REDDIT DEVVIT WEB · BEST DAILY GAME ($15K TRACK)

# 60 Seconds. One Global Circuit. Every 2 Moves, Time Flips.

**ChronoTile Daily** is a 60-second daily spatial circuit-routing and temporal-flip logic puzzle built natively on **@devvit/web** with server-side replay verification and Redis Top-10 leaderboards.

6x6 Neon Conduit Grid | Chrono-Lock +90° Parity | 10-Year Guaranteed Par Solver | 33/33 Vitest Verified

FEED-NATIVE RETENTION

# Why 60-Second Daily Puzzles Win Reddit Feeds

## 60s

HARD TIMEBOX

Built for inline Reddit post feeds. Players finish a full round between scrolling posts without tutorial fatigue or multi-minute commitment.

## 1 Seed

SHARED UTC DAILY BOARD

Every player worldwide solves the exact same UTC puzzle. Shared constraints spark organic comment-section debates on optimal move parity.

## 7-Day

PRACTICE ARCHIVE + STREAKS

Daily streak tracking rewards repeat subreddit visits, while the 7-day archive lets newcomers practice past boards immediately.

ZERO BROKEN DAILIES

# Deterministic UTC Seed & 10-Year Solvable Par Solver

### FNV-1a + Mulberry32 Generator

- Keys directly off **YYYY-MM-DD** UTC date string so client and server derive identical boards with zero drift.
- Carves a guaranteed path from **Source** through **2 Gold Relay Cores** to **Sink**, then scrambles rotations and injects Chrono-Lock tiles.
- Rejects trivial boards (**Par < 4** moves) automatically via deterministic salt iteration.

### 576-State Optimal Par Dijkstra Solver

- `solveOptimalPar` models exact board reachability across both temporal phases (**576** state-space transitions).
- Computes true minimum moves (**Par**) for fair Gold/Silver efficiency tiers and leaderboard benchmarking.
- Stress-tested across **365 consecutive days** and a **10-year horizon (2026–2036)** with 100% solvability.

SPATIAL + TEMPORAL STRATEGY

# Time-Lock Polarity Mechanics

Tapping any unlocked conduit tile rotates it **+90°**. Every **2 player moves**, all purple Chrono-Lock (⏱) tiles automatically shift **+90°** between Phase A and Phase B.

### 1. Power Source

Fixed entry node on the left edge emits live cyan energy into connected conduits.

### 2. Gold Relays (x2)

Both diamond relay cores must be energized simultaneously before the Sink activates.

### 3. Chrono-Lock (⏱)

Switches between Phase A (0°) and Phase B (+90°) on every even move count.

### 4. Circuit Cleared

Closing the circuit on Phase A or B stops the 60s clock and locks in your move score.

TRUSTED SUBREDDIT COMPETITION

# Devvit Web + Redis + Anti-Cheat Replay Verification

**React 19 Client**
Records exact `[{row, col}]` move history during 60s run.

→

**Express API**
`POST /api/submit` validates UTC date & `0..60s` bounds.

→

**Server Replay**
Replays every move from initial board; rejects forged solves.

→

**Devvit Redis**
Updates user streak & Top-10 leaderboard (moves, then time).

**Dual-Mode Resilience:** Runs natively inside Reddit Devvit Web (`@devvit/web/server` + Redis) and falls back cleanly to standalone Express or browser `localStorage` for instant GitHub Pages playtesting.

AUTOMATED TEST & BROWSER QA

# Verification Metrics

**33 / 33**

VITEST PASSING

Covers engine, solver, edge cases, and Express anti-cheat API routes.

**830ms**

FULL SUITE RUNTIME

Includes 365-day & 10-year solvability stress verification.

**0**

CHROME ERRORS

0 console errors, 0 uncaught page errors, 0 failed network requests.

**0**

SECRET LEAKS

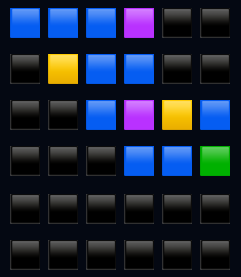
Verified clean with TypeScript strict check (`tsc --noEmit`) and Gitleaks.

**Tested Failure Modes:** Forged incomplete move lists rejected (HTTP 400), invalid UTC date strings rejected, out-of-range elapsed time (> `60s`) rejected, and leaderboard tie-breaking verified.

COMMENT-THREAD VIRALITY

# Viral Shareable Reddit Scorecard

```
ChronoTile Daily #42 (2026-11-27)
⚡ Solved in 7 moves (Par 7 · PAR!) · 14s · 🔥 5d Streak
```



```
Can you beat Par before the Chrono-Lock flips?
```

### Engineered for Reddit Comments

- **Spoiler-Free Grid:** Shows energized path shape and Chrono-Lock (🟪) vs Relay (🟨) positions without revealing tile rotations.
- **Efficiency Tiers:** Awards `PAR!`, `GOLD`, or `SILVER` badges based on moves relative to optimal solver Par.
- **1-Click Clipboard:** Players copy and paste directly into the daily subreddit post thread, driving friendly rivalry and return traffic.

BEST DAILY GAME ($15,000 TRACK)

# Built for Reddit Game of the Day

### Why ChronoTile Daily Fits Best Daily Game

- **True Daily Cadence:** Deterministic UTC seed, 24-hour reset, streak counter, and 7-day archive.
- **Devvit Web Native:** Configured in `devvit.json` with Redis persistence and Express backend.
- **3-Minute Subreddit Launch:** Documented end-to-end in `DEVVIT_DEPLOY_CHECKLIST.md`.

### Live Demo & Repository

- **Playable Web Demo:** `alphonshhhomenicmtu.github.io/chronotile-daily-reddit/`
- **Public GitHub Repo:** `github.com/alphonshhhomenicmtu/chronotile-daily-reddit`
- **Architecture Deck PDF:** `docs/chronotile-deck.pdf` (8 slides, 16:9)