



Umut Eren Demirci

Game Designer — Systems · Levels · Progression

Ankara, Türkiye umuterendemirci@gmail.com linkedin.com/in/umut-eren-demirci-a68a39163

Portfolio: umuterendemirci.github.io

Game designer coming to games from twelve years of teaching English and designing courses, with a background in linguistics. I design difficulty curves, progression and systems that players can read at a glance, and I check them with data and playtests: for my mobile games **Brushfall**, **Arcana Siege**, **Cloudhaven Skyport** and **Arcana Match** I built bots that play the real rules to tune pacing and difficulty, and for **The Mouth of Silence** I designed a constructed language as a puzzle system. I work in Unity and Unreal Engine 5 (Blueprints), Excel and design documents.

Projects

Pull-out · hyper-casual tap-away puzzle for mobile and web · Unity 6 · play: ueren.itch.io/pull-out 2026 · personal project

- Designed a tap-away puzzle with a queue of colour boxes: pencils slide out the way they point, the wrong colour waits in a tray of five, and a full tray stops play. Rubber bands, paper clips, ink blots, two boosters and timed levels; 40 levels in four chapters.
- Kept a mechanic only if the solver showed it changes the par or the tray a level needs: clips and blots released by boxes mattered in 0 of 300 deals, so I redesigned them to release by the player's own pulls.
- Bots showed the tray is the wall: a careless player dead-ends in 89–99% of games on six levels, so the game names a dead end and offers a sixth slot. Documented for a publisher: GDD, flowcharts, level workbook, ad storyboard, CPI test and KPI plan.

Shelf Life · hyper-casual sort puzzle for mobile and web · Unity 6 · play: ueren.itch.io/shelf-life 2026 · personal project

- Designed a book-sort puzzle with one twist, height: tall volumes fit only on the few tall shelves, so a set with an atlas must finish on one. Later chapters add a returns cart that only gives and locked cases that open when a colour is finished. 40 levels in four chapters.
- Kept a mechanic only if the solver showed it changes the best line: my first two ideas (height per colour, an empty reserved shelf) did nothing and were redesigned, and the generator now rejects any level where the newest mechanic is decoration.
- Bots found the height rule's real job: a careless player dead-ends in 75–98% of games on 9 of 11 height levels, so the game now names a dead end. Documented for a publisher: GDD, flowcharts, level workbook, ad storyboard, CPI test and KPI plan.

Clockwork · hyper-casual puzzle for mobile and web · Unity 6 · play: ueren.itch.io/clockwork 2026 · personal project

- Designed a ring-rotation puzzle with one twist: cogs that link neighbouring rings at 2:1, and padlocked rings that turn only through a cog. 40 levels in four chapters on a sawtooth, a level map and combo praise, art built on a professional free kit.
- Wrote each level as a spec; a generator lays it out and a breadth-first solver proves every par. Measuring all 40 with bots showed reachable boards track a careless player's moves more closely than par does ($r = 0.77$ against 0.61).
- Changed it from playtests: one-way cogs read as broken (now two-way at 2:1), and levels 9–10 were a wall (level 10's best line from 6 moves to 4). Documented for a publisher: GDD, flowcharts, level workbook, ad storyboard, CPI test and KPI plan.

Brushfall · hybrid-casual puzzle for mobile and web · Unity 6 · play: ueren.itch.io/brushfall 2026 · personal project

- Designed a game that chains four genres with one currency per step: a 30-second match-3 charge sets the hero's power, a power climb banks paint by colour, and the paint restores famous paintings. Daily painting, weekend Grand Climb, skins, rewarded revive.
- Balanced with bots at human speed: climbs paid 5–10× what restorations cost, yet weak players ran 9 climbs short on the wrong colours; colour-led drops, chapter prices and restorations that keep their progress cut it to 1–2.
- Synthesized the sound and music and captured a 15-second ad from real play; documented it for a publisher: GDD, flowcharts, live economy workbook, CPI go / kill test and KPI plan. 140 automated tests.

Arcana Siege · match-3 tower defense for mobile · Unity 6 · play: ueren.itch.io/arcana-siege 2026 · personal project

- Designed a puzzle defense where every tile colour fires a tower: four towers, seven enemy types, an upgrade draft, 12 sieges.
- Tuned with bots that play the shipped rules at set speeds, then reworked after a studio playtest: the road now moves with the player's moves, so mashing fell from 87% to 10% and slow thinkers rose from 10% to 50%.
- Set the art and audio direction from a genre study; GDD, flowcharts, balance workbook, ad storyboard, CPI test and KPI plan.

Cloudhaven Skyport · arcade idle management for mobile · Unity 6 · play: ueren.itch.io/cloudhaven-skyport 2026 · personal project

- Designed an airship-port tycoon in the Airport Master style: a counter chain served by standing at it, 22 build pads and 10 goals per island, staff, Grand Liners, island twists (storms, VIPs) and rewarded-only ads.
- Paced with an economy simulator that plays the shipped rules as three kinds of player: the first pass ended in 15 minutes for everyone, so demand upgrades, slower staff and matching capacity made a 53-minute island where skill counts.

Arcana Match · tarot match-3 for mobile · Unity 6 · play: ueren.itch.io/arcana-match 2026 · personal project

- Designed the whole game (85 levels on a Fool's Journey map, 11 board shapes, blockers, specials and combos, a 78-card collection, a story I wrote) and a balance simulator of its rules: a spawn-weight sweep lifted level 18 from 33% to 85%.

The Mouth of Silence · narrative puzzle adventure · Unity 6 · play: ueren.itch.io/the-mouth-of-silence 2026 · personal project

- A playable chapter of my novel built on *Kha'shul*, a constructed language I designed as the puzzle system (10 words, 5 grammar rules); rewrote a puzzle after an outside playtest and produced 343 voiced lines. 16-page GDD; 56 rule tests.

The Chronicles of Demise · narrative RPG concept · Unreal Engine 5 May 2025 – present · personal project

- Prototyped emotion-driven movement in Blueprints for a game adapting my own fantasy novel series.

More design work

- Design samples** · a level pack, a level teardown, level design, narrative design, feature proposals, game concepts2026
- A hand-made level pack for Arcana Match: 12 levels, each with an intent, a designed fail point checked against simulated losses, a clear heatmap and logged iterations, tuned to a sawtooth of target win rates.
 - A level teardown of Candy Crush Saga's first 105 levels: pacing, teaching and difficulty tags from public level data, two levels rebuilt and simulated, and a redesign of level 46.
 - Level design from five shipped games' data: lane rules, a generated 85-level curve, teaching waves and a simulated balance fix.
 - Narrative design from my novel's manuscript: two opposed cosmologies, magic as grammar and three converging strands.
 - Four live-ops features grounded in each game's data, with A/B tests; three new game concepts scored against a hybrid-casual brief.
- Game deconstructions** · Raid Rush (Panteon) and Royal Match (Dream Games)2026
- Broke down each game's core loop, meta, economy and live ops from public data (patch notes, store listings, market estimates, player reviews), and proposed changes, each with a hypothesis, an A/B test design and guardrail metrics.
- Tabletop RPG design** · D&D 5e modules and world-buildingDec 2022 – May 2024
- Wrote and ran adventure modules, adjusting encounters, pacing and rewards from what happened at the table.

Experience

- Game Designer** · independent, AnkaraMay 2025 – present
- Designed and released eight playable games on itch.io: **Pull-out** (hyper-casual tap-away puzzle), **Shelf Life** (hyper-casual sort puzzle), **Brushfall** (hybrid-casual puzzle), **Arcana Siege** (match-3 tower defense), **Cloudhaven Skyport** (arcade idle management), **Arcana Match** (casual match-3), **Clockwork** (hyper-casual puzzle) and **The Mouth of Silence** (narrative puzzle adventure).
 - Owned design end to end: core loops, level and difficulty design, balance simulators, playtests and GDDs for all eight; F2P economy, monetisation and ad / KPI plans for the mobile games. Full-time since January 2026.
 - I design every game; an AI coding assistant (Claude) writes the code to my specs, and I set the rules and tuning, run the balance simulations and play-test each phase.
- Private English Tutor** · self-employed, AnkaraJan 2024 – Jan 2026
- Planned one-to-one courses around each learner's level and goals, adjusting pace and difficulty lesson by lesson.
- Visa and Education Consultant** · TEOL and Bilimevi, Ankara (alongside teaching)2023 – 2025
- Guided clients through visa and study-abroad applications, from first meeting to decision.
- English Teacher and Course Designer** · language schools and companies, Ankara2014 – Dec 2023
- Taught English to groups and corporate clients for nine years, designing courses that introduce one new skill at a time on a rising difficulty curve and adjusting the pace from learners' results.

Skills

- Design**Systems and balancing · difficulty curves and level pacing · progression and meta · F2P economy design · live ops · game deconstruction and market analysis · narrative and puzzle design · dialogue writing · playtesting · GDDs and flowcharts
- Tools**Unity 6 · C# · Unreal Engine 5 Blueprints · Python · Excel and Google Sheets (formulas, charts, simulation data) · Mermaid / draw.io · Git
- Languages**Turkish (native) · English (fluent)

Education

- Ankara University** · English Language and Literature (2013–2017), then Linguistics (2017–2022)coursework, no degree

Design documents

- Pull-out**One-pager · GDD (6 pages) · Flowcharts · Level design workbook · Ad test and KPI plan
- Shelf Life**One-pager · GDD (6 pages) · Flowcharts · Level design workbook · Ad test and KPI plan
- Brushfall**One-pager · GDD (12 pages) · Flowcharts · Balance and economy · Ad test and KPI plan
- Arcana Siege**One-pager · GDD (12 pages) · Flowcharts · Balance and economy · Ad test and KPI plan
- Cloudhaven Skyport**One-pager · GDD (11 pages) · Flowcharts · Balance and economy · Ad test and KPI plan
- Arcana Match**One-pager · GDD (22 pages) · Flowcharts · Balance and economy · Card catalogue
- Clockwork**One-pager · GDD (6 pages) · Flowcharts · Level design workbook · Ad test and KPI plan
- The Mouth of Silence**One-pager · GDD (16 pages) · Kha'shul language reference · Flowcharts · Script sample
- The Chronicles of Demise**Design sample: emotion-driven movement
- Design samples**Level pack: The Tower (8 pages) · Level teardown: Candy Crush (8 pages) · Level design (8 pages) · Narrative design (8 pages) · Feature proposals (5 pages) · Game concepts (5 pages)
- Deconstructions**Raid Rush (6 pages) · Royal Match (5 pages)
- Everything**umuterendemirci.github.io: builds, screenshots and all documents