

Deus Ex Machina

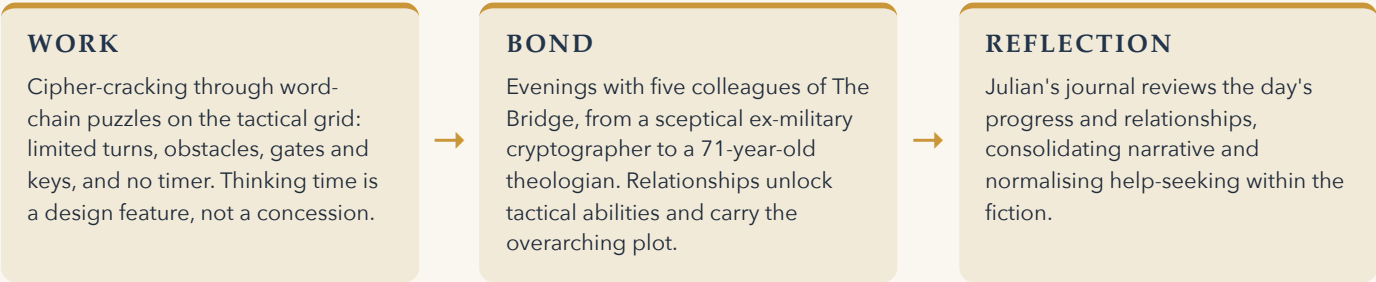
A tactical word-puzzle adventure, designed as a serious game for cognitive health

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In the Aetherpunk world of Aetheria, every message on the Aetheric network arrives scrambled: the Fall of Babel has been corrupting language itself for fifteen years. Julian Ashworth, a sixty-year-old professor of classical languages retired after heart surgery and quietly convinced he is no longer useful, is recruited by The Bridge, a secretive unit of linguists, cryptographers and engineers, to help crack the cipher. His experience turns out to matter precisely because of his age, not despite it.

The design premise is that **words function as movement rather than scoring**. Players build word chains (each new word begins with the last letter of the previous one) on a tactical grid, and the length of each word determines how far Julian moves, so vocabulary retrieval, pattern recognition and route planning are exercised in a single decision. The game is aimed at adults over sixty, particularly those at risk of mild cognitive impairment. Its niche is narrative: existing serious games for this audience are transactional drills with no story, and Deus Ex Machina instead gives older players an overarching plot to invest in. The audience does not need dumbed-down challenges, it needs real ones, calibrated for flow.

THE DAILY CYCLE



↻ NEXT DAY · FOUR SEASONAL ACTS, PACED LIKE AN ACADEMIC YEAR

RESEARCH GROUNDING

- Vergheze et al. (2003), Bronx Aging Study.**
Crossword play four or more days a week was associated with a **2.54-year delay** in dementia onset among 469 older adults followed for five years.
- Devanand et al. (2022), NEJM Evidence RCT.**
Over 78 weeks, computerised crosswords outperformed generic brain training in participants with MCI, with better ADAS-Cog-13 outcomes and **reduced hippocampal atrophy**: word-specific tasks beat generic stimulation.
- Benge and Scullin (2025), Nature Human Behaviour.**
A meta-analysis of 411,430 older adults found digital technology use associated with a **58% reduced risk** of cognitive impairment, supporting the digital game as the delivery medium itself.

MECHANIC TO OUTCOME

- Word formation

→ Lexical access and verbal fluency under the chaining constraint, with no time pressure.
- Grid navigation

→ Spatial reasoning and executive function: balancing the right word against the right position.
- Bond phase

→ Social cognition and episodic memory, through recall-based dialogue with the five colleagues.
- Telemetry

→ Word length, chain complexity and route efficiency tracked as engagement proxies.

Cognitive engagement Puzzles exercise vocabulary retrieval, pattern recognition and planning together; turn-based pacing removes reflex demands entirely.	Narrative resonance Julian's cognitive fog and search for renewed purpose mirror the lived experience of the audience; the fiction argues for cognitive value in later life.	Accessibility first Touchscreen-first interface, high-contrast scalable UI, and assistance woven into the story: Julian asks colleagues for help and consults his journal.
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WHAT WAS BUILT

A research-grounded game design document tracing every mechanic to evidence and to a measurement approach; a scene-by-scene storyboard of the opening day; and a playable Unity 3D prototype with the core word-chain puzzle loop, win and lose states, and a character bond scene, targeting Windows standalone with touchscreen-first design for later mobile deployment.