Mandy Otero

Email: aro.freelance@gmail.com

Portfolio: https://aroragames.com

Software Developer with 15+ published applications. Passionate about game design and development. Dedicated to creating a positive experience for users through intelligent interface design and systems. Inspired to write, create, and design. Committed to learning all aspects of game design, asset creation, and programming.

Skills

Unreal Engine 5	Unity Engine	Github
C++	C#	Firebase
Blueprints	HTML	Room Database
Javascript	CSS	Blender
Kotlin	PHP	Gamemaker Studio
Swift	XML	Game Design

Application and Game Development Experience

Platformer Prototype (Gamemaker Studio 2)

July 2024
- Built a fully functional platforming game prototype using precise tileset collisions, which made me one of the few to complete a submission for Pirate Jam 15. You can find a demo version here: https://arorasoftware.itch.io/luminaro
- Led a collaborative design team and incorporated feedback to improve the gameplay as well as the level design.
- Improved my ability to design a prototype on a short timetable by managing scope and setting focused goals.

Tactical SRPG (Gamemaker Studio 2)

April 2024 - Present
- Designed and developed a Fire Emblem style prototype using turn-based combat on a tactical grid.
- The project makes use of CSVs which enables a robust system of over 75 classes with own unique abilities
- Includes scalable systems for: level editing, cutscenes, custom abilities, missions, elemental affinity and multi-tiered attributes. It is designed to enable the creation of story-based tactical games.

Top Down RPG (Unreal 5.3 C++ and Blueprints)

December 2023 - April 2024
- Leveraged the Gameplay Ability System framework along with C++ and Blueprints to build a flexible ability system which uses attributes, modifiers, and custom Niagara effects.
- Created character object class hierarchy to allow for shared functionality between player character all enemy classes. Shared functionality included movement, gameplay attributes, gameplay effects and gameplay tags.
- Made use of async tasks to allow for seamless propagation of data between the different systems, to dynamically update UI elements and derived attributes. This allowed for robust, responsive UX using the character attributes.

Action RPG (Unreal 5.2 C++ and Blueprints)

July 2023 - December 2023
- Designed huge breathtaking landscapes using modular levels to load data in proximity to the player. This allowed for open world exploration at a fraction of the system resources.
- Used enemy patrol patterns, aggro conditions and attack AI to achieve dynamic enemy movement.
- Experienced with troubleshooting IK system to successfully achieve responsive foot movement for character rigs on sloped or multilevel terrain. Achieved realistic character model movement in complex mountain landscape.

- Created custom attack animations using Root Motion Attacks and Motion Warping as well as Box Trace and Anim Notifications in Blueprints to create detailed attack animations with accurate hit detection and sound effects.
- Designed custom Niagara Effects for use with attack animations as well as items in the open world

Applications from Android to IOS and IOS to Android

January 2023 - June 2023
- Achieved cross platform mobile development by porting my projects between mobile platforms.

IOS Application Development

2022
- Designed, developed and published productivity applications and games for IOS devices including a Calendar, Tasklist, Journal, Dice Game, Choose Your Own Adventure Story, and Tip Calculator
- Proficient in using Swift and Xcode to develop clean, performant applications.
- Made use of machine learning techniques as well as augmented reality applications.

Android Application Development

2020 - 2021
- Designed, developed and published Android applications including productivity applications such as a Calendar, Tasklist, Photo Journal, and Countdown Timer as well as Dice Games, and a Music Player.
- Well versed in Model, View, Controller Application development process and skilled with creating applications with a clean and focused UX and UI design
- Experienced with building, using and migrating databases as well as fixing corrupted databases without losing data.

Match 3 (Unity)

Spring 2020
- Designed and developed a 2D game in Unity utilizing C# in Visual Studio based on the classic game Memory but utilizing three card matches and implemented a system of abilities based on the character chosen by the player
- Integrated a system of Achievement and Daily Quests as well as a currency progression to allow the player to unlock new characters as well as buy boost items.
- Gained experience with packaging and releasing a Unity application on Android as well as integrating payment.

Certifications

Unreal Engine	Unreal Engine 5 C++ The Ultimate Game Developer Course (2023)
Android	The Comprehensive 2021 Android Development (2021)
	Kotlin Complete Android App Development (2022)
iOS	iOS & Swift - The Complete iOS App Development (2022)
Design	CalArts Game Design: Art and Concepts (2023)

Professional Experience

Sky is the Limit LLC
December 2014 - 2023
Producer & Video Editor
- Involved in all aspects of video creation including concept, research, filming and editing for over 800 videos.
- Wrote copy and handled search engine optimization for all videos to help drive traffic and improve click rate.
- Assisted with testing and gameplay recording to create accurate informational guides.
- Led communication with the community to provide a positive and responsive creator relationship with viewers.