

112 Term Project Documentation

Todos

all
documents
in one
file

- Roguelike with optimised code
- ASCII (maybe tileset)
- Be executable with a single file for our dist.
- Git integration for version control
- Have documentation with info on roguelikes and links
- Soundtrack → Scenario/Adventure/Orbitally exposed/FTL
- Have had handle graphics/fonts/etc., algorithms for puzzles/meleeks/etc
- Maybe just a barebones NL with an original pathfinding algorithm or something
- Turn Based/Active
- Rewrite parts of libstd/nano lib
- contact guys about using music for soundtrack
- use tiled game as database, add own features
- Different procedural generation algorithms for every floor
- Stranger friendly settings for NL\$
- Post on itch, Roguelash, etc.
- different characters/classes
- Tony Hawk/GTA style mode

- puzzles? - Idle game elements

- Entities? - synergies?

- Food/cooking? - phys, dual

- combat? - light?

- Num/there / invent, ready

mouse support?

Put this project
on itch.io?
Roguelash, send to NY,
etc

title card
caption

ads to Elex

multiple endings
- All die unless we find ads
- Escape - Never kill the boss/existential brand no matter

whole
series
use

Amazonic
habit
then lowest
fat sets
render
as you set
further

Floor to floor algorithm is different for the dungeon generation

- different shapes and patterns
- different colors, textures, tiles, busses
- different theming etc

maybe different fonts

You and a follower, procedurally generated characters maybe?, lover, daughter, etc.
go floor to floor, dialog, love, stay, from followers

Every kind of floor has a different puzzle, maybe procedurally generated

fixed mode?

Theming - Sci-fi, xenobiology, Lovecraftian

Things to do

Tech Demo

TFP Activatable/Time sheet

Write on the board/MVP goals

Design documents/Spec write case due/budget

Figure out puzzles

Dungeon gen algorithms

Menu/game states/moving floor to floor

Current Problems

Depreciation warnings in terminal

Catching instead of closing

Time Sheet

Prior to 4/3: ~~5~~ hours research/identifying
tinkers/etc

4/5: 4 hours for tech demo

4/6: 4-5 hours for tech demo

4/8: 6 hours on design/documents/research

4/10: ~~4~~ hours fixing bugs/reworking code

4/10: 3 hours working game map creation

4/11: 2 hours researching ego ascention

4/12: 4 hours planning/writing ego ascention

4/13: ~~2~~ hours esp by editing

12:30

4/16:

Questions for Nether

another -

When should I worry about var, const / git hub?

Yes - Can I implement a library that makes packaging easier after MVP without a tech demo?

Yes - Will a standard ASCII roguelike pass muster for TP w/ grading?

Yes - Can I use snakecase? Not too many underscores would make it look better.

Follow up - Do I need to worry about style guides / should I use the linter?

Difference between flushing a console and killing?

Possible bugs with crashing and exiting

Other idea

You and daughter/lover/pet duck/creatures generated character/maybe base it like a class?
on alien planet/alternate dimension (not specified)

Got those as a result of some research (gravitation recognition stuff)

Story/love/etc from dialog with follows

Goes floor by floor (probably not called floors)

- In other waters
NC Vtue
- Each floor is themed
 - unique procedural generation algorithms
 - flats get weird as you get further in to the madness
 - different color schemes / biomes / etc
 - specific scripted puzzle for each floor or maybe a kind of puzzle with different random solutions each time
 - procedurally generated challenges / scenarios
 - Story events / dialog / environmental / chronological differences etc etc

Probably not combat based

- More puzzle/exploration based
- Some atmospheric / horror elements
- Running from things / stealth / timed stuff
- Light / PCV / hiding

Maybe more scripted??

Multiple endings - None "happy", Only temporary escape from existential dash

- All madness, some glitches at, humor/unstable, everyone dies

Stay/Life/Theming ideas

Lovesoft

Lorecation/Sci-fi/Horror/Undertale/A dark Room/In other waters/silent hill/Allen

Name?

Important Elements

Relationship between you and followers
Story/tone told through dialogues and environment (No narration)

Multiple endings - None Happy (Existential)
- All bad
- Escape sadness temporally
- Panic victory
- Apocalypse?

Running/escaping/week like on horror game (Not a warrior killing thing)

Ambiguous setting, crates

Insanity

Xenobiology - detailed creatures/environment
- presented in a biological manner
- world building
- maybe a little grotesque/detailed

Incorporate some Lovesoft here

Some love story stuff

Zelda-style Plant overworld with various crypts/dungeons/rooms/etc that you go in to

Weird things happen based on environment - sandtrack changes

- Control charges
- Scale time/turn based
- Parts change
- Glitches
- Nexus charge
- new weird mechanics

Start in a benign world/stay discovers the horror stuff

(Blue and yellow life in other waters)

Blank and
Red and

Mario just
Agesonic
butler snatched
blue and yellow

Snow Sand track
had you seen what parts
we at scary parts?

Death road
(Tard road/Blood Incubus/Rings of Satan)

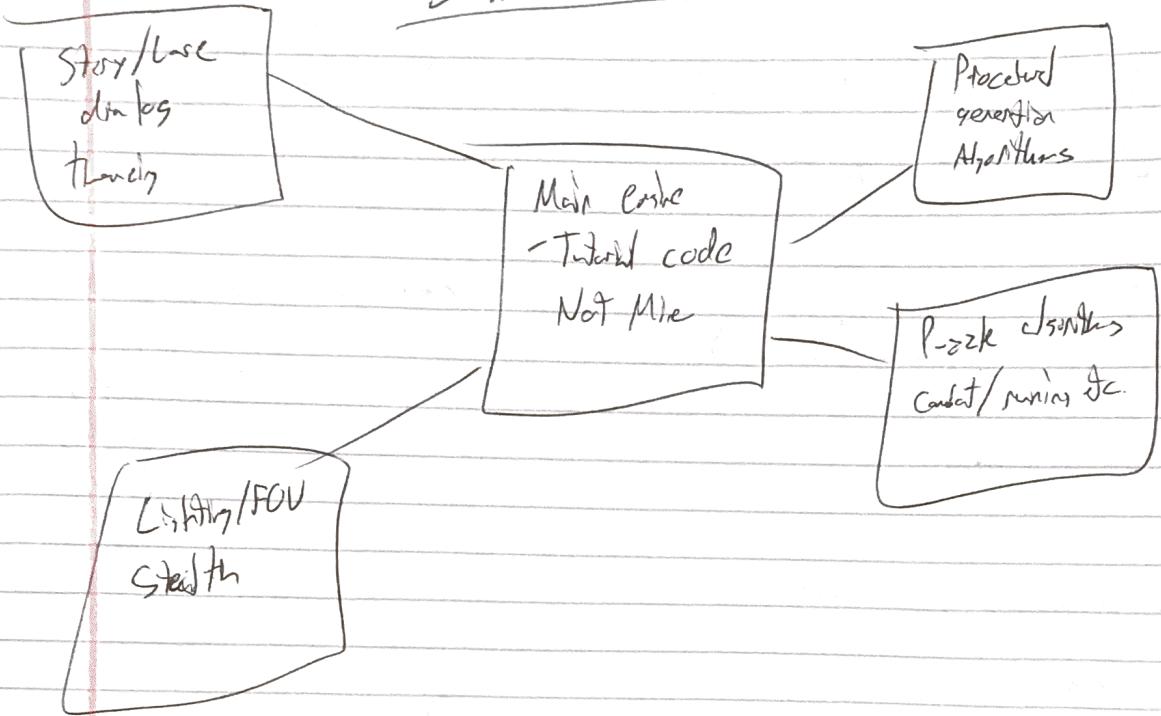
Big Zelda style overworld? Be the one to show it
so stuff

Feature List

- Multiple farts (including weird Alien looking ones) (maybe different humors?)
- Make things change from floor to floor
- Followers
 - Name generation
 - Different floor types (algorthms, farts, etc)
 - Dialog
 - Tiled escape/mimic sectors
 - puzzles
 - mazes
 - Music/Soundtrack / random? / scripted event music
 - scripted story events
- Settings file (farts/tiles/music/streams/nodes/controls/colors/etc)
- different endings
- Purposeful glitchiness a la P.T. / waterfalls if you set to close to something you should /
- Morse support
- Red fire?
- Some floors red fire zone NOT
- dark node where you can die
- A floor editor of sorts so that I can make floors with given
 - farts/color
 - puzzle
 - enemies
 - story cuts
 - dialog
- Mean w/ sound effects (clicks and what not)
- Zelda Style overworld
- Npc's/shops/gods/etc
- Saving/loading
- Puzzles that affect environment

Puzzles that are linked
to a particular kind of floor

Structural Plan



Ex Oblivion

Have
S.
I
can
handcraft them
individually
class for "Floor"

Shaders mess show max or
quit like monsters

Puzzle Ideas

Sakurabon

Puzzles based on names of Cthulhu rods that are procedurally generated.

- Maybe in a cult of a cult that worshipped elder gods

"Music" puzzle - every random number of steps you set a message that says "you hear a sound" use the intervals in between to figure something out

Killing enemies in a certain order \Rightarrow they keep resounding if you get it wrong

- Names are randomly generated with Markov chains
- Find a book that tells you the right order

Markov chain randomly generate chemical names

- make player gather right chemicals to synthesize something alchemy thing

One of those puzzles where flipping a switch flips every other door open to close and you have to pull them in the right order levers open doors to some rooms, close other doors

Open new folder in vs
add classes to a tool class log

- Menu
+ Spawn in black/yellow

Combat

You are weak

Should be more stealth/escape based

Basic weapons like clubs/knives/etc

MVP Goals

Menu

At least three kinds of floors generated uniquely / Different paths/areas
Combat System/Stealth system

Win state

Puzzles

Proc gen names markov chains

Binary Space Partition

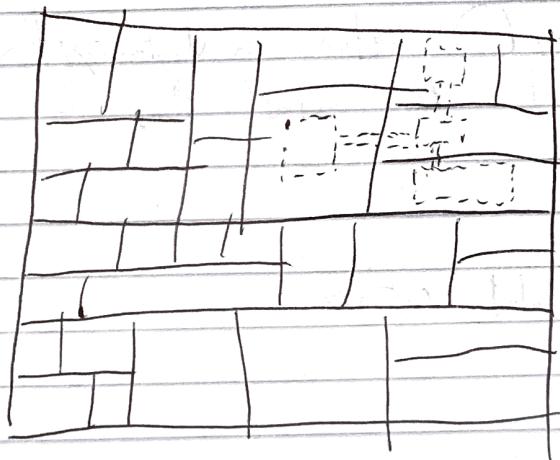
BSP Algorithm Ideas

- More than two partitions per recursion?
- Random number of partitions per recursion?
- Random room shapes? / consider differences

use rect class

Basic Outline

- take a big square and split it into 2 "containers"
- recurse on each of those containers to split them into two more using a random splitting point horizontally or vertically
- do this to a desired depth
- Put rooms into each container randomly with some amount of padding
- Draw corridors between each container's node



go from center
to outer

or check the area instead
the width-to-height?

Pseudo code for BSP

use Rect to keep
track of x, y
position

def bsp(self, parameters, depth):

if depth == 0:

 split space in two at random
 draw lines from center to center
 fill containers with rooms (with paddles)

else:

 not seen now?
 else to make sure
 all parts are connected
 this doesn't seem right

 split space in two at random
 → draw lines from center to center
 bsp(self, parameters, depth - 1)

Fixes to implement

Instead of drawing corridors from center of each container, draw them from the center of each room

make it so that bsp() returns a dictionary/list of rooms and have another function that actually does it

figure out parameters

check for width to height ratios

Markov Chains

- Puzzles?
- Lovecraft god random names, 3 enemies that must ~~be~~ be killed in the right order based on a riddle, they keep coming back to life if killed in the wrong order
- Items with random names that must be identified

Object Seg Algorithms

Basic rectangle

BSP

AC

Random Walk

Timeline

Finish esp

design docs

menu/game states / rework mesh file

adding in stairs floor to floor movement

tp1

Combat/items/win state

FOV/stealth

Markov chain room generator/puzzle

CA/Random WALK AI

tp2