DEREK BAERT

GAME DESIGNER AND PROGRAMMER

(204) 250-5597

Portfolio
LinkedIn
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SKILLS

TECHNICAL SKILLS

C++, C#, Python, Unreal Blueprints, Unreal Engine, Unity, Godot, Prototyping, Playtesting, Mechanic Design, Git, Perforce

SOFT SKILLS

Leadership, Problem Solving, Communication, Client Communication, Adaptability, Time Management, Critical Thinking

EDUCATION

ADVANCED DIPLOMA – GAME DEVELOPMENT (PROGRAMMING)

Red River College Polytech, 2022-2024

- Developed game projects in both Unreal and Unity engines.
- Designed game mechanics for a variety of game projects.
- Completed a shipped game as a final term project in a team of 18 artists and programmers.

FEATURED PROJECTS

RIFT CITY REBELS (UNREAL ENGINE 5) – MULTIPLAYER PLATFORM FIGHTER

- Developed a camera system to calculate camera position adjust zoom to show up to 4 players on screen at once.
- Developed a system for tracking player character selections, game modes, and match statistics, displaying results post-match for up to 4 players.
- Developed a training mode that allowed players to AI behaviours and dynamically swap between all 7 playable characters to test out their unique
- Designed a moveset consisting of 9 distinct abilities by researching frame data and realworld references to develop a unique and cohesive moveset.

EXPERIENCE

PROGRAMMER/LEVEL DESIGNER

Electric Monk Media, April – October 2024 Reason for Leaving: Work Completed

- Designed and implemented 6 engaging level designs for a 3D platformer in the Unity engine to craft memorable gameplay scenarios and environments.
- Implemented game and puzzle mechanics consistent with preexisting designs and constraints as well as thoughtful use of enemy placement to reinforce core gameplay mechanics across 6 levels.
- Reinforced narrative themes and story beats through environmental design and appropriate level themes.

DIPLOMA - BUSINESS INFORMATION TECHNOLOGY

Red River College Polytech, 2020-2022

- Developed Windows applications in the C# programming language.
- Developed a Weather Scraping application in Python.
- Developed Front and back end for websites using HTML, CSS, PHP, JavaScript, and Ruby.
- Completed courses in Cisco Routing and Switching, Database Management and Server Administration.

VIRTUAL HOUSE TOUR (UNREAL ENGINE 5) – VIRTUAL REAL ESTATE SOFTWARE

- Developed systems which allowed users to change materials for 5 different house elements, including walls, doors, countertops and roofs.
- Developed UI for selecting options for 5 different house elements, including changing the material applied to the mesh, and swapping wall panels for window panels.
- Developed three movement options for ease of use and accessibility, including WASD controls, double clicking the ground to move, and fast traveling between rooms.

SPEARGUY (UNITY) – SINGLE PLAYER ADVENTURE

- Designed main player abilities, including melee and ranged attacks
- Designed 3 unique enemies with 3 variations each to test player's combat abilities
- Programmed all systems, player and enemy abilities
- Conducted playtesting sessions, and integrated feedback into project.

VOLUNTEER EXPERIENCE COORDINATOR

Winnipeg Game Collective, April 2024 - Present

- Participated in bi-weekly coordinator meetings to organize meetups, game jams, and other group initiatives.
- Assisted with tasks at in person events, such as checking tickets at entry.
- Greeted attendees at in-person events.
- Assisted group members with inquiries on our group Discord.

ZECROMANCER (UNREAL ENGINE 5) – VR PROTOTYPE

- Programmed AI behaviours, including Zombie NPC behaviour which could be influenced by player inputs.
- Created development tools to automate workflow of converting animations to vertex animations using Unreal's AnimToTexture plugin.
- Programmed system to change animations of NPCs which used vertex animations in place of skeletal animations.