IDEA / MSSA Console Game Mini Proj. **DATE /** Oct 17, 2024

DESCRIPTION

A simple, roguelike game developed in a console application.

DEFINITE FEATURES

- Searching Algorithms
- 4 classes
- Party System
- Small puzzles in 3 unique maps
- Battle System - At least 2 battles
- Menu
- ASCII Art
- Credit Scene

POSSIBLE FEATURES

- Coins
- Items
- Loading Screen
- Trailer
- Quests
- Moving enemies
- Music

MARKET / AUDIENCE / DEMAND

Project for class; no demand, no market, audience is my 2 instructors and 13 other students.

HOW WILL IT ADD VALUE TO PEOPLE'S LIVES?

Hopefully display concepts learn't in the past 8 weeks in a way the other students can identify and use/improve in their future projects.

DOES IT ALREADY EXIST? IF SO, HOW CAN I MAKE IT BETTER?

Plenty. The Goal isn't to make it better, but instead group as many concepts I've learned into a single project.

HOW WILL IT BE MADE?

Visual Studio 2022, console application

POSSIBLE CHALLENGES

- Time constraints
- Not knowing the code/concept
- Too ambitious
- Loss of internet

WHAT RESOURCES WILL YOU NEED? ($, PEOPLE)

- Visual Studio · 2022
- NuGet? — Maybe
- ASCII Art. eu
- ASCII Flow.com

POSSIBLE SPIN-OFFS OR EXTENSIONS

- Expand the game further
- Transfer to a game engine
- Continue upgrading it with concepts learned

## WHY DO YOU WANT TO MAKE THIS? HOW WOULD YOU DEFINE SUCCESS?

It is a fun project I'm excited to do and allows me to utilize everything I've learned thus far into a single product.

FURTHER RESEARCH / SKETCH

- Master Mini RPG Elements in console app using Michael Hadley tutorials
- Master creating maps via ASCII flow
- Create the small story.

This might be a good time to share your idea to gauge response & get feedback.

EVALUATE

1	EXCITEMENT	5	1	DIFFICULTY	5
○—○—○—○—●			○—○—●—○—○		
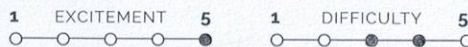
Record these numbers on your list of ideas.

DECIDE

- ☑ HATCH IT / # 3
- ☐ BACK BURNER
- ☐ ABANDON

PROJECT / Roguelike MSSA

SPECIFICATIONS / SCOPE

- 3 unique maps w/ player movement ☒
- Simple story with art ☒
- Battle system - 2 Battles min. ☒
- Credit Scene, Intro Scene ☒

- Audio ✓
- Music ✓
- ~~Character Art~~ ✓
- Dialogue ✓

} If time permits

ACTION STEPS

	task	who	due date
☒	Map prototypes on computer	Me	Oct 22
☒	Story + Art Ideas complete	Me	Oct 24
☒	Battlespace/Arena design Idea	Me	Oct 25
☒	Master C# Micro RPG Logics	Me	Oct 31
☒	Game Logic Complete (Idea)	Me	Oct 31
☒	Maps created, implemented, Finalized	Me	Nov 2
☒	Player movement implemented	Me	Nov 3
☒	Transfer between scenes - Correct Draw	Me	Nov 3
☒	1st Battle complete	Me	Nov 4
☒	2nd Battle complete + 3rd Dialog complete	Me	Nov 4
☒	Credit + Intro scene implemented	Me	Nov 5
☒	Final Debug + Test	Me	Nov 5
☒	Launch		
☐			
☒	Video (can be trailer too) of project		Nov 6th
☐	~~Powerpoint? of project (presentation)~~		~~Nov 6th~~
☒	Presentation Key Points		Nov 6th
☐			

TARGET LAUNCH DATE
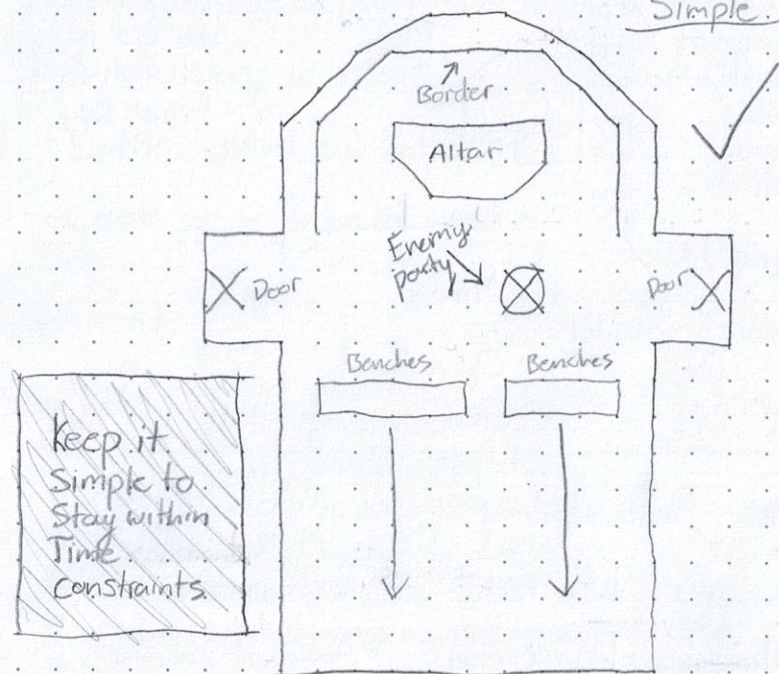
Nov 7th 2024

HATCH 3

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3. Locations. Brainstorm.

- Spooky church ✓ connected?
- Graveyard ✓
- House
- Mall
- Cornmaze ✓
- Random encounter
- Sewers

- Farm house ✓
- Mines
- Open field

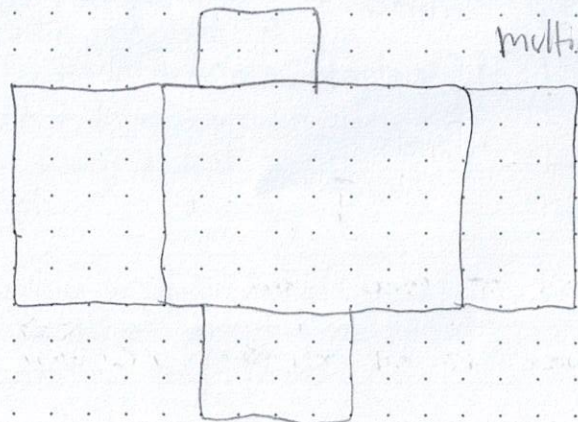Graveis locked, hav to go to church to find key

Enemies. Brainstorm

- Bat
- Zombies
- Bandits
- Rats
- Ghosts

- Wraiths
- Drunk Guy
- Slime
- Skeletons
- Birds

- Radioactive enemies
- Armored enemies
- Mages
- Witches

Spooky Church Maps (interior)

Simple ✓

Border
Altar

Enemy party ⊗

× Door   Door ×

Benches   Benches

↓   ↓

Keep it Simple to Stay within Time Constraints

multilevel?

Cornmaze Map (Interior)
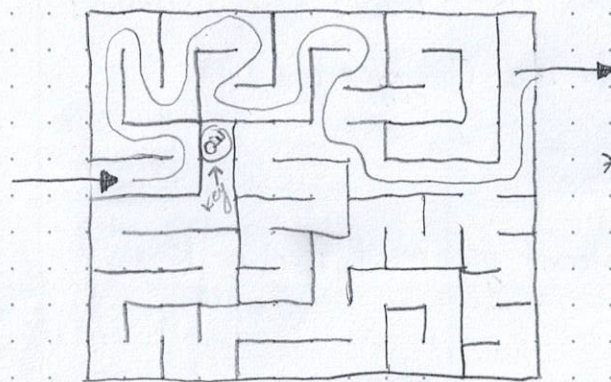
* off to the side?

Farm House (Interior)

Upstairs?

Bath Tub Sink

TV

⊗ ← Angry Farmer

Bed
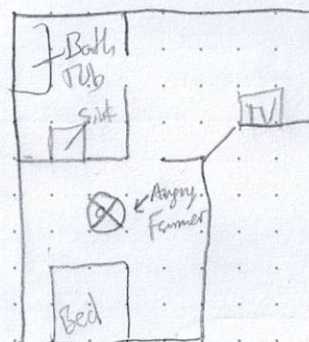
Size? 120×60? [Console]
        W   H

Exterior Art for choice Screen

Small Chapel - Hayley Wakenshaw / Church away.   Joan Stark

Barn - No Artist

Enemis in church

- Group of Zombies (3-5)
  - → Broke in from the Graveyard.

Enemies in Maze

- No enemies. Instead you must find a key
to then exit.

Enemies in Farm/Barn

- Angry farmer (Boss)?
  - → Must explore church to find clues about why
    there are zombies? He's the reason

Story Progression

Maze $\xrightarrow{\text{Finds}}$ Church $\xrightarrow{\text{Explores nearby}}$ Barn

~~Graveyard?~~ (If time permits)

You and your buddy are tasked to find out
what happened to your neighboring town and
why it's been so quiet the past couple weeks.

Class Hiearchy of Enemies

Enemy : Base Class

Attributes
- Health : int
- Damage: int
- Art : Artwork class
- Color: ConsoleColor

Methods
+ Bascic Attack ()
+ Special 1() } can override
+ Special 2()

Public
Artwork
Class

Zombies : Enemy

Attributes
- Group size : int (3-5)

Methods
+ Slash
+ Ferocious Bite

Skeletons : Enemy

Attributes
- Group size (1-3)
- Ranged : Bool

Methods
+ Attack

Evil With : Enemy
~~Angry Farmer : Enemy~~

Attributes
- Anger level : Float (.1-1)

Methods
+ punch
+ Chop w/ Axe } Change
+ Punch Combo } when coding

← Backup
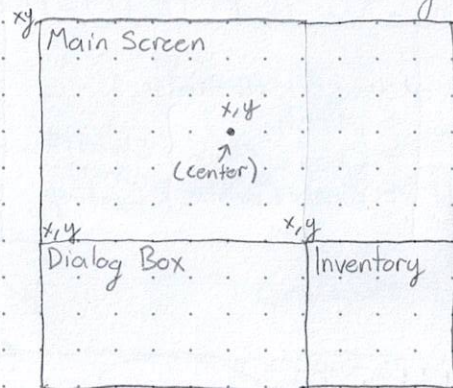
in maze?
Too much?

Battlespace Design

Enemy Nam
Art
Your Health Bar
Enemy Health Ba

If someway
to center it?

```
┌─────────────────┐
│  Dialog / Menu  │
└─────────────────┘
```

Normal Screen Design

```
x,y
┌──────────────┬──────────┐
│ Main Screen  │          │
│              │          │
│       x,y    │          │
│        •     │          │
│        ↑     │          │
│    (center)  │          │
├──────────────┼──────────┤
│x,y      x,y  │          │
│ Dialog Box   │Inventory │
│              │          │
│              │          │
└──────────────┴──────────┘
```

Size: _Fullscreen_ _Fullscreen_
         width   height

Border Design

Story Line

Start / Beginning

A group of adventures stumble across a odd town
that gives them the creeps. Against their intuition
they proceed to the small town. They arrive at
a town square and are cprented with options.

1. Abandoned church (Find dead priests) + Enemies
2. Graveyard (Locked) → Strange crystal Alter
   all options
3. Spooky Barn (want to explore ~~church first~~) Hear nois
   from Barn
4. Corn maze (Find key here.) → Graveyard

Evil witch has been spawning all these
monsters.

Choices Flow → Quick n' Dirty story

1. Abanandoned Church

> Find dead priests w/ partial note.

> Small Group of zombies have to fight

> Find other note piece to explore maze to find key
to graveyard.

2. Cornmaze
  > Find key to graveyard
  > Potential enemies
  > Finding key unlocks graveyard
3. Graveyard
  > Fight off Zombies
  > Find strange crystal alter where you then hear a noise to investigate.
4. Spook Barn
  > Boss fight with evil witch
  > Party member ~~dies~~ wounded
  > Beat the witch, Grab party member and run

End Story

End Screen would happen
Here w/ credits

The Classes

World Class
- Hold 2D array for the various maps
- Drawing the maps/levels

Game Class/Level Class (individual)
- Game loop

Player/Party class
- Draw player location
- Get x, y

Enemy Class
Artwork Class
Menu Class
Stack class for cool display functions?

Abandoned church story

> Player enters the church – comments on the musky smell then hears something move... [Dialog].

→ the "O" represent things to find, "X" are enemies, ">,<" are both denotions for exits, "#" is a key

> 4 "O"s total: Dead priest, blood, partial note, note that completes partial note.

The note will read about how someone dropped the graveyard key in the maze.

> 1 "X" total: A group of Ghosts the player must fight to leave

> If the player visits the church again, different dialog.

Once enemy is defeated, it will disappear until game is reset or program is closed.

Maze Story

> Player enters maze and if has found note, comments on their is somewhere to find the key. otherwise just a generic comment.

> Player can leave even if they don't grab they key.

> Once player grabs key, player will see a glimpse of a long pointy black hood. [Dialog]

> Getting key unlocks Graveyard.

Graveyard Story

> Player walks into graveyard and spots movement which is a skeleton.

> Once skeleton is defeated they notice a strange crystal alter with a lot of blood.

> When the player inspects it, they will get a dialog that they hear something coming from the Barn. The player can then leave the graveyard.

Barn Story

> When player enters, notice a large hooded figure. (Boss - Grim Reaper)

> Once player wins, dialog to exit. Once player exits the Barn and BossDefeated is true -- cue credit + Tbd screen.

End

Development Notes

> World DrawGrid() may want coordinates as parameters.
> ~~Console Renders very fast~~
> ~~CHECK CONSOLE RESOLUTION~~
> Check to makesure (x, y) are not reversed
> Level creation Steps:
> 3 classes → Game/level , World , Player   ⟲ As many as needed
> World holds instructions to Draw everything
> Game/Level holds specific things related to the level
> 1. Grid/Image, 2. Player input 3. Draw frame
> 4. Game Loop (drawframe, player input, events, render)
> ☒ [TASK] ~~Master Level parser Logic~~
> Confirm Grid Coordinates constantly
> ~~Find a way to get Console's Last input to avoid loop of rendering~~ ✓
> Map Fonts = Blur Vision ASCII
> Dialog Font =
> Want to color X=Red O=Blue ⟩ = yellow

> Use Linked List to ~~write~~ Display instruction
> Instruction Font = Mini
> Loading symbol Method → Sleep use
> Once Scen transitions are complete, "RunGameLoop"s Completed next (Events)
> Organize Solution Exporer
> ~~[20241028] Implement the rest of scenes and transitions~~
> Add conditions to places ☒
> Cant enter graveyard until has key ✓
> Can't enter barn until in graveyard ✓
> Enemy Class creation with all enemies ☐
> Battles → Battleground class ↗ [Items Class]
> Check inventory Display (Weapon + key
> Appropiat Damages after Battle implentation is complete
> Beginning story dialog needed
> ReadKey() → ReadKey(True);
  ↳ Causes the attack methods to not run on

Just need "Reaper" ☐

occ

- ✗ KNOWN BUG - Player fight method doesn't always call and skips his turn.
  - ✗ Check menu method (0.+ 1s)
- > ~~Check how to add items globally~~
- > Neatify
- > IntroOutro handle all Death scenarios (1.) ✓
- > Add musics (5.)   ↳ Add Intros to fights
- > ~~Add timer to Maze? (2.)~~ → Push to a potential polish
- > ~~Sword option that's poisoned at barn and gives -10HP every turn (3.)~~
- "Don't make a Deal with Death"
- > Dialog after Battle? (4.) ✓
- > Install NuGet for Sound Player (5.) ✓

See Final Touch ups
pg. 107

Intro Screen

Quick Doodle

Title?

Instructions — Seperate Serceen

Menu Selection

> Start Game
> Exit
→ Seperate

Outro - ~~credits?~~

Battle. Logic.

Player. Attacks ⟳ Enemy. Attacks

If enemy dies → check if there are more (group).
└→ repeat attack sequence → go back to screen

If player dies → Death Screen → ~~Go to main title~~ Exit Game

Display enemy name
Art
Health Bar
Dialog box
Player attack options

Enemy

He attacks!
Player retaliates!
- basic (+1 stm)
= special (3 stm)
= SKiP (gain +1 stm)
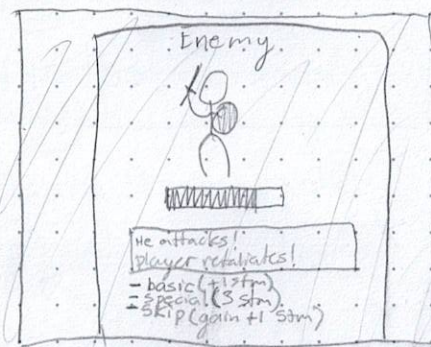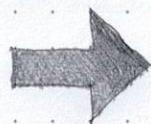
[If time make border]

"Enemy Defeated" Screen?
"Enemy Attacks" Screen?

Final Potential Additions

Added!

- Option for player to recieve +10 damage potential at the cost of 10 HP per turn - the catch is the 10 HP cost is not said.
"Don't make a Deal with Death" ✓

- ~~Add a timer to the maze, you get woken up outside the maze to try again if you exceed the timer.~~

- Add an enemy to chase player in maze. if it catches you, you die   Fog, mist etc.

• Dialogs when exiting places ✓

Bug. Fixes

☒ Menu Battle. bug - Need Longer render time.
☒ Menu selection. Dissappears - fixed list length
☒ TryCatch Window sizing in beginning.
☒ Clearer Game Controls. Description Code
☒ Center all Dialogs as best as possible