**Base Build GDD**

* Follower spawn – consume food to spawn a new follower
* Follower death – allow followers to die in combat
* Building destruction – Buildings take damage and can be destroyed by enemies
* Building repair – When buildings are destroyed, they can be repaired by followers for a lower resource cost than the full build cost
* Pathfinding
* Land corruption and healing
* Larger buildings (4 tiles)
* **Save game**
* Fog of war
* Focus on selected follower with F key
* Spawn creatures over time (up to a maximum number)
* Priests heal soldiers and archers in combat when added to the squad

Functionality

* Land corruption and healing – healthy land can be corrupted by enemies, and corrupted land can be healed by priests
* Resources that are mined in corrupted areas draw more enemies and drop fewer resources
* Land healing draws far more enemies (priests must be heavily defended to heal land)
* Enemies can only be spawned in corruption
* Spawners appear in corrupted lands, the player must find them and destroy them before they grow
* Enemies target the home building (firepit etc.) until they are hit or are blocked by a wall
* More enemies and tougher enemies spawn as the player progresses
* Squads – allows soldiers, archers and priests to be commanded as groups rather than as single units. Combine squads to create armies

Buildings

* Guard tower – allows for archers to fire over walls when assigned to the tower
* Spikes – deal damage to enemies that walk over them
* Barracks – Convert followers to soldiers
* Temple – Convert followers to priests
* Archery range – Convert followers to archers
* Lumberyard/Mine/Farm – allows for resources to be gathered over time indefinitely
* Roads – Followers move faster on roads
* Bridges

Follower types

* Priests – priests can heal corrupted land over time, they must be defended while healing (more enemies attack priests while healing)
* Archers

Enemy types

* Undead – followers and soldiers can be raised from the dead by enemy necromancers. Standard undead followers have low health and damage, but soldiers have higher health and damage
* Necromancer – Raises followers and soldiers from the dead in an area around them (can only raise the dead in corrupted land)
* Corruption spreader – Spread corruption to uncorrupted tiles
* Explosive – moves really slowly but deals AOE damage when in range of followers or buildings. They must be killed in time

Stretch goals

* Play as the other side (spreading corruption) – possibly multiplayer, possibly AI

Bugs:

* Hitting creatures from far away
* Directing follower with full inventory to gather resource sends them to the storage, then sets to idle (FIX LAST TARGET THING)
* Bunnies outside map
* Sometimes doesn’t hit bunnies (not sure why)

To do

1. Separate tiles into chunks to allow for tiles to be streamed (make it procedural)
2. Ensure start is on land

Combat

* Make undead keep slight distance from soldier
* Squads:
  + Right click on a combat follower with a combat follower selected to either create a new squad or join the existing squad (maybe up to a maximum number of followers ~5)
  + Once a squad is created, it is selected by clicking on any of the followers within it
  + Followers in the squad can be directed to locations, to attack enemies or to defend buildings

Inspector

* *Add follower spawning at fireplace*
* Add building description
* Add follower details to the inspector
  + Health
  + Profession
* Add building damage to the inspector for all constructed buildings
* Add squad details and management

Pathfinding

* Update path if wall is built or the target moves
* Separate pathfinding with multithreading (or job system)
* When in squad instead create squad path
* Update everyone’s path whenever a building is built or destroyed
* Update every frame?
  + Instead update more often when close to the target and less often when further away.
  + Check if target is static, if so there is no need to update every frame
* **Need to improve enemy pathfinding efficiency**

Corruption

* Prevent starting in water
* Ensure distance to start is greater than minimum value
* Add enemy squad spawning in corruption

Followers/Squads

* Update follower count on UI when follower dies
* Drag select multiple followers into a squad instead of right clicking on each one
* Squad management (removing followers)
* Buildings can call nearby followers to defend it?

Worker improvements

* Find new build target when finished construction (continue building wall sections etc.)
* Followers store a list of previous commands and targets

Improved building system

* Drag build for some building types
  + Walls – click to begin drawing, then click again to build
  + Bridges
  + Roads
* Destroy/remove building
* Larger buildings
  + Select multiple tiles
  + Check all selected tiles are clear before building
* Grid highlight green when buildable and red when not

Priest

* Command to heal followers when not in a squad by right clicking
* Only heal if someone needs healing
  + Check before it starts to heal
* Recharge restoration pillars
  + Pillars lose charge over time
* Move away from enemies when too close (find pathable tile far enough away)

Necromancer

* Move towards target, but attempt to keep a safe distance
* Fire shadow bolts at targets
* Move in range of corpses and turn into undead
* Check if target already has a shadow effect on them, if so attempt to find a new target

Tile effects

* Freeze effect – Freezes any follower on the tile, slowing them down until eventually freezing in place

Status Effects

* Class that can be added to followers and enemies
* Need to be able to replenish
* Prevent adding status effects that already exist
* Need to add status effect visuals
  + Purple outline for shadow
* Fix followers (and enemies) walking through wall corners in 8D pathfinding
  + Think it happens because follower’s start position when pathing IS the wall position, so it doesn’t check it for obstacle
  + Need to ensure follower is always pathing from the correct place
* Fix inspector