless Experience

01

User Authentication

Securely register or log into your private account.

02

Dashboard View

Personalized display of session history and scheduled intentions.

03

Proactive Planning

Schedule future intentions with specific goals and durations.

04

Focus Mode

Launch a distraction-free mode with a live timer at the scheduled time.

05

Task Completion & Reflection

Mark tasks complete and either update your dashboard or log unplanned sessions with a distraction score.

Database Design & Integration

The database uses a relational model to ensure data integrity and user privacy.

Core Principles

- **Self-Contained:** No reliance on third-party APIs for core functionality.
- **SQLite Database:** File-based for excellent portability and rapid development.
- **Robust ORM:** Flask-SQLAlchemy handles all transactions, preventing common vulnerabilities.

Key Tables

- **User Table:** Stores user ID, unique username, and a securely hashed password.
- **UsageSession Table:** Records manually logged sessions, including intention, duration, activity, and feeling.
- **ScheduledIntention Table:** Stores proactively planned sessions, including title, scheduled time, duration, and completion status.

The Road Ahead: Future Roadmap

Our vision for the Digital Screen Planner extends far beyond its current capabilities.

1

Phase 1: Enhanced Visualization

- Graphical charts to track Distraction Scores over time.
- A calendar view for all scheduled intentions.
- Weekly email summaries of user progress.

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Phase 2: Advanced Tools

- Browser extension to block distracting websites during "Focus Mode."
- "Streak" and achievement system for habit building.

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Phase 3: Scale & Mobility

- Migrate database to PostgreSQL for larger user bases.
- Develop native mobile applications (iOS/Android) for on-the-go planning.