



A Grim Day Out

Short Game Demo by John Barvenik

"A Grim Day Out" was developed to create a small, single level game that has the potential to be expanded beyond its current state. It was made in the Unity engine and follows the retired Grim Reaper on a short task collecting coins for an off-island trip.



Grim was designed to be easy to model and animate, but nevertheless aesthetically appealing and charming. From a narrative point of view, playing as the Grim Reaper affords the opportunity for some lighthearted yet dark humor down the line.

The Island was chosen as the space for the first level given the plentiful opportunities it has for content, as well as setting the stage for theme and feel of the game. Because it is completely contained, the size and scope can be adjusted based on needs. Currently the game mechanics are simple, but the environment invites many ideas for how to expand beyond its present state.



Link to Gameplay Video: <https://youtu.be/h4xEQmrX4O8>

Link to Animation Demo: <https://youtu.be/FCDpmNUAMLo>

Current state:

Complete basic level developed in Unity and Blender entailing:

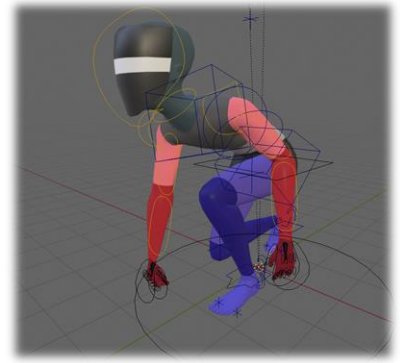
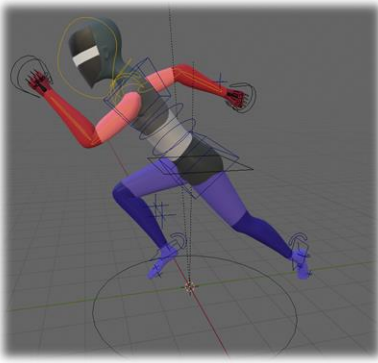
- Environment design, modeling, texturing, scene lighting
- Character design, modeling and animation
- Coding for basic character controls, camera controls, UI, and objectives

Future goals:

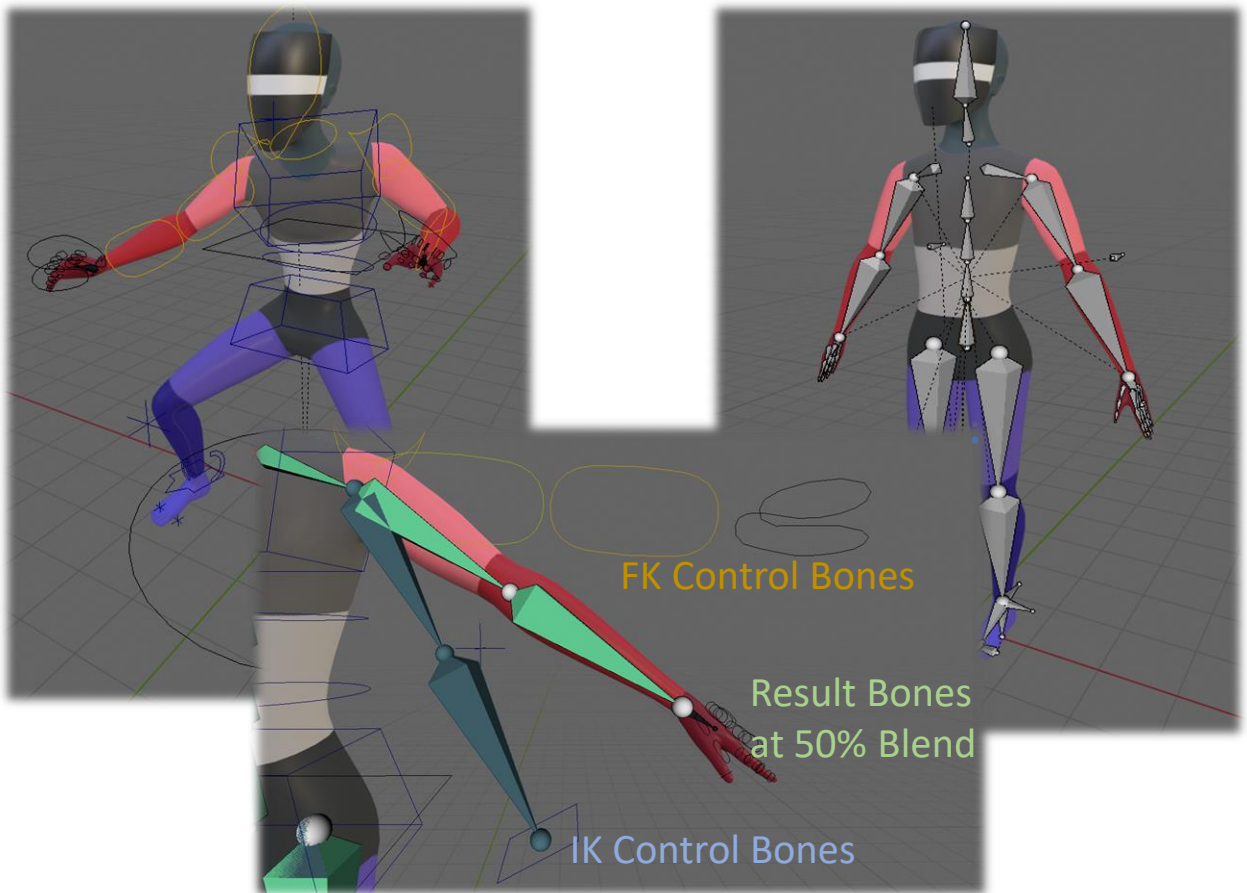
- Add sound (ambient and effects)
- Fine tune player and camera collisions
- Add more complicated objectives and activities
- Add NPCs and enemies
- Add bird flocking behavior simulation for aesthetics ("boid" animation, theory and implementation learned about in Graphics course)

Character Rig

by John Barvenik



This skeleton was created to be a comprehensive character rig that allows for multiple dynamic types of movement. It was made in Blender.



Current state:

- Includes dual IK and FK controls to drive a result rig on all limbs
- Custom controls for easy foot roll and finger coordination
- IK to FK Blending
- Custom code for IK/FK matching

Future goals:

- Spine twist controls (blender does not have built in IK spline twist)
- Improved IK/FK matching
- General cleanup on controls for user preferences and visibility
- Face controls

Marbology Board Game

Designed by John Barvenik

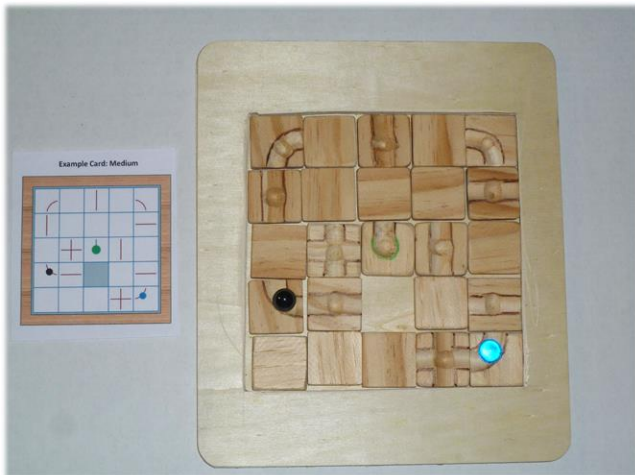
In 2013, I designed a board game for the 3rd annual national Game Design Contest at Marbles the Brain Store. The challenge was to design a fun and unique game to be sold at stores across the country. My design, titled "Marble Groove", was selected as the winner.

From Nicole Willer at Marbles the Brain Store:

"Marble Groove encompasses all of the elements we look for when considering games for Marbles' stores as a beautiful, heirloom quality, twist on a classic puzzle game"

From the original description:

Marble Groove is a visual puzzle that requires problem solving and critical thinking to master. It is a variation on a sliding tile puzzle with an added dimension: in addition to sliding tiles, the player must also push a marble along grooves in the tiles. The game mechanic is simple with multiple difficulty levels and the option to invent new levels.



Setup:

The setup of the game varies depending on which card the player selects. The player chooses a setup card with a desired difficulty (easy, medium, hard). Tiles and marbles are placed on the board in the pattern dictated on the selected card.

Object:

The object of the game is to push the blue marble to the end goal using the black marble.

The concept was lightly modified before going into production as "Marbology". It is currently sold on Amazon.com, Barnes & Noble, and other retailers.

