

Daniel Kirwan

C#/Unity/Tools Programmer

Unity / C# Developer specialising in tools, editor extensions, gameplay systems, and performance optimisation. Experienced in rebuilding legacy systems, creating scalable architecture, and delivering production-ready features for mobile and PC.

Mobile: 07969176632 Website: dangrygames.uk LinkedIn: [Daniel Kirwan](https://www.linkedin.com/in/danielkirwan) Games: <https://dangrygames.itch.io>

Email: danielkirwanjobs@gmail.com Medium: <https://danielkirwan.medium.com/> Code Samples: [SoloGame](#) [GitHub](#)

TECHNICAL SKILLS

- **Languages:** C# (Certified with Akylade), JavaScript, React.js, HTML, CSS
- **Engines / Frameworks:** Unity (Certified with Akylade), Unity Editor Scripting, WPF, Unity UI Toolkit
- **Tools / Workflow:** Git, GitHub, Perforce, Unity Version Control, Jira, Azure DevOps, CI/CD pipelines, build automation, Agile / Scrum
- **Gameplay & Systems Development:** Gameplay programming, combat systems, progression systems, save/load systems, player input systems
- **Performance & Runtime Optimisation:** Gameplay programming, combat systems, progression systems, save/load systems, player input systems
- **Tools & Editor Development:** Unity editor tools, custom inspectors, automation utilities, workflow optimisation

PROFESSIONAL EXPERIENCE

DangryGames – Self-Employed Generalist Programmer

June 2024 - Present

- Developed **Unity** prototypes and tooling for clients and portfolio projects.
- Created **C# WPF** automation apps to generate PC builds, icons, and project assets without opening the **Unity editor**, reducing build iteration time.
- Developed a **Unity Editor tooling** package to automate script generation using templates, batch workflows, and token replacement, reducing boilerplate and improving iteration speed.
- **Refactored** a large editor window into **modular** partial classes and UPM structure, improving maintainability and ensuring compatibility across Unity 2022 LTS through Unity 6.
- Implemented **preview, validation, and editor-safe** file generation to prevent invalid output and guide users through complex configuration states.
- Built **UI Toolkit Plus**, a modular, data-driven UI framework for Unity featuring tooltips, popovers, context menus, and designer-authored content via ScriptableObjects.
- Implemented input-agnostic UI systems, custom markup parsing, and layout-safe runtime positioning for production-ready UI workflows.
- Designed and implemented a custom **C#** game engine using **Veldrid** for cross-platform rendering and **ImGui.NET** for in-engine tooling and editor UI.
- Built a fully **interactive level editor** with real-time scene manipulation, hierarchy management, inspector panels, and gizmo-based transform controls.
- Created a **robust undo/redo system** using serialised state snapshots to support non-destructive editing workflows.
- Designed a modular architecture separating editor, runtime, rendering, input, and physics systems for future scalability.

On The Block Gaming - Freelance programmer

Unity / C# Tools and Systems Developer

June 2025 - Nov 2025

- Designed and implemented modular Unity tools, including a **drag-and-drop framework** reused across multiple mini-games, reducing repetitive setup time using **C#**.
- Built a configurable open/close **UI system** used across scenes, improving consistency and reducing UI bug count.
- Developed a robust **save/load architecture** supporting **ES3** and **cloud storage**, enabling scalable persistence.
- Introduced new game systems (**XP, levelling, UI behaviours**), expanding content creation capabilities.
- Improved **avatar customisation** workflows by redesigning backend constraints and increasing flexibility.

Halfbrick Studios - Gameplay programmer

Unity / C# Programmer

Aug 2022 - Jun 2024

Age of Zombies – Unity Port (C++ to C#)

- Rebuilt multiple **gameplay systems from scratch** (wave system, tile painting, progression, save/leaderboard/achievements).
- Optimised performance across mobile devices, reducing memory usage and load times through profiling and asset workflow improvements.
- Authored **technical documentation** allowing effective cross-timezone collaboration.
- Prepared and validated builds for **App Store and Google Play**, performing QA in Jira and working alongside release management.

Magic Brick Wars – Backend Migration

- Migrated backend from deprecated Amazon GameSparks to **Heroic Labs Nakama** without major codebase disruption.
- Built a custom data wrapper replicating GameSparks' data flows, allowing systems to remain unchanged and reducing developer rework.
- Enabled multiplayer and cloud storage functionality, restoring long-term project viability.
- Conducted extensive QA to ensure smooth release on Halfbrick Plus and new servers.

Integration Support Engineer – Adyoulike

May 2017 - Aug 2022

- Designed and implemented custom native ad units using **HTML/CSS/JS**.
- Served as primary technical troubleshooting contact for clients, handling integrations and performance issues.
- Provided UI/UX placement recommendations to improve client ad performance.

Build Automation & CI/CD

- Implemented automated multi-platform **Unity builds** using TeamCity, Unity Batchmode, and custom build scripts, improving build consistency and reducing manual overhead.
- Created custom Unity build pipelines including versioning, platform switching, asset pre-processing, and automated deployment steps.
- Configured iOS/Android build stages including Xcode project generation, Gradle, and mobile signing/provisioning.
- Integrated automated reporting and error logging into the CI pipeline to improve release reliability.

Mobile Services & Telemetry

- Integrated Firebase Crashlytics, Analytics, and Remote Config into live mobile titles to track crashes, improve feature rollout safety, and inform design decisions.

Mobile Platform Expertise

- Built and deployed iOS builds using Xcode, including CocoaPods installation, provisioning profiles, and device debugging.
- Configured Android builds using Gradle, keystore signing, and platform-specific settings.

Collaboration & Documentation

- Worked across remote teams spanning engineering, design, and production, providing clear communication and technical support.
- Authored detailed documentation for features, processes, and pipelines to support onboarding and multi-timezone teams.

EDUCATION

BSc (Hons) Computer Science with Games Technology – First Class Honours

City, University of London • 2015–2020

Other Employment

- Home Shopping Delivery Driver – Asda (2024–Present)
- Facilitator – Redbridge College (2014–2016)
- Windscreen Technician – Screen Medic (2011–2013)
- Locksmith – Lock Medic (2009–2011)