The Wicked Dungeons

User Manual v1
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<u>System Requirements</u>

Required: Java Version Version 8 Update 251 Release date April 14, 2020 Or later Installed

If you can't install this or a later version, you will need to recompile the source files located in the "source_files" folder note: Does not play well with linux… might not play well with mac either… (possible fix, ensure files are sorted alphabetically)

<u>Minimum</u>

- A CPU made in the last decade
- A GPU of pretty much any kind
- 1GB of RAM
- A Monitor
- A Mouse
- A Keyboard (preferably an ASCII one)

As long as your computer is not potato you should be good :3

<u>Recommended</u>

Anything equal to or better than the following

CPU: Intel i3-2100 / AMD FX-4100

GPU: Nvidia gtx 950 / AMD Radeon RX 460

RAM: 4 GB

Monitor: 1080p (16:9) 60Hz

note: the game will scale to different screen resolutions, however you will see less of the game map if you have a screen smaller than 1080p

<u>Objective Of The Game</u>

The objective of the game is rather straightforward. You, the player, start off in a dungeon and must navigate your way through it whilst not dying. Along the way you will encounter various enemies you must battle. But don't worry, you will also find numerous potions and equipment to make this feat plausible. If you somehow manage to make it through the dungeons, you'll soon arrive at the final crypt, where you must face off with the demon who guards the ultimate treasure.

<u>How To Play</u>

<u>Controls</u>

- **WASD** to **move**
- **E** to pick up / **interact** with items
- **1-8 / mouse wheel** to **scroll through potions**
- **Q** to use selected **potion**
- **Move the mouse** to swing your **sword**
- **Esc** to open **settings menu**
- You can **restart** a level **via the settings menu**

<u>Combat</u>

- All enemies have "aggressive hit boxes", if you move through a specific enemies aggressive hit box, the enemies will begin attacking you.
- You can attack enemies by hitting them with your sword
- If you hit an enemy there is a delay before you can attack again
- Similarly if your attacked or an enemy is attacked, there is a delay before you can move
- You can see this delay as the player/weapon/enemy will be highlighted red
- Potions: red - health, blue - speed, yellow - defence, green - strength

<u>Earning Score</u>

- Picking up coins +50
- Killing enemy +100
- Opening chest +200 + any coins in chest
- Completing level + 200

*** The game only saves at the start of a new level ***

<u>Game Settings</u>

<u>FPS Counter</u>   <u>Default: Off</u>
Displays you in game frame rate in the top left corner

<u>VSYNC</u>   <u>Default: On</u>

Sets your max frame per second to your screens refresh rate
note: If you change monitors mid game and your monitors have
differing refresh rates, the max frame rate will be the same.

<u>Debug / Build Mode</u>   <u>Default: Off</u>

Displays various tools for debugging / building levels.
<u>Tools include</u>
- Collision grid lines / positions
- Hit boxes
- Aggro boxes
- Clicking your left mouse button will copy the clicked Grid boxes coordinates.

note: This mode is not intended for use whilst playing the game,
it may hurt your eyes and will cause severe fps loss.

<u>Music</u>   <u>Default: On</u>
Turns game music on/off
Highly recommended you play will music on :3

*** In case required, game settings can also be changed from
the config file located in the settings folder ***

Types Of Enemies

Orc

Attack Style:　　　　Melee　　Attack Damage:　　1
Health:　　　　　　3　　Movement Speed:　4

Orc Shaman

Attack Style:　　　　Ranged　　Attack Damage:　　1
Health:　　　　　　3　　Movement Speed:　3

Chort

Attack Style:　　　　Melee　　Attack Damage:　　2
Health:　　　　　　3　　Movement Speed:　5

Swampy

Attack Style:　　　　Melee　　Attack Damage:　　1
Health:　　　　　　5　　Movement Speed:　2

Necromancer

Attack Style:　　　　Ranged　　Attack Damage:　　1
Health:　　　　　　4　　Movement Speed:　4

Big Zombie

Attack Style:　　　　Melee　　Attack Damage:　　3

Health:　　　　　　8　　Movement Speed:　3

Engine Mechanics

The following is a list of all mechanics implementable by the game engine.

- Creating a game window
- Rendering Objects
- Translating via in game camera which follows the player
- Moving Objects
- Testing if objects are touching or colliding with each other
- Rotating Images
- Changing the Hue of Images
- Getting User Input (Keyboard, Mouse, Mouse Wheel)
- Loading game sprites and other assets such as music
- Loading externally Generated Levels via a level file
- Playing music and sound effects
- Saving The Game
- Changing and saving in Game Settings
- Calculating and displaying FPS

*** For more information check out the Engine.java File located in the "Source" folder ***

Building Your Own Levels

All in game levels are loaded from external text files located in the "Levels" folder.

Step 1: Setup

First you're either going to have to edit a specific level file or create a new level. If editing a specific level, simply open the file with a text editor. If creating a new level, create a text file inside the "levels folder" and open it with a text editor.

Step 2: Creating a level

First I would recommend checking out the start level method in the Engine.java class as well as any standard game level to get a sense of how levels are designed / loaded.

Primarily, levels are loaded one line at a time via keywords along with parameters, for example (player 120 60) which specifics to the engine to create a player object and place him at the coordinates 120, 60. All keywords and required parameters are listed in the Engine.java class

The only keywords require for a level are the "Level_size" and "player" The Engine treats a level as finished when it reads a blank line

note: levels are rendered from bottom to top, Ie: what you put at the top will appear in the "front"

Step 3: Running your level

On startup, the game engine loads the levels into an array called "levels" in alphabetical order. Inorder to run your Level, you must specify the index of your level(The numerical position of your level in the alphabetically sorted levels file, minus one since arrays start at 0) in the save file located in "Saves folder", under currentLevel.