Zachary Meldrum

Technical Combat Designer

PROJECTS

AI Designer, Midwinter Entertainment

Project T, Unreal 5

- Prototyped 5 boss units including behavior trees, abilities, animations, effects, and sounds
- Designed and implemented 8 external playtest quality enemy units
- Implemented 150+ Enemy Attacks using Unreal Gameplay Ability System
- Owned 10+ enemy units and bots, handling bug fixing, iteration, and features
- Maintained Enemy Design Documents across milestones
- Pitched bot specs and feature priorities to relevant team leads
- Sought out code reviews and design work sessions to ensure quality work
- Mentored fellow enemy designer on enemy implementation
- Collaborated sound, vfx, and animation teams to develop clear enemy attacks
- Enforced restraint around player and enemy push back systems to avoid "clunkiness"
- Tested builds with custom changes to facilitate discussions around creative direction
- Achieved internal playtest quality player bots 6 Months ahead of schedule
- Dove into other systems to assist overburdened departments during milestone closures
- Queried teammates on their feelings about the game and enemies

Creator, DigiPen Institute of Technology

January - April 2023 Academic, Solo

Adventure Party, Unreal 5

- Engineered 3rd person melee combat system in the vein of Devil May Cry or Bayonetta
- Refined animation speed and cancels to achieve flowing attack chains
- Designed melee combat enemies that supported player dodging and combos
- Practiced feature planning and tracking

Tools

Jira | Perforce

SKILLS

Game Engines Unreal 4 & 5 | Unity | Custom Engine

Languages C# | Blueprints | C++

EDUCATION

Bachelor of Arts in Game Design DigiPen Institute of Technology

Excel | Miro | Maya Microsoft Office |

Design Skills Combat Design | Game Balance | User Research | Documentation |

Ability Design | Enemy Design

Graduated: April 2023

Sep 2023 - Sep 2024