You need to limit the number of moles that can be onscreen at once. Otherwise the game is prone to freeze.

Regarding visual artstyle, I aim for designs to all be fairly simple. Colour palette should be fairly simple and allow for vibrant colours but also not too visually disruptive. Not really low-poly as such, but obviously keep polys to a minimum as to keep performance at a reasonable level. Overall it should be models, with some sprites used just for things like the dark arts swing, status effects, etc.

Enemy designs should be cool but I feel like some kinda disturbing/weird/horror-ish designs for the aliens could go hard (and link somewhat to a sense of comedy with this dumbass caveman destroying all these horrors beyond my comprehension)

For sound design, I want things to have a kinda consistent, synthy vibe, kinda like what Spelunky does, but less of a focus on retro sorta sounds. So I reckon as many SFX as possible should be made with the hardware synths, with plugin processing as needed. This links to music since a lot of the SFX will be quite tonal, so I think picking a key signature, and then switching between modes for each track (i.e. minor for one, dorian for another, mixolodian for another) will be a cool idea that will help SFX not sound dissonant with the music.

Music should be energetic but not necessarily ‘dumb’, I’m feeling kinda somewhere between RoR2 and Little Guys.

For obstacles:

Certain enemies should be able to fly over obstacles.

Need a script for obstacles’ HP – this should factor in HP (obviously), how resistant they are to bullets vs explosions (just have a damage divisor for bullets that gets bypassed for explosions or sth) and then a sendmessage to any script that deals with the on kill effects of that particular type of obstacle.

Normal rocks have a small chance of turning into other rock types.

Need to set it so the level is bounded by a completely invulnerable type of wall that the player can’t get past but enemies can. Should then make it so the camera’s bounds are set automatically by the positions of these walls.

Obstacle types:

* Normal rock. Is a normal rock.
* Pits – invulnerable obstacle, can dodge over it but falling down deals damage. Enemies just pathfind around it.
* TNT – explodes on destruction, destroying nearby rocks, enemies, and player.
* Item rock – drops an item when destroyed.
* Power rock – gives an all stats up when destroyed.
* XP rock – drops a number of XP orbs when destroyed.
* Supercharge rock – gives a firerate and damage up when standing near it.
* Regen rock – over time, replaces rocks that get destroyed within a radius and has a better chance of spawning alternate rock types.
* Laser spawner – essentially a segmentation plant-esque laser. Probably only hits player.
* Fan. Instakills enemies and player by choppin em to bits. Alternates between being on and off.
* Other power rock – gives a damage and shot speed up when you stand in its radius.

Areas:

* Snowy area. Has small ice lake areas that reduce your friction but break if an explosion happens on them, which should be lethal for player and enemies alike.
* Blood/bones wasteland area. Has these pustule growth things you can break that deal a strong DOT to anything in their area.
* Factory. Alt area, very dangerous, has unique enemies.

**Flowchart for adding new items:**

* Make item/all related objects/item sprite (obviously).
* Add a method (public void Undo()) within the item that undos any stat changes associated with the item. Needed for stuff like damage ups (including converter), better dodge, etc., and any item that adds a new thing to a delegate needs to have that addition removed.
* Add a new entry to the ITEMLIST enum.
* Add a new case to the itemHolder switch statement so getting multiple of the item does the correct thing (i.e. incrementing an existing script’s instances vs adding a new version of the script).
* Add a new thing in the itemDescriptions script.

Special item types:

So each item pedestal has a 1/20 chance to be a special type. Once an item has been selected to be special, it then determines which of the following it will be (randomised, with weightings for each). Special pedestals only start spawning after the 5th wave.

* 0. The normal cursed items that are in the game. Weight = 200
* 1. Receive 1 of this item every time you pick up an item in future, but you lose 2 random items every time you take damage. Weight = 200
* 2. Receive 3 of the item, but if you take damage within the next 2 rounds you lose 5 random items. Weight = 200
* 3. Gives enemies 1 of the item, but every time an enemy dies within the next 2 rounds there’s a 5% chance they drop one of the item. After 2 rounds the enemies lose this item. Weight = 100
* 4. Receive 5 of the item, but you cannot heal ever again. Weight = 100
* 5. Receive 5 of the item, but if you take damage within the next 3 rounds you die instantly. Weight = 100
* 6. Receive 3 of the item. Weight = 40
* 7. Receive 10 of the item. Weight = 10

Enemies:

* Very fast enemy, deals no damage (just give it a finaldamagemult of 0), but they grab you and hold you in place until they die. Have 150 HP and only spawn in groups of 2 or so.
* Summons a big vertical wall that moves across the screen can’t be dodged through. Gaps in the wall open and close on a timer (i.e. with consistent timing) and you have to get through via them. They only summon the walls once every 15 seconds or so but can do so repeatedly when they’re alive.
* Fires a lazer, but only does so in the cardinal (up/down/left/right) directions and when you could get hit by it.
* Shoots a slow-moving projectile that deals no damage, but spawns creep as it moves and creates a huge puddle of creep where it hits you/lands after 3 seconds.
* Walks around slowly and randomly, but charges at you insanely quickly whenever you get on the same x or y coordinate as it.
* Fires lightning at you. Just like an infinite range, infinitely piercing shot.
* Fires curving lazer, kinda like what the Colossus final bosses from Towerclimb do.
* Spawns a circle on your position and one second or so later, deals damage to that area.
* Runs towards you very quickly, and drains your HP whenever it’s close to you, but gives this HP back upon death.
* Spits a bunch of projectiles, monstro’s lung-style, that create creep where they land.
* Enemy that doesn’t attack or deal damage (but still walks towards you). Anything (i.e. you AND enemies) get a fire rate and damage up when standing in a certain radius of it.

Elite types:

* Hmm. That’s a tough one. Hmmm. Picks up and throws other enemies at you.
* Can absorb your items temporarily, gives them back when it dies.
* Buffs up nearby enemies.
* Places sentry turrets as it moves.
* Spawns homing mines every time it takes damage.

Shit to do:

* Add obstacles – mainly just simple stuff like pillars, as well as boxes that could be destroyed after damaging them enough, and holes in the ground that can be shot over but you can’t walk over. At the start of each wave it picks from ~15 different possible layouts. These will have to be meticulously designed since anything that makes dodging certain enemies impossible is cringe. Could be fun to also have special level hazards like spikes that come out of the ground for 1 second every 3 seconds, segmentation plant-esque lazers, and so on. These level hazards should also hurt enemies, for fun AND 4 phones.
* Occasionally (rarer than normal upgrades) you can be offered a replacement weapon or replacement RMB ability.
* Make it so you don’t deal contact damage by default, should be an upgrade.
* Add armour, essentially damage reduction for various damage sources. This includes physical (damage from bullets), blast (damage from explosions), status (damage from status effects). There’s damage subtraction and damage division for each kind.

Items to change:

* Make dodgesplosion also convert enemy bullets to your bullets and fire them away from you. These bullets have whatever item effects they already had and deal the same damage they otherwise would have dealt to you.

Passive items:

* On contact with an enemy, deal 100 (+100 per stack) damage to them.
* 5% chance on hit to disable a random script from an enemy for 5 seconds.
* On death, enemies split into 4 (+2 per stack) bullets that deal 25% (+25% per stack) of your bullet damage and have all your bullet effects.
* Picking up XP damages every enemy for 5HP per stack.
* Upon killing an enemy, 1/round number chance to summon a familiar with 50 HP that runs around and shoots at enemies.
* 25% chance to freeze enemies on hit. Frozen enemies can’t move for 1.5 seconds and take 1.5x damage. Stacks increase duration and damage increase.
* Status effects (bleed, fire, freeze) are 33% weaker, but they have a 50% chance to spread to nearby enemies when effected enemies die. Stacks increase radius and chance to spread.
* Once per second, enemies in a certain radius around you experience your bullet effects (i.e. it rolls to proc bleed, fire, freeze and ATGs once per second, but does no damage.) Stacks increase radius and decrease cooldown timer.
* Shot speed, range, and movement speed up.
* Every 5 seconds, every enemy bullet in a certain radius gets turned into a friendly projectile that deals 30 damage and has homing. Stacks increase instances of homing the bullets have and their damage by 20.
* Hitting an enemy in close range gives you 0.5 seconds of invincibility. Range increases with stacks.
* Temporarily increase firerate upon critting. Bonus increases with stacks.
* Crits spawn an XP orb. More orbs spawn with stacks.
* Crits heal 5 HP. Heals more with stacks.
* Increase natural crit chance by 10%. Stacks as you’d expect.
* Crits inflict a random status effect on enemies.
* Every frame you're not firing, get a temporary damage and firerate up. Stacks increase duration of effect.
* Increase firerate and range by 50% below 50 HP. Stacks increase bonus.
* Pain probability - Taking damage permanently increases proc coefficient of all sources by 0.05x of the damage you took. Increase increases by 0.05x per stack.
* Upon being taken to below 50 HP, enter a 3-second phase where you take half damage, and hitting an enemy within a close enough range heals you for 15 HP. Stacks increase the length of the period and damage reduction.
* Bigger bullets (also increases melee weapon size)
* Killing an enemy deals damage to all enemies in a radius. Radius increases with stacks.
* Chance upon killing an enemy to spawn an axe that flies around for a few seconds, homing in on and dealing damage to enemies. Stacks increase time it’s active.
* An extra life. Yay.
* Every lethal hit, don’t die, but reduce max HP by 30. After each trigger, halves the max length of iFrames. Stacks decrease the HP and iframe reduction debuff (each one makes the effect 1/3 as significant).
* After taking lethal damage, you don’t die, but enter a ghostly state where you have 1HP. Return to your normal state after picking up an item. Only works one time per stack.
* If you have under 100 max HP, each kill gives you +1 max HP.
* After taking what would be a lethal hit, the next item you pick up gets applied 4 times per stack.
* Double your health but remove the first item you picked up.
* Locks your max HP to what it currently is. Fire rate decreased by 3, shot speed increased by 3, and base damage increased by 10.
* Damage you take is divided by 4, but occurs 3 times over the course of the next few seconds.
* Every 5th shot leaves a trail of short-lasting wapant creep on the floor. Size of creep increases with stacks.
* 10% chance for bullets to leave a trail of bullets behind them. These bullets have high range, slow movespeed and random movement direction AND can collide with each other (but don’t die on hit). They deal 0.5x damage (+0.5x per stack) of your normal bullet damage and copy all bullet effects.
* Fire delay -8, bullets move in a zigzag pattern.
* Shoots an additional bullet behind you.
* Chance for bullets to deal heavy knockback to enemies. Enemies effected by this deal damage to enemies they hit based on how fast they’re moving. CHANGES BULLET TO A FIST
* After killing 5 enemies in a certain window of time, gain 1.5x movement speed and 2x damage for 5 seconds.
* After taking damage, deal damage to enemies to regain health (like Dead Cells rally). Speed at which rally decays decreases with stacks.
* Your bullets leave creep on the ground.
* Bullets get a random bullet effect. Will have to make tags for bullet effect items. Stacks give extra effects.
* An orbital that, upon getting hit, fires a missile at the responsible enemy.
* Obstacles have a 50% chance to drop a goody when they are destroyed. Goodies include heals (40% chance), XP (5 – 10 orbs, 40% chance), or an item (20% chance). Stacks shift the weight towards dropping items.
* Your bullets deal +4x damage to obstacles.
* When obstacles are destroyed, they shoot out 10 bullets that deal your damage stat. Damage is multiplied with stacks.
* You are immune to explosions, makes all explosions +100% larger per stack.
* 20% chance for shooting a rock causes it to be activated; the next bullet you shoot that lands far enough away causes activated rocks to be launched towards the location, dealing 150 (+150 per stack) damage to enemies.
* Higher chance for special rocks to spawn.
* Obstacles have a 50% chance to regenerate into a special obstacle type upon being destroyed. Chance increases logarithmically.

Alt RMBs:

* Parry – spawns a hitbox directly in front of the player, and if any bullets or enemies are in the hitbox, deals 75 damage to nearby enemies and deletes all nearby enemy projectiles. Successful parries make you invincible and get guaranteed crits for 1 second.

We pons:

* Have some ideas silly guy

Active items:

* 10 second cooldown, charms enemy nearest to your mouse cursor.
* 20 second cooldown, deal +50% damage but take +30% damage.
* 60 second cooldown, summon a Trin familiar for 20 seconds that runs around, shooting and stabbing enemies. During this time, if you walk into him you pick him up and can throw him at enemies.

Ideas that are longer-term:

I like the idea of enemies having a tiny chance to drop a card (tarot card, maybe?), and from then on every game you play it draws 3 of the cards you’ve collected and you can choose one that adds a little spice to the run. If a card drops during a run you can choose to activate it then and there as well. I think they should be net positive but give some interesting downside. Cards should also have a weight assigned to them so some are less likely to spawn than others, which could make for some fun when you’re offered a very rare card. A wild card that has a randomised effect would also be fun.

At the end of each run, the total xp you got can be spent in a little store to unlock permanent upgrades, like more HP drops and 20 minute till dawn-esque rune upgrades. Every 5 upgrades you unlock gets you a new weapon (should be in a set order, i.e. you start with the pistol, after 5 upgrades you get a shotgun, a further 5 gets you another thing, etc.). Having a little skill tree could also be fun and lead to some pog moments when you unlock the ‘omega upgrades’.

The structure of the game should be kinda RoR-esque, i.e. you start in one area, then go to another, then to another, with the last thing you do in each area be fighting a miniboss. Maybe 5-10 waves per area would be funny. Possibly a lil slay the spire-esque route progression could be fun. Areas don’t need to be unique, but could be kinda randomly generated, like it generates a list of 5 enemy types to use, a particular sprite sheet to use, a particular palette swap setting thing, and chooses between one of the maps.

I love that sense that I used to get from the old Star Wars DS games of there being secret doors and the like I could see were there but didn’t know how to access – this could be very fun to recreate, with very rare locked red doors in maps that can only be unlocked with a certain, very lategame key item meta unlock, that are, until that point, very mysterious. Obviously there would need to be something to go behind them in order for that to not be a scam – they could be stuff like unique cards, a new item added to the pool, etc.