

Warlock's Gantlet Alpha Demo 1.1 User Manual

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What sort of game is Warlock's Gantlet?

I refer to Warlock's Gantlet as a "Sword & Sorcery-themed hack'n slash FPS". It is primarily an action game but it has some light strategy elements to it which will be explained in the "Strategy Mode" section.

"Gantlet"?

Yes, "gantlet", not "gauntlet". This is an older spelling of the word, but only of its meaning as a punishing trial; "gantlet" does not have anything to do with gloves, armoured or otherwise. I had several reasons for choosing it over the more common "gauntlet", first among them is that I like it. Another reason is that it works as a small homage to Doom 2, the classic FPS. Trivia surrounding that game is where I learned of this alternate spelling, as it was used in the name of its third level: The Gantlet.

How to play

Start a new game

When you start the game, you will be shown a title-screen while the program loads necessary assets. Once that has finished, you will see a black screen with two options: Start New Game, and Exit, with the appropriate keyboard commands listed. Selecting "New Game" will begin generation of the first level and once it is done, you will be dropped into that level, ready to play.

Exit a game

To get back to the main menu, press the Escape key at any time. Once there, press the Return-key to exit the game. To get back to the game from the main menu, simply press the Escape key again.

If the level is "broken"

The level generator will, in rare cases, produce a level which cannot be completed. In most of these cases, the error will be detected and a notification will appear on the screen. In these cases, simply press the F7 key to generate a new level while keeping your status and inventory as it was. There is a small, but never encountered, chance that a level will be broken without the generator noticing it. If you discover that you can't progress, pressing the F7 key works at any time. (Yes, you can cheat yourself out of a dire situation with F7 and I can't stop you.)

Start over

If you want to start over from scratch, go to the main menu and press the F7 key there. A new level will be generated and all of your stats will be reset to default.

Demo structure

The demo simply consists of procedurally generated levels in perpetuum. Play until you die, the game crashes, or you get bored =)

Gameplay

The status frame/GUI

The status frame is the grey-coloured, decorative and informative frame which surrounds the entire game window. Much important information is displayed in/on this frame so PAY ATTENTION!

Top left corner:

- "Rsltn": Short for "Resolution", this shows the current resolution of the game-window (Everything besides the status frame).
- "res nr: x of 8": There are a total of eight different resolutions which you can choose between to maximise performance, though it is really only the three first (highest) that offer decent gameplay. The remaining five are mostly there for a laugh. Use the P key to cycle through the different resolution options.
- "Frame cap: x": The maximum number of frames allowed per second. This can be adjusted by you to give you a smooth experience. The game is programmed with 30 frames per second in mind. Most things in the game are independent of framerate but movement is not. I found that movement became choppy when I tried making it "frame independent". So, for the time being, movement is tied to framerate and I recommend a framerate of 20 - 35 for the best experience. The options for framerate go from 20 through 60 in increments of 5, plus one at 6000 for those who want to test their system. The default setting is 30, since it is the intended framerate. Cycle through the frame cap options with the O key.
- "Manual: F1": Simply means that you can access a quick reference sheet by pressing the F1 key at any time. Doing so will pause gameplay so that you don't catch any fireballs while perusing it ;)
- Keys: Once you collect one or more keys, they will appear here as sprites. There are always a total of three keys in a level and they always come in the

same order: Bronze, silver and gold. (And they open the correspondingly coloured gates).

Top right corner:

- "frames per sec: x": Indicates your current framerate so that you can more easily find the settings which give you an optimal experience.
- "mouse sensitivity: x": Mouse sensitivity can be set anywhere on a scale which goes from 0 to 10 in increments of 0.1. The default setting is 1.0 and it can be adjusted by using the F10 and F11 keys.
- "Turbo mode: off/on": This indicates whether "turbo mode" is active or not. Turbo mode means that the game is only drawing every other frame, but everything else, such as input, movement and collisions, are calculated every frame. Believe it or not, it can improve the gameplay experience vastly on a weaker system.

Bottom row:

- Leftmost box: This shows your currently equipped weapon. If the weapon is reliant on ammunition to function, the amount of ammunition you have for it will be displayed above the weapon sprite. You can cycle through your weapons by pressing the Q key. Just underneath the weapon-sprite you will see the information:
- "x out of y". This text will appear whether the "y-value" is 1 or higher. It denotes the "power level" setting of the equipped weapon. In some cases a weapon (or spell, more of that later) can be set to different power levels, and this indicates which one is currently selected. To change the weapon's power level, use the 1 and 2 keys.
- "drblt: x": Short for "durability: x". This denotes the durability of your weapon. Using your weapon will reduce durability. Once the durability reaches 0, you lose the weapon.
- Text column: This shows a number of convenient status values.
- "HEALTH: X": Your character's health. The maximum amount is 1000. If it reaches 0, the game is over and you will have to start from scratch.
- "SPEED BOOST: 0": This will show number of seconds remaining of your speed boost, when you've taken a speed potion.
- "STRENGTH BOOST: 0": This will show number of seconds remaining of your strength boost, when you've taken a strength potion.
- "swords: x guns: x": This shows how many swords and guns you have. You can have a maximum amount of two of each. Meaning that you can carry one spare for when the one you're using breaks.

- "blunderbuss ammo: x": Shows you how much blunderbuss ammunition you have.
- The lamp box: This shows a sprite of your oil lamp. It will be burning when you're using the lamp. Below the sprite is a number which indicates how many seconds worth of lamp oil you have left. To turn the lamp on or off, press the G key.
- Player character's face: This shows you. The face will become bloodier as you take damage. You can switch between playing as a man or as a woman by pressing the N key.
- Potion box: Shows you which potion you have equipped and how many potions of that type you have in total. You can cycle through the potions by pressing the R key and drink one by pressing the C key.
- GOLD BOX: Shows how much money you have. This can be spent in the shops =)
- Spell box: This show you which spell you have equipped by displaying a sprite of the associated spell scroll. Just like the weapon box, it shows the currently selected power level of said spell as "x out of y". You can cycle through your spells by pressing the E button and adjust the power level with the 3 and 4 keys.

How to move

To move forwards and backwards, use the W and S keys respectively. To move left and right, use the A and D keys respectively. To jump, press the spacebar. To turn, use the mouse. To invert the mouse y-axis, press the F11 key.

How to attack

To use your weapon, press the left mouse button. The weapons all aim towards the centre of the screen. Melee weapons rely on one-frame static projectiles which are placed in the weapon's path at point of "release" (such as when the fist is in the most extended position). Each of these projectiles do a set amount of damage, but it can be different depending on distance from the player and other factors. The sword places these projectiles in an arc, for example. This means that the damage of melee weapons is highly dependent on distance and angle. Practice is very valuable to find out how best to employ these tools. If you hit an enemy in the head, any registered hit does triple damage.

To use your spell, press the right mouse button. All the spells are projectiles that travel straight along your line of sight (at the time you fire). Read more about their individual properties below.

How to handle inventory, weapons and spells

The map:

You don't automatically have a map, but you can buy one at the beginning of each level if you have enough money (500 coin). A text in the top left corner will tell you if you have a map of the level you are currently on or not (as mentioned above in the status frame section). To toggle the map on and off, press the X key. The map is always shown as a transparent overlay in the centre of the game window.

The lamp:

You always have an oil lamp with you and it can be turned on and off with the G key. You do not always have oil for the lamp though. This can be bought in a shop at the beginning of every level and found in treasure caches (if you're lucky). Every bottle costs 100 coin and confers 60 seconds worth of light. Use it wisely ;)

Notes on inventory cycling

You can only cycle through your weapons and potions one way. This will be improved on and supplemented with a mouse-driven interface (during strategy mode) in the beta and full release. Happily, there are so few items that you're never more than two clicks from any one item, spell or weapon.

The map and the compass

The map is always oriented with north towards the top (as it should be). It does not show your position so this must be deduced by observing your surroundings and comparing them to what you see on the map. For reference: You always start in the white area, at the end of a corridor which juts out towards one of the map's edges. The different coloured areas on the map denote separate areas of the level, each with its own texture set, light-levels and density of "population" and treasure cache probability. The small, purple rooms are treasure caches. In this demo, there are no unmarked secret caches, the challenge is to figure out where they are, and get to them. You always have the compass and it works just like a real-life compass in that it shows you roughly which way you're pointing.

Temporary buffs

Whenever you drink either a strength potion (red) or a speed potion (blue), you get a 45 second buff to that attribute. If you drink more than one potion at the same time, or before the time-limit runs out, you just add 45 seconds on top of whatever time remains of the buff. If you have both the strength and speed boosts active at the same time, you also gain the attribute of high jump, allowing you to leap much higher than usual, clearing most obstacles and

all enemies. In many cases, you can even jump across the gates that separate areas. Just remember that if you don't have the key for that particular gate, you might get stuck on the other side if you lose the high-jump ability.

Strategy Mode

You enter and exit "strategy mode" by pressing the TAB key. Strategy mode essentially pauses all activity; neither you nor the enemies or any projectiles can move and neither you nor the enemies can make any attacks. The world appears frozen in time. However, you can look around freely. You can also look at your map, turn your lamp on and off, cycle through weapons, potions and spells, adjust the power levels of weapons and spells, and drink potions. Your oil lamp will at most consume one second of oil while in strategy mode, no matter for how long you remain there. The purpose of strategy mode is to allow you to get your bearings, study your surroundings, come up with a plan of action, and prepare for it. It is an attempt to bring some more strategy into the classic FPS gameplay and a way to give less talented FPS players (such as I) to stop and think a little. It takes a while to get used to the idea that you can pause and strategize, I still forget to use it sometimes, but it is useful. I also find it to be quite a bit of fun once you have a good supply of weapons, spells and potions to work with. Also, it is invaluable if you want to take a look at the map while dodging fireballs ;)

The shops

You will find a number of shops at the beginning of each level which allow you to purchase weapons, potions, a map and lamp oil. To purchase an item, simply walk up to the shop and press the F key. If you have enough money, that amount will be deducted from your purse and you will receive one such item in return. In the beta and full release, shops will be present in hub locations such as villages and towns instead and they will have a much more sophisticated interface in which you can trade multiple things at once and interact with the store owner.

The weapons

Your fists

This is your default weapon. It is a short-range attack which goes in a straight line in the direction you are looking as soon as your fist reaches its most extended position. The attack does most damage at a certain distance from your position, so being closer than that does less damage in total. The fist is the only weapon you have which does not take damage with use. Your punch becomes significantly stronger when you use the strength-potion.

The sword

The sword affects an arc which is very similar to the arc described by the swing animation. It is slightly inclined from top-right to bottom-left and passes through "centre-screen". The attack lands when the sword is mid-swing. The sword takes damage when it hits an enemy but not when it hits anything else. As with the fist, the best distance to hit a target is almost, but not quite, at max distance of the sword.

To get a good idea of the range and pattern of the fist and sword, I suggest attacking the walls of the starting area. The graphical impact effects will help you determine how far away you can be when attacking. It will take quite a bit of practice (at least it did for me) to learn the best distance and timing with these melee weapons. So don't be discouraged.

The Blunderbuss

The blunderbuss is your only true projectile weapon. Think of it as a sort of shotgun. It fires cartridges with 9 shot (pellets) in each. The direction of each shot in a cartridge is random, so the spread varies from discharge to discharge. The blunderbuss has three "power levels", which indicate how many cartridges you load it with per discharge. This means that one discharge can contain 9, 18 or 27 shot in total. Firing more shot obviously does more potential damage, but it also degrades the gun's durability faster. To be clear, it will do more damage to the gun to fire three cartridges simultaneously than firing them one by one.

The spells

Spells in this demo are powered with your health! Every time you cast a spell, you will also take damage. In the full game you will also have some sort of energy-reserve, specifically for spellcasting, but you will still be able to use your health as a backup.

Spell Scrolls

You start the game with only one spell available, the fireball, and you only have access to its lowest power level. There are technically only two spells in the demo, but the fireball spell has three quite distinct variations, essentially making it four.

In the full game, there will be several more spells, very likely with several power levels and accompanying variations each. A spell costs more to cast the higher you set its power level.

Spell Power Levels

The Icebolt

The icebolt is a fast-moving, precise bolt of ice which does impact damage and freezes enemies on contact. Enemies remain frozen for a short period of time during which they appear with a blueish tint and move and act significantly slower; allowing you to deal more damage between their attacks, or slip by more easily.

The Fireball

- Level 1 Your starting spell! This fires a very slow-moving ball of fire. It will do a bit of damage on impact, but this is not its primary function. Instead, this is your magical illumination option. Every spell you cast also generates light, but most of them move too fast or are too expensive to be practical in this regard.
- Level 2-3 These look just like the level 1 variant, but they move considerably faster and do more damage. Level 3 does more damage and moves even faster than level 2. You can think of this as your main long-distance/high precision/high damage alternative; a "sniper rifle".
- Level 4-5 These both move slower than levels 2 and 3, but faster than level 1, and they do more damage on impact. They also look cooler. When a level 4 fireball impacts something, there is a chance that it will generate a single flame on the ground underneath which will burn for a short while, doing damage to anything that passes through it. The level 5 variant behaves much like the level 4, but does more damage and generates several flames in a larger area on impact.

The Potions

The Health Potion

When consumed, this potion gives you back 200 points of health, up to a maximum of 1000.

The Strength Potion

Bestows a strength boost for 45 seconds, per bottle. Drinking more will extend the period of effect but not the strength itself.

The Speed Potion

Bestows a speed boost for 45 seconds, per bottle. Drinking more will extend the period of effect but not the speed itself.

The Enemies

There are only two types of enemy in this demo, though the full game will contain many more. I also intend to give all enemies so called "8-directional sprites" so that you can tell which way they are facing. This is not the case in the demo, in which they always seems to be looking at you, even when they aren't. So if you wonder why an enemy is walking away from you even when it seems as if they should go straight for you, it is probably because they actually don't see (they're most likely facing the way they're walking).

The Zombies

Zombies are very simple creatures. Once they see you, they will head straight for you until you cut line-of-sight or either of you die. Zombies have a melee claw-attach which can do quite a bit of damage if you end up "mid-swing". Zombies have 600 health and can be killed in one sword-swing, if you hit them just right (in the head, at the "sweet-spot" of the swing, it takes practice).

The Liches

These are a bit more sophisticated, though not necessarily smarter. They shoot fireballs that do a lot of damage. They also don't necessarily move towards you when attacking, but prefer to move around erratically to throw your timing and aiming off. Sometimes, their erratic behaviour means that they'll cut line-of-sight them- selves, but don't count on it. Liches have 1200 health and it takes a very well-placed blunderbuss-cartride worth of shot, straight to the head, to kill them in one blow, but that is tricky to do unless you are at point-blank range. I find that using the icebolt on these can be very valuable, especially when you are facing several at once. It reduces the number of fireballs in circulation about your person.

Loot drops

Enemies always drop loot when they die. Zombies primarily drop blunderbuss ammunition and liches primarily drop gold. Usually, the amount you get of either is rather small, but there is a tiny chance that you might get 10 times the usual amount, and a super-tiny chance that you might get 100 times the usual amount!

The Levels

Every level has the same sequence of areas, but the specific layout varies a lot.

Four distinct areas

You always start in the "murky library" section. This contains the shops and the bronze key which will get you access to the second area. This area is lit up by braziers, but can have some dark sections. It has a very low probability of containing treasure caches.

- The second area is the "misty graveyard", which contains the silver key and the level exit. This is an outdoor area, so it is always bright. It has the highest concentration of enemies and can be difficult to search through because of its irregular layout. It also has a very low probability of containing treasure caches.
- The third area is the "mossy caves", which only contains the gold key, but has a high probability of containing treasure caches. It is a semi-dark area, illuminated by occasional holes in the cave-roof.
- The fourth area is the "temple catacombs". This is completely dark, only illuminated by your torch, your spells, and streaking lich-fireballs. This area has the highest probability of generating treasure caches, so it is often worth your while to explore, though the darkness can make that tricky.

Gates and keys

Every key corresponds to a type of gate. Every area except the first can appear as multiple separate sections which branch off the previous one. For example, area 2 might consist of three separate areas which all branch off of area 1. Each of these will then have a gate which can be opened with the bronze key.

The level exit

The level exit is always in area 2, and it is always next to a silver gate. Interacting with the exit will immediately start generation of a new level and bring you there once it is done. This means that you'll only ever need to get to the second area to "finish" a level. But that isn't the trick. Unless you grind combat AND get very lucky with enemy loot drops, you'll be running out of resources fast. You really should try to gain access to those dark and foreboding caverns and catacombs, and seek out their treasures ;)

Treasure Caches

As stated before, these are always visible on the map (so getting one is a good idea). The entrances to the treasure caches are indistinguishable from the surrounding walls though, so you have to deduce where it is and interact with the right wall (just as you would a gate or a shop). Of course you can guess; walk around while "wall-humping", as it is known in classic FPSs, but this is an ineffective method. In the full game I intend to have a more sophisticated system

which will allow for secrets to be marked either on maps, or by subtle signs, like a different wall texture. They might also open by activating a lever/switch in a different part of the level etc. It is an aspect of level-design and level-generation that I certainly look forward to tackling, in order to make the experience more exciting!

Adjusting the game experience

Unfortunately, this is one of the "jankier" aspects of this demo, in the sense that whatever changes you make will have to be made every time you start the game again. This too will of course be improved in the beta, if not earlier. That said, these are the ways that you can alter the game's settings to obtain better performance:

Resolution

The game proper runs at very low resolutions. This is both for the sake of performance and for the sake of aesthetics. The highest resolution is 320 x 180 pixels. You can cycle through a number of settings by using the P key. The first two-four settings are "useful" in gameplay (depending on your tolerance for low resolution) and the rest are really only there for a laugh.

Frame Cap

This limits the number of frames that the game will process per second. It is useful in order to get a smooth experience. Let's say that your best framerate during gameplay is around 25-30, but you have regular dips into the 20-25 fps range. If this bothers you, it would be wise to set the frame cap to 20 fps, since your system always manages at least that. Cycle through the different settings by pressing the O key. There is a setting for "6000 fps". This is not because I think anyone will achieve this on their system. It is merely there to allow you to see how high a frame rate you can get. Might be fun if you have a powerful CPU.

Turbo Mode

This is a kind of "hack" I stumbled on almost by accident. It simply skips drawing every other frame, which saves a lot of processing power (time). For example, if you are using turbo mode and the game tells you that you are getting 30 fps, it is really only showing you 15 frames per second. But all the game logic (input, movement, collision, AI etc.) is being calculated 30 times per second (once per frame). The impression is that things are happening at a "30 fps rate", but you might have a less smooth visual experience. Personally, I find that the impact of the mode varies depending on which other settings you have

and your system, so don't be afraid to experiment. Switch turbo mode on and off by pressing the T key.

Mouse Sensitivity

This always starts at 1.0. It can be adjusted in increments (F10) or decrements (F9) of 0.1 to the extremes of 0.0 and 10.0. Find the one that suits your needs best.

Invert y-axis

For those who are more comfortable with an inverted y-axis ("airplan controls") input on the mouse, pressing the F11 key will switch to that control-scheme.

Troubleshooting

The game works quite stably for the most part, but there are a few known issues:

Game won't start at all

This might have to do with your native resolution. The game supports a range of native resolutions but has trouble with a few. These include resolutions where either the width or height is less than half of the corresponding value in the 1920 x 1080 resolution. For example, 800 x 600 will not work because 800 is less than half of 1920. Whether this is also true for resolutions which are more than twice as high on either width or height is not known. Some other resolutions, such as all that have a height of either 1050 or 900 also do not work.

So if you have trouble starting the game and your resolution falls into any of these categories, try setting it to something else. 1920 x 1080 is the game's "native resolution", so it will work best with that.

Game fails to generate a level

It sometimes happens that the game will freeze either when you try to start a new game or when transitioning from one level to another. It happens quite rarely, but if you play the game a lot you will most likely encounter it. This is a known bug which most likely has to do with the level-generation. Since the level-generation will be completely redesigned for the beta and full release, it will not be fixed. The only "solution" is to close the game from Windows and restart.

What will the full game play like?

I believe that I will aim for an overall game structure similar to that of Diablo 1 or 2. This means that there will be at least one "hub-area", most likely a village, and most of the gameplay will involve exploring the area surrounding this hub and discovering various caves, dungeons and structures to explore there. The story of the game will be transmitted by NPC dialogue and texts that you might find on your explores.

When it comes to exploration, I aim to include much more vertical level geometry. Indeed, there is quite good support for this in the engine already, but the level-generator I made for the demo was not advanced to take advantage of it (due to time constraints). There will also be some more sophistication to the environments such as moving platforms (elevators etc.), water, damaging surfaces (lava, toxic swamps etc.) and more inter-activity through switches and items.

There will be a small update to the physics-part of the engine, hopefully allowing both you and enemies to be pushed around by outside forces. You'll be able to push enemies off ledges, be affected by explosions etc.

There will be "social interaction" with village NPCs. This will be entirely optional, not necessary to complete the game. I will put it in because I aim to make a much more sophisticated RPG after this game and this is a mechanic which I have been planning for years at this point. I simply want to get some experience with that kind of system, and I do believe that it might make for a deeper experience for those who choose to engage with it.

Of course there will be several more enemies, weapons, spells, potions etc. I do believe I will include at least a rudimentary character-development system by which you can level up and choose a "path of development" (something like a skill tree).

Rough development roadmap (this order might change a bit, but probably not much):

- New art tool
- Graphical GUI tool (possibly)
- Finish the engine's support for level-geometry. There are a few more details that need to be implemented, especially water.
- Finish the engine's support for physics, which should only include "movement by external forces" apart from what is already supported.
- Update the level editor so that it matches the capabilities of the engine.
- Implement the hub areas (villages) with friendly NPCs and shops that trade multiple items and a barter system.

- Implement the social interaction mechanic.
- A story-telling system which moves the narrative along based on certain cues.
- A new level generator which far surpasses the current one. One that can make several various types of environment, both natural-looking and artificial-looking. This one must also implement verticality, far greater environmental interaction and construct enemy encounters based on the environment and enemy group composition.
- Expand the game with A FEW new enemies, tools, weapons, potions, spells, texture sets for different environments etc.
- Beta!
- Expand the game with A LOT OF new enemies, tools, weapons, potions, spells, texture sets for different environments etc.
- A character creation tool? I would love to let the player make their own face, but it has to match up with the visual damage that your avatar experiences. I'll absolutely try to solve this one!

More demos such as Alpha 1.5, Beta etc.

There will definitely be a Beta, as you could probably tell from the roadmap above. When I say "Beta", I mean a demo which has just about all of the games intended features, but lacks the full range of content, such as enemies, levels, weapons, spells etc.

Apart from the Beta, I might release some updates to the Alpa and call them "Alpha 1.1" etc. if the game is in a good playable state and has some neat new features that I want to show off. For example, once I have expanded the physics-capabilities of the engine, it might be fun to play around with that.