

Indecent Descent Report

What we did

Thomas:

- Worked on the multimap (a map of a key character to multiple value strings with weights) in which the grammar is stored.
- player movement/animation/controls
- enemies/hazards (the lasers)
- Tile interactions (cracked tile disappearing, ice tile being slippery, mud tile slowing the player)
- Tile textures
- Co-wrote the grammar for the level generator
- The final debugging and polishing of the random level generator

Stephanie:

- grammar parsing loop (make sure the path doesn't go back on itself right away/ make sure junction directions are different)
- path building based on a string parsed created by the grammar
- levels "stacking" or generating on top of each other to form a tower (using a queue data structure)
- walls around levels that capture as much of the level as they can within the width/ length limits
- Co-wrote the grammar for the level generator
- deleting tiles and collectibles that appear inside wall object so z-fighting doesn't happen
- scoring/ feedback (collectibles and score display)

How to play

- Move around with "wasd", jump with space bar
- Try to avoid the lasers.
- Tile functionality:
 - Ice tiles are slippery, increasing player velocity.
 - Mud tiles are sticky, decreasing player velocity.
 - Cracked tiles break a short amount of time after the player steps on it.
- Goal: get collectibles (the lights)

Objectives met

- Levels are procedurally generated
- all the tiles have their intended functionality
- score and levels fallen through display for player feedback
- enemy spawn rate increases as the player's floor level increases
- tile spawn rate doesn't change as floor level increases