

Mindsky – Comprehensive Design Brief (Refined)

CONCEPT

Mindsky is a personal, local-first productivity system designed for ADHD/ASD cognitive patterns. It externalizes the user's mental landscape into a dynamic sky of living clouds. Milestones, tasks, and subtasks appear as soft, animated cloud forms. Completing work clears clouds from the sky and reveals sunlight, reflecting clarity, emotional progress, and momentum. The system avoids rigid numbers or productivity metrics and instead uses atmospheric feedback to motivate gently and intuitively.

The core goal of Mindsky is to reduce overwhelm and friction. By making work tangible, spatial, and playful, the app encourages exploration and engagement rather than control and optimization. Interaction is tactile and forgiving, allowing the user to fiddle with clouds without breaking structure.

TOP USE CASES

- Breaking overwhelming goals into approachable steps.
- Tracking progress without numeric pressure or strict deadlines.
- Maintaining motivation through visual and atmospheric feedback.
- Reducing distraction via focus modes.
- Identifying neglected areas through storm-like visual cues.
- Quick, mobile-friendly task interaction.

WORLD STRUCTURE

- One global sky representing the entire mental ecosystem.
- One overarching goal: clear the sky.
- Milestones are large cloud clusters.
- Tasks orbit milestones.
- Subtasks appear inside tasks during task focus.

FOCUS MODES

Focus modes are implemented as camera zooms into the cloud itself, not as abstract panels. The cloud morphs subtly to accommodate information while remaining visually identifiable as a cloud.

Focus Look & Feel

- Focus view occupies ~80% of the viewport.
- Background is slightly darkened and fully frozen.
- Focused cloud is locked in position.
- Children spawn in a circular arrangement around the focused node.

Focus Content

Focused node displays:

- Title
- Description
- Due date (if any)
- Completion toggle (Mark as Complete / Mark as Incomplete)
- Visual completion indicator when children exist

Child nodes display:

- Title
- First 50 characters of description
- Toggleable completion checkbox
- Completed children turn green immediately

Focus Functionality

- Focused node cannot be moved.
- All other nodes are freely movable with no gravitational pull.
- Node rearrangements persist while focus mode is active.
- Exiting and re-entering focus resets child layout to circle.
- Clicking another node focuses it.
- Clicking sky exits focus mode.
- Nested focus supported (milestone → task).

INTERACTION GESTALT

- Hover only scales clouds (no magnetic motion).
- Hover shows progress as [Done / Total].
- Dragging stretches cloud elastically.
- Nearby clouds gently repel during drag.
- Compatible reassignment targets glow subtly.
- Reassignment happens immediately on mouse release.
- Plus-cloud is fixed in position.
- Double-click sky creates a new milestone.
- Long-press equals right-click.
- Accidental drags are prevented via movement threshold.
- Overlapping clouds respect z-order with focused node priority.
- No multi-selection exists in the system.

PHYSICS MODEL

- Gentle force-directed layout in overview mode.
- Tasks orbit milestones at 160–220px radius.
- Free dragging allowed at all times.
- On release in overview, clouds ease back to their anchor unless reassigned.
- In focus mode, gravity and snapping are disabled for children.

COMPLETION BEHAVIOR

- Binary completion only.
- Subtask completion affects parent visuals.
- Completed tasks dissolve (300–400ms).
- Completed milestones dissolve (500–700ms).
- Dissolves use soft particles and sound cues.

DYNAMIC SUNLIGHT & WEATHER

- Sun brightness depends on recent completion momentum and outstanding importance.
- Neglected clusters darken, roughen edges, and wobble subtly.

EDITING

- No text editing occurs in focus mode.
- All editing is done via right-click modal.

TECH STACK

Frontend: React, TypeScript, Vite, Tailwind, Pixi.js

Backend: Node.js (Express), SQLite (Prisma or Drizzle)

Deployment: Multi-container Docker (frontend, backend, SQLite volume)

Autosave enabled, localhost only.

GUIDING PRINCIPLES

- Emotion over numbers.
- Calm, minimal, liquid UI.
- Playful but structured interaction.
- Reduce overwhelm and encourage engagement.

Ready for implementation.