


DAMIAN SLOCOMBE

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GAME DEVELOPER & PROGRAMMER

<https://github.com/WooshiiDev/> 

UK, Scotland

ABOUT ME

Passionate, driven and determined games developer that's been going on for almost 10 years since the start of their journey. Loves what they make, and loves learning even more. A graduate that really wants to show what they can do, and be a part of a team that cares deeply about what they do as much as them.

Originally began learning with GMK:S and GMK 8.1, but eventually leading on to larger and more ambitious projects with Unity and other game engines or tools. Competent games programmer and designer with experience in all areas from gameplay, AI, editor tooling and core systems. Previous uses of other frameworks or libraries includes SDL2 (C++), Phaser.JS (JavaScript) and others.

Confident OOP skills, with a growing understanding of design patterns and modularity. Use of abstraction, inheritance and other OOP concepts to keep a clean growing codebase in all projects.

Can demonstrate understanding of version control with Git and Github, and the use of external node libraries. Previously created simple plugins through *Spigot*, *Bukkit* and *Minecraft Forge* API's and local hosted servers for *Minecraft Java Edition*.

Confident in abilities to create modular flexible systems to be used within games and extend game engine use. On a constant path to learn new topics, systems and concepts. Love's making editor tools and extensions for Unity when free time is available.

SKILLS



EXPERIENCE

Gameplay, AI and Tool Programmer & Game Designer

May 2020 - Present

Featherskull Studios - Tribulation

Worked with an agile team, developing a Roguelike Hack and Slash, featuring procedural generation and state based AI using C# in Unity 3D. Created core systems like for input wrapping around Unity's for easier handling of controls per game platform i.e. Console, PC. Developed a reflection-based state manager to allow the team to define values for state classes that would be created at runtime.

Implemented a custom made Camera system rather than using Unity's own Cinemachine for flexibility and learning. Included spherical movement, interpolation and camera state behaviour to have setup targets, offsets and distances.

Implemented a Rigidbody Controller solution, for Artificial Intelligence or Player use, with large amounts of capabilities, locomotion purposes and modularity for expansion. Allowed for more accurate collision detection within Unity using discrete Rigidbody settings. Capable of handling locomotion action-specific behaviour, from slopes to ledge holding.

Supported the other developers with peer programming, discussions and code reviews, to make sure code quality and design was provided. Confidently implemented core systems and provided a clean API for said systems to be used within the team. Created a Scriptable Object based Audio system, with 3D and 2D audio capabilities.

Improved efficiency with multiple editor tools and extensions. Created a quick and fast level building tool with simple placement and jigsaw-like features. Created a fast, and local saving editor build window for easier local test builds on any platform. Created a lightweight solution to PlayerPrefs utilizing Attributes to call and save data from fields. Created additional Property Attributes for improved Unity inspector capabilities from grouping, visualizations and collection handling.

Used Kanban Boards (Trello, GitHub Project) to structure the entire team development, keeping an agile backlog with clean categories for bugs, issues, requests and tasks waiting for review. Created a community server discord bot for our studio's discord server using Node.js and Heroku. This provided some convenient commands for the members of the server, but also some moderation and team only control.

Resident Adviser

August 2018 - May 2020

University of the West of Scotland - ResLife Team

Worked for the residential team at the University residence, helping and supporting students daily living inside and outside of the premises. Showed confident teamwork and communication whilst coordinating events or while discussing current problems inside or outside of the office work space. Worked together with a strong team to improve workspace efficiency and plan residential events.

Certified for first aid, trained and provided through working as a Resident Adviser.

Quality Assurance Tester & Community Moderator

March 2016 - September 2018

Mineplex LLC

Voluntarily worked for Mineplex in a moderation role on their server for two and a half years.

Throughout the first year I went on to do QA testing for new systems, games and maps. Provided in-depth and excellent feedback on new games, changes and features throughout testing sessions. Regularly discussed ideas for new features, quality of life changes and suggestions from the community forums.

Wrote a document for a full game mode update and revamp, which included media from prototyped systems personally implemented in Spigot. This document was positively received by the developers and then implemented for the next server update.

EDUCATION

First Class Bsc (Hons.) Computer Games Development

September 2017 - May 2020

University of the West of Scotland, Paisley, Scotland

Honours Project (Unity, C#)

Created a procedurally generated hex based world, with state based AI and progressive difficulty. Player mechanics included basic locomotion, a modular inventory and world interaction. Took advantage of patterns like pooling and prototype to create flexible implementation.

Web Games (Phaser 3, JS, CSS, HTML)

Implemented and designed a virtual web pet game, where pets could be fed and played with through minigames. Local storage functionality allowed players to return to the game later on after quitting. Minigames all included local multiplayer functionality with various forms of mechanics.

Level Design (Unity, C#)

Designed and implemented a first person shooter with emphasis on sneak mechanics through modular finite state machine based artificial intelligence. Took advantage of Unity's editor features to create an extension tool capable of drawing out paths for objects to follow. Includes bosses with unique behaviour, narrative and a lightweight inventory system for weapons, items and other collectibles found whilst playing.

3rd Year Games Project

Created a city builder inspired by "Kingdoms and Castles" with a procedurally generated terrain and environments. Included a dynamic runtime NavMesh, multithreaded task systems for the villagers that would inhabit the city built. Tower defense systems implemented to defend off enemies that came to destroy the town.

HND Computer Games Development

August 2015 - May 2017

Kilwinning College, Ayrshire, Scotland

AWARDS

Tranzfuser Award - Programmer

October 2020

Tranzfuser - UK Games Fund

Our team Featherskull Studios entered Tranzfuser to pitch and create a slice of a game idea, in order to be awarded a grant to help develop our teams studio.

Awarded the "programmer award" for participating in the competition with *Featherskull Studios* for the progress and development done within the competition duration.

NATS Award

December 2019

NATS (National Air Traffic Control)

Award won by designing an innovative game with core gameplay aspects involved in air traffic control.

The game was called "Toy Controller" and the objective was to handle a household run by efficient sets of toys making sure the house stayed tidy, clean and everything was done for their owner.

The game was to not only reflect the stress and difficulty of being an Air Traffic Controller, but to allow communication and coordination between players be critical for success.

PERSONAL PROJECTS & HOBBIES

Hierarchy Decorator

July 2020 - Present

Unity extension to give the Unity hierarchy some options for customisation, due to its lack of depth or options. Has gained a small following since development began (35~ stars on GitHub).

- Fully customisable, with all new features toggleable.
- Custom headers and draw options per instance in the hierarchy through the use of prefixes.
- Display icons for components on objects, with every Unity type supported and custom components supported.
- Display current layers of game objects with easy switching between them directly from the hierarchy.

Wooshii Attributes

August 2020 - Present

A growing collection of attributes to be used within Unity for ScriptableObjects and the general Inspector to provide utility and more flexibility when it comes to variables and exposed data.

- Structure based attributes for headers with full width underlines and custom grouping of variables.
- A "global" attribute system per script, to access variables and data easier.
- Global attributes allow for attributes *on* arrays themselves rather than collections, for custom drawing or displays in the inspector.
- Easily expandable for new types, often refactored with new systems or features added when required.

World Builder

September 2020 - Present

With the lack of level design tools Unity provides, placing assets or models without continuous duplication or without project folders being locked makes it very tedious to rapidly create levels.

World Builder is an ongoing tool to be built throughout development of other projects, to build levels and scenes much faster.

- Fast selection of asset folders to use models and assets from for placement.
- Separate window for selecting the loaded selection.
- Popup options within the scene view including mode options for manual placement or snapping to mesh faces.
- Prefab mode integration.

Procedural Hex Terrain Generation

September 2019 - July 2020

Originally began through university, involved with the final year honour's project. Continued it in available free time.

- Created a solution for generating procedural hexagon-styled terrain meshes.
- The meshes themselves were made up of smaller hexagons to create a larger mesh "piece" that could connect to other pieces.
- Implemented terrain heights using Unity's Perlin Noise, and then applying hexagon position logic to the corners of each smaller hexagon.
- Biome implementation with colours through gradients based on heights added to meshes themselves.
- Included biome-specific environment generation for adding depth to the generated pieces.