No Time to Mine

Handover Presentation

Idea & Inspiration

Motivation & Constraints

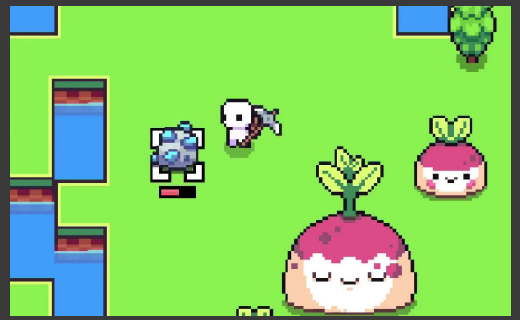
- Limited Timeframe (one Semester) -> limited Scope
- Catching up the progress the others made in Wintersemester
- Accessible for players of all levels
- Coherent & Complete Experience

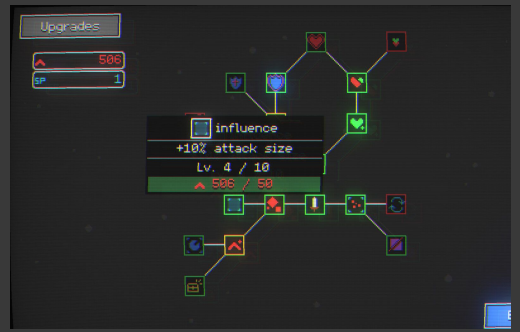
Inspiration

What games do i like, that are and realistic to implement given the time?

Idea

Combine the compelling elements of each game:





Forager:
- Mining, resource collection
- Simple cute artstyle

Nodebuster:
- Skill tree
- Limited life cycle

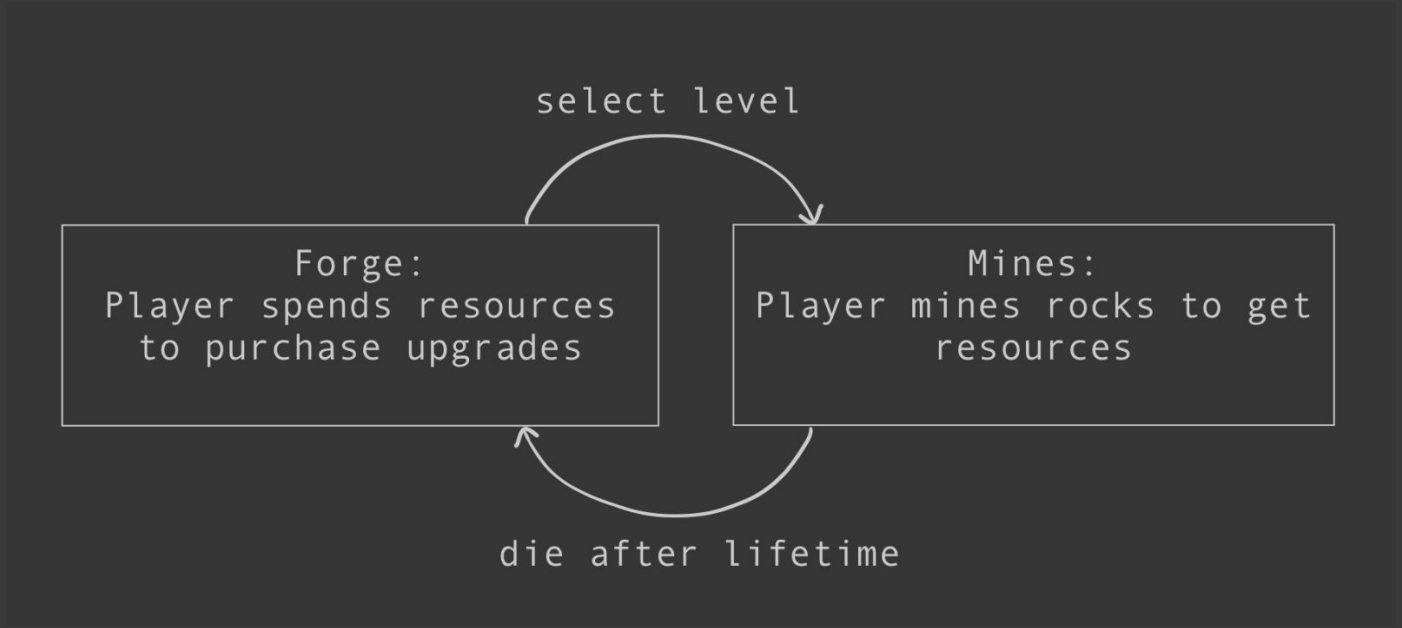
Similar characteristics:
- Thrilling exponential growth
- Upgrading the resource collection process

“finite life cycles with iteratively increasing progress”

Initial formulation of unique selling point

Core mechanics being: Mining, Resource Collection, Upgrading

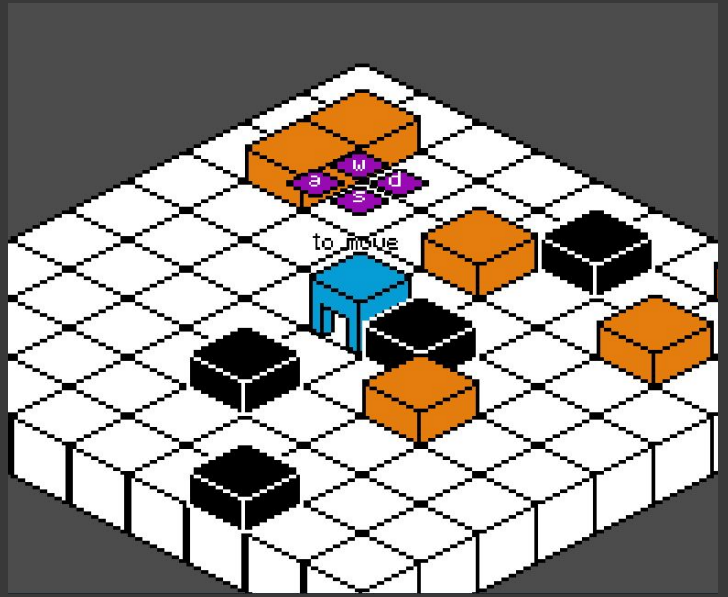
Identification of main game loop



First priority: Implementing and refine this loop

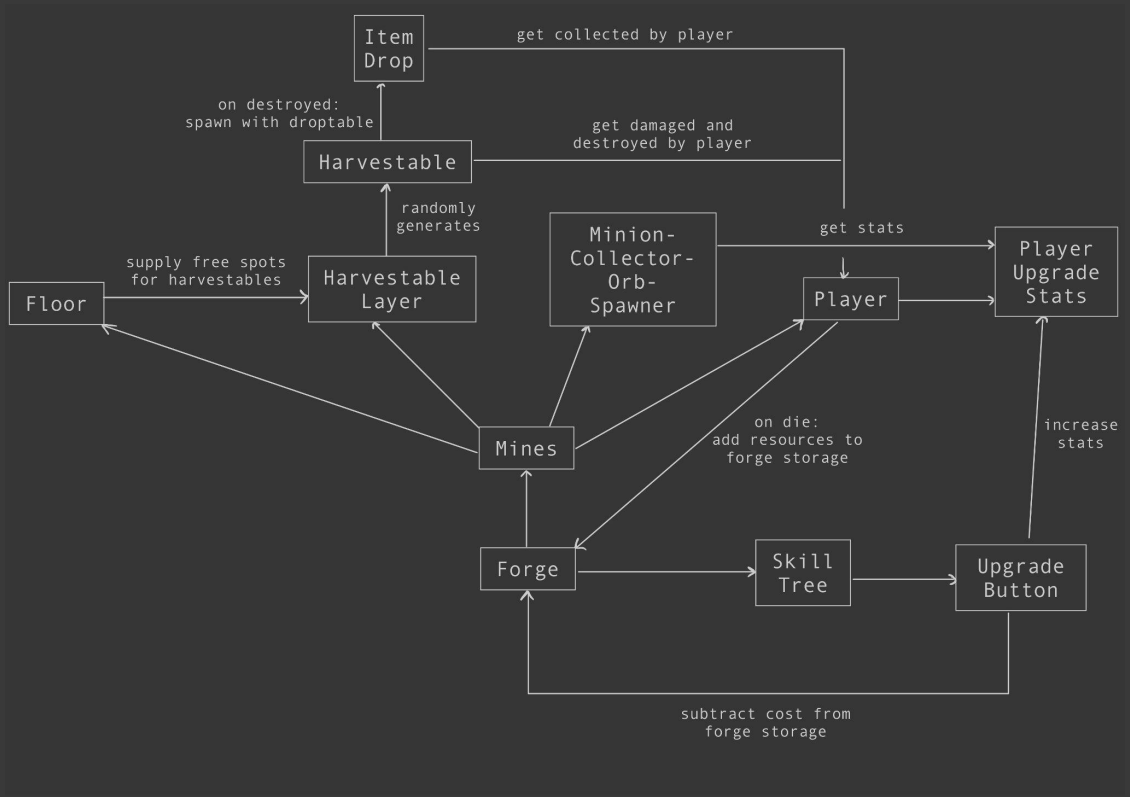
Implementation as Whitebox Environment

Early draft with placeholder art



Implementation Architecture

Main Loop


Item Drop
get collected by player
on destroyed: spawn with droptable
Harvestable
get damaged and destroyed by player
randomly generates
Minion-Collector-Orb-Spawner
get stats
Player Upgrade Stats
supply free spots for harvestables
Floor
Harvestable Layer
Player
Mines
on die: add resources to forge storage
increase stats
Forge
Skill Tree
Upgrade Button
subtract cost from forge storage

Important Classes

Player:
- handles movement / controls
- handles which harvestable is targeted
- applies damage to harvestables
- collects items, adds them to inventory / forge when dying
- influences main loop control flow when dying
- animates appearance

Forge:
- handles savestate
- populates loaded savestate
- handles control flow of main loop
- acts as monolithic singleton, most other classes are coupled to it
- handles own appearance

UpgradeButton:
- updates upgrade stats
- handles visibility of children and info label
- calculates and applies cost and stat increase
- handles own appearance

Problem: Some classes do way to much, should be refactored

Things done well in implementation

- Reusing code though composition:
  - ButtonAnimationWrapper
  - GridVectorToPositionConverter
  - GuiItemListDisplayer
- Using utility scripts e.g. build, selfmade recolor pipeline:
  - RecolorMultiple
  - ImageRecolorer
- Using godot resources, as more modular alternative to monolithic singleton:
  - TypePopulater
- Using godot callables, e.g.:
  - TimeoutCallback
  - upgrade button strategy pattern
  - ScreenTranisiton

Visuals

Working out the visuals: Setting

First concept art

Deciding character should be rocky

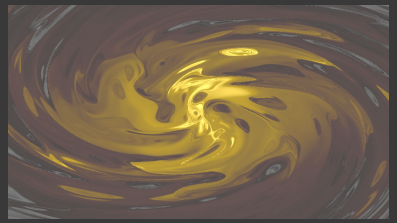
Early draft of lore/backstory

Conclusion Setting mines, keep it simple (remember scope)

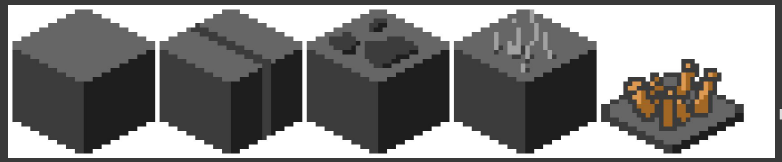
Working out the visuals: Sprites

Choosing a color palette from lospec:

First choice (Oil 6)
Went with rust gold 8, fits setting



Used balatro shader code for background, worked well with palette



First draft of sprites

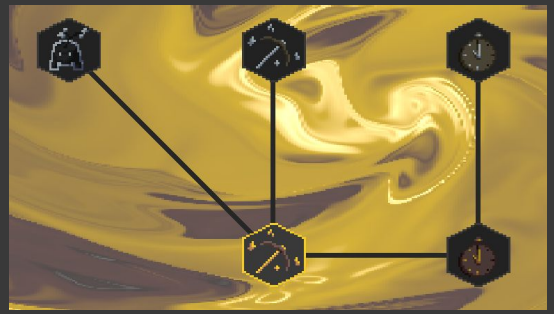
Refining main loop

Improving audiovisual feedback

- Self made sound effects with mic borrowed from hci and audacity
- Animations, Particles, screenshake, camera lerp
- Shader effects

GODOT TUTORIAL: Shockwave shader for noobs

Adding a “goal” / progression



Level System

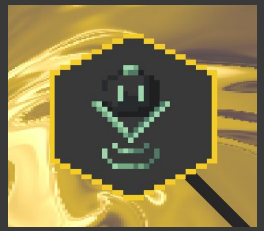
- Add levels with different materials
- Respective layers on skill tree for level
- Each having same sprites recolored
- Level unlocked by harvesting all rocks on a level
- After clearing a level, you can replay it it being bigger -> thrilling exponential growth

Putting in content

Coming up with upgrades

Minion:
help player mining

Orb:
bouncing around
damaging rocks



Collector:
collect items

And respective upgrades
for stats of them
(damage, speed, ...)

Defining content scope

- Adding in a story, reusing assets
- “Source” at start and end of game
- Last level unlocked after 6 levels
- Expanding the skilltree to 6 levels

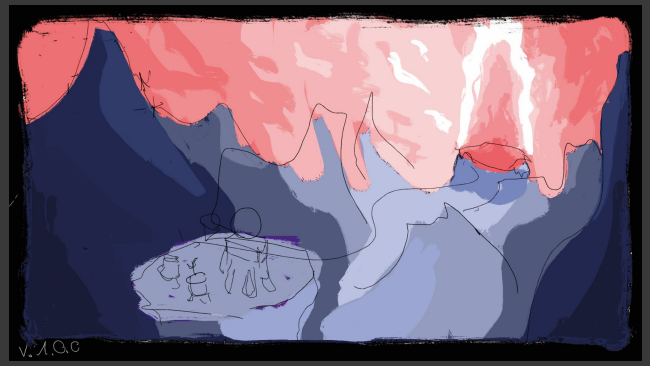
Final Touches, Preparing for expo / release

Music by Drusba

Adding in music massively changed the vibe of the game

Did the music with a homie using samples from splice

Titlescreen

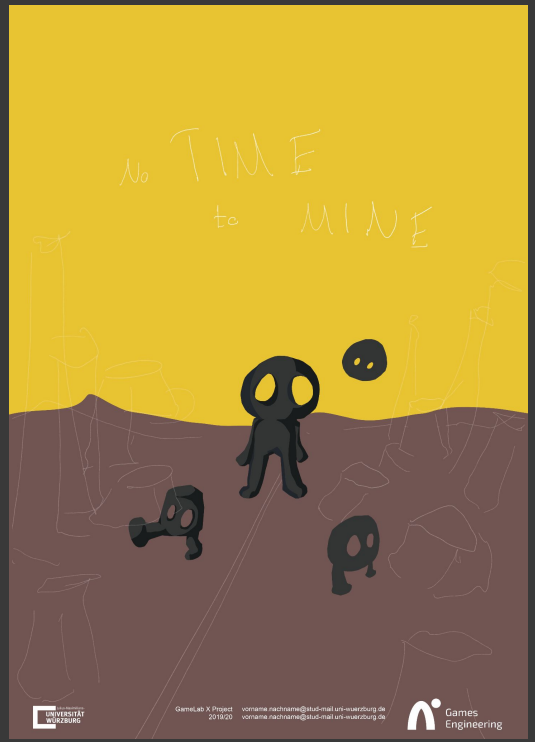


First Draft (incomplete)

work in progress

final version

Poster



First draft (incomplete)

Draft for presentation

Final Version

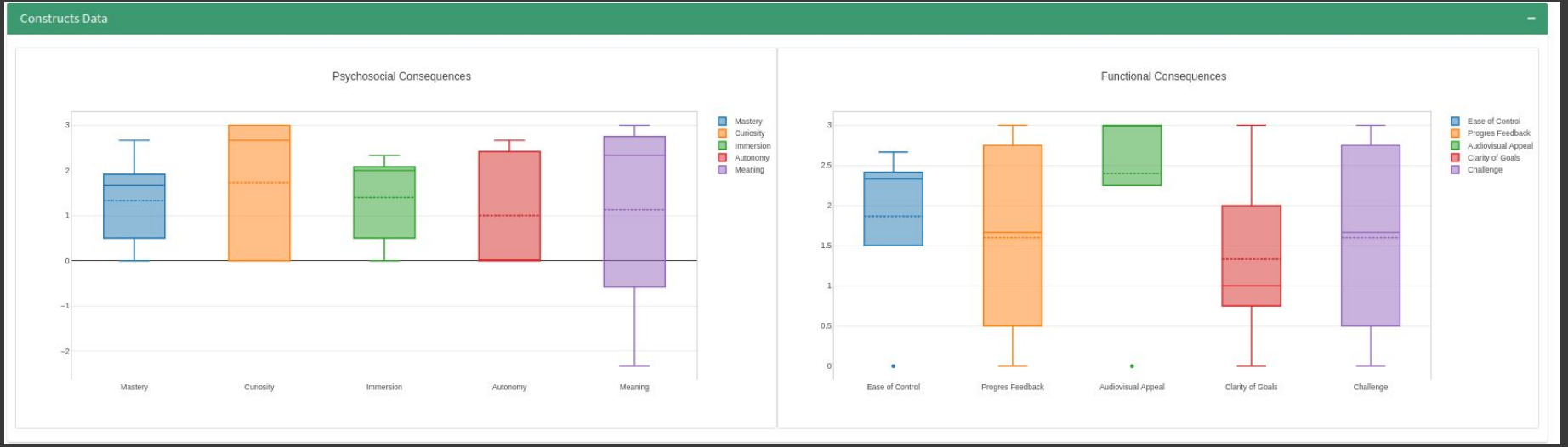
Trailer

https://youtu.be/rBGoRgpmopY?si=BEkYJN9gjaSZk-IW

Player feedback

Setup a playtester feedback survey and generated statistics (sample size 4)

Player Feedback



Strengths: audiovisual appeal, curiosity, accessibility(ease of control)
Weakness: meaning, clarity of goal

Thanks!

Find this and my other projects at:

hiqqup.itch.io