

The background is a dark blue gradient with a complex, abstract design. It features concentric circles and a series of 3D rectangular blocks of varying heights and widths, some of which are stacked or arranged in a way that suggests a cityscape or a digital structure. The overall aesthetic is modern and technological.

MindTrace Extension

Hackathon Project Presentation

Distraction Detection & Focus Reinforcement Chrome
Extension for Enhanced Digital Productivity

The Digital Distraction Crisis

Current Problems

30% of students distracted by devices during lessons

7 hours daily average screen time

Existing blockers are too aggressive or easily disabled

VS

Our Approach

Gentle nudging instead of forceful blocking

Self-regulation through positive reinforcement

Behavioral change through mindful interruption

Our Solution

Smart Detection

Automatically monitors distracting platforms like YouTube, Instagram, Netflix, TikTok and provides real-time awareness

Gentle Nudging

Uses motivational quotes, mild alarms, and visual cues to encourage reflection without harsh blocking

Progressive Response

Escalates intervention only after repeated distractions, promoting gradual behavioral change and self-awareness



7+

Platforms Tracked

Real-Time Detection

Automatically activates when users access distracting platforms for immediate awareness and intervention

- ▶ Monitors YouTube, Instagram, Netflix, Facebook, TikTok
- ▶ Customizable platform list in extension manifest file
- ▶ Instant activation without browser performance impact

10x

Gentle Alarms

Motivational Overlay

Displays inspirational quotes with blurred background to encourage pause and reflection before continuing

- ▶ Random motivational quotes from curated collection
- ▶ Full-screen overlay with elegant blurred background
- ▶ Encourages mindful decision-making about continued browsing

3x

Visual Flashes

Multi-Sensory Alerts

Combines gentle audio alarms with visual flash effects to capture attention without overwhelming the user

- ▶ Mild alarm sound plays up to 10 times
- ▶ Brief red screen flash occurs 3 times
- ▶ Non-intrusive alerts maintain browser functionality completely

30s

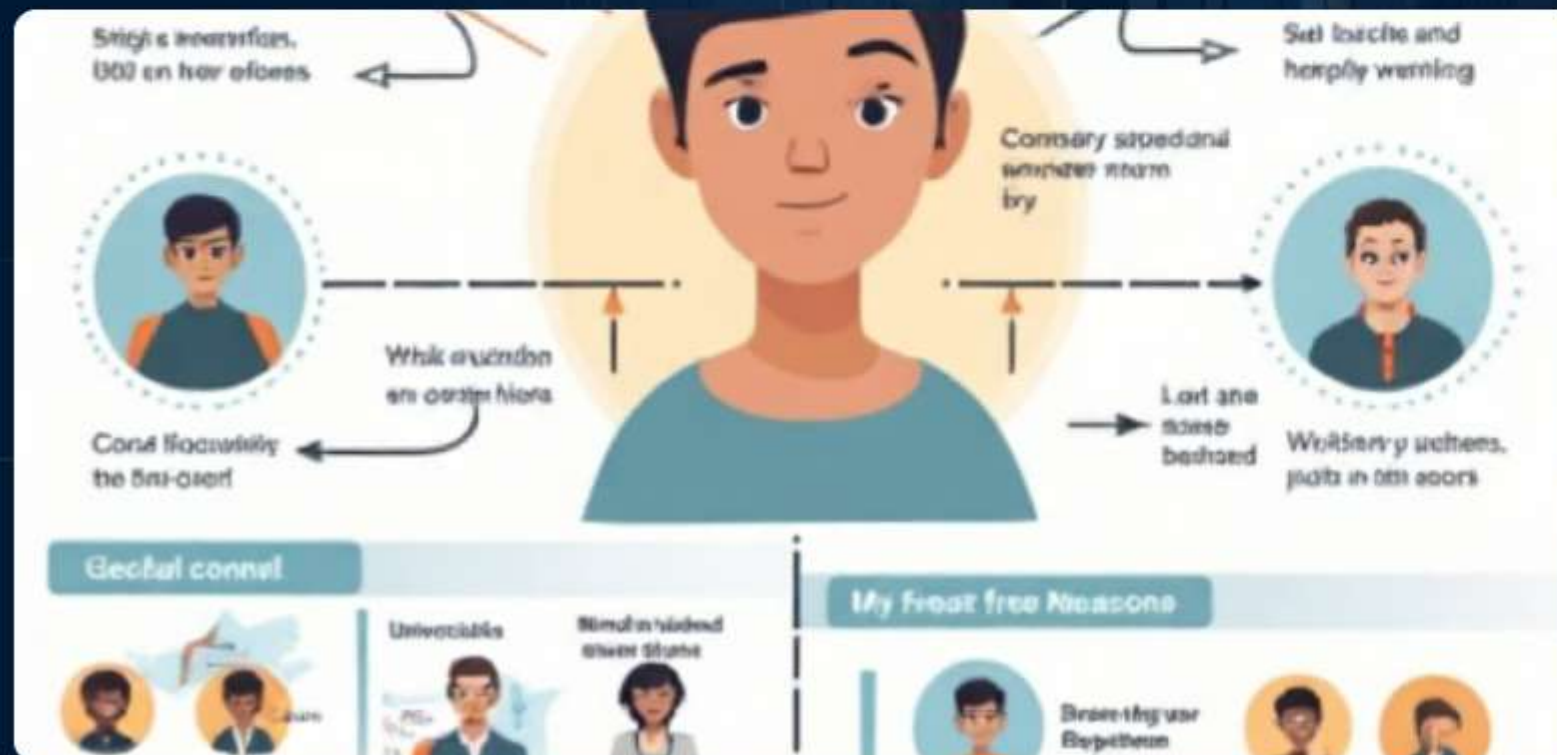
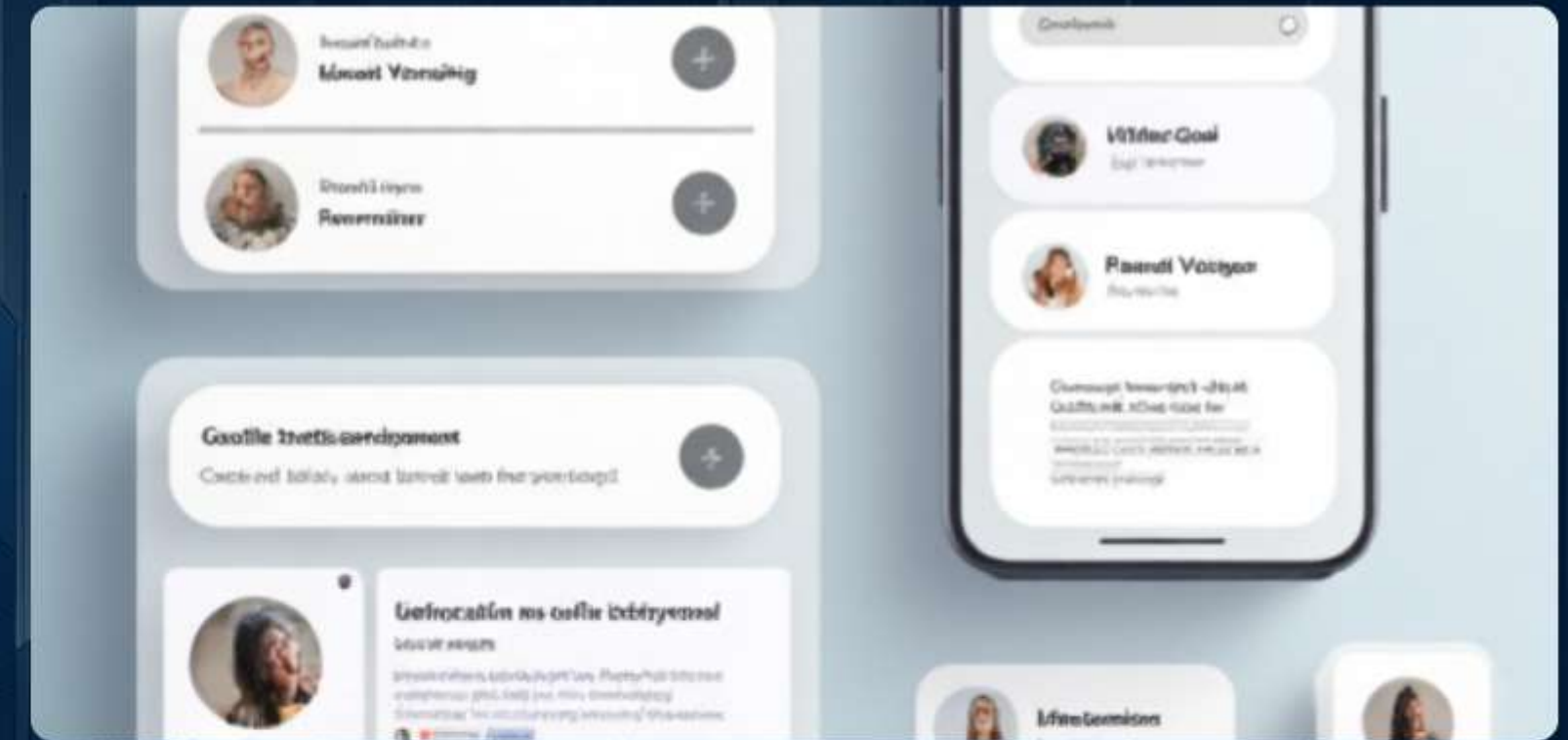
Smart Lockout

How It Works



Non-Intrusive Design

- Doesn't block sites outright unless limits consistently exceeded
- Maintains user freedom while promoting conscious decision-making



Behavioral Science

- Uses proven nudge theory for gentle behavior modification
- Encourages gradual self-regulation through positive reinforcement techniques



Students maintaining focus during study hours and exam preparation periods

Students

- Focus enhancement during online learning sessions
- Distraction awareness during research and homework
- Better study habits through gentle reminders



Remote professionals staying accountable while working from home environments

Remote Workers

- Productivity maintenance during work hours
- Meeting focus and attention improvement
- Professional accountability and task completion



Individuals practicing digital detox or building healthier screen-time management habits

Digital Wellness

- Mindful browsing and conscious internet usage
- Screen-time reduction and awareness building
- Healthy digital boundaries and sustainable habits

Technical Implementation & Built With

Core Technologies

- JavaScript for content script logic
- Chrome Extensions API (Manifest V3)
- HTML/CSS for overlays and visuals
- Web Audio API for alarm sounds

Key Features

- Real-time website detection system
- Local storage for distraction tracking
- Motivational quote display system
- Progressive response mechanism

Future Roadmap

- Custom lock duration settings
- Personal dashboard with analytics
- AI-generated contextual quotes
- Focus scheduling and reminders

30%

Student Distraction Rate

OECD data shows 30% of students are distracted by digital devices during lessons, highlighting the critical need for gentle yet effective distraction management solutions.



Thank You

Questions & Demo Time - MindTrace Extension

Ready to revolutionize digital focus with gentle, intelligent distraction management for better productivity.