



**Hive Mind Ranching**

# The Swarm

Presenting in the order of:

- Eiler Schiotz
  - Super Senior, Philosophy Major
  - Programmer, Sprite Artist
- Kevin Woo
  - Junior, Mathematics Major
  - Programmer, Game Architect
- Henry Arjet
  - Senior, Aerospace Engineering Major
  - Programmer, Level Design & Terrain Artist



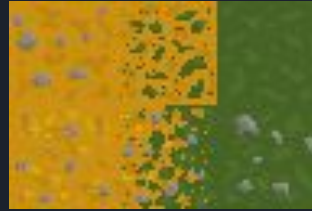
# High Concept Design

- Tile based
- Turn-based tactics
- Single resource for progression
- Space → Texas
- Pixelated art
- Variety of characters



# Visual Aesthetics

- Arid landscape
- Bug-like alien swarms
- Farmers
- Cowhands

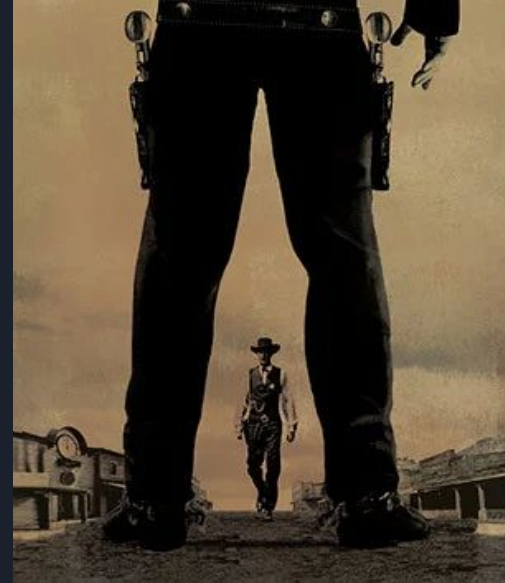


# Audio Aesthetics

- Tense western showdown music
- Gunshots and death cries
- Hawk screeches and train horns



*Old West Gunslingers*  
by Fesliyan Studios music  
<https://www.fesliyanstudios.com>



# Gameplay Aesthetics

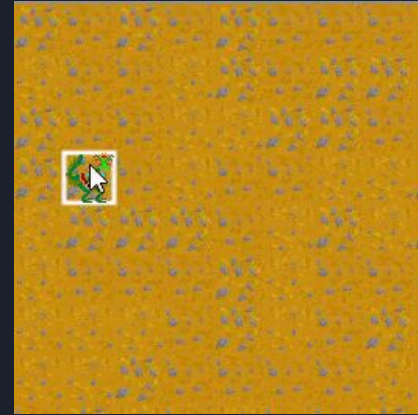
- Nostalgic
- Simple controls
- Precarious game progression
- Absurd satire of Texas dialect

Alien2:  
Primeape? Sounds mo' like primerib to me, ha! Lets grill 'em up  
medium-rare.



# Gameplay Mechanics

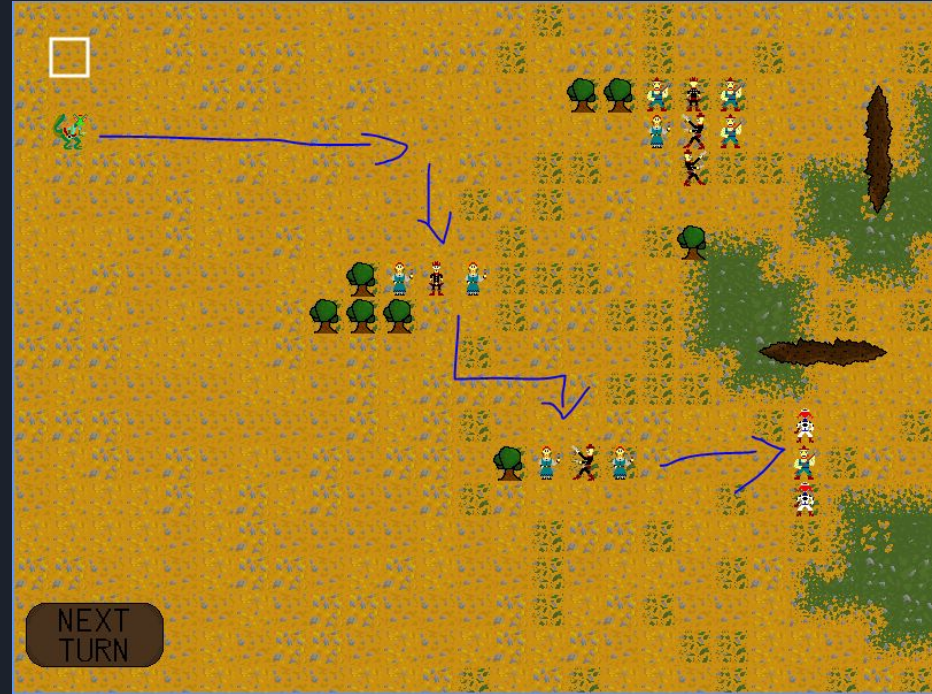
- Click
  - To move
  - To attack
- Can eat to heal or spawn
- Cowhands rotate and shoot at target
- Game is won by eating the objective





# Gameplay Dynamics

- Swarm making
- Avoidance of cowboys, attack farmers
- Path planning





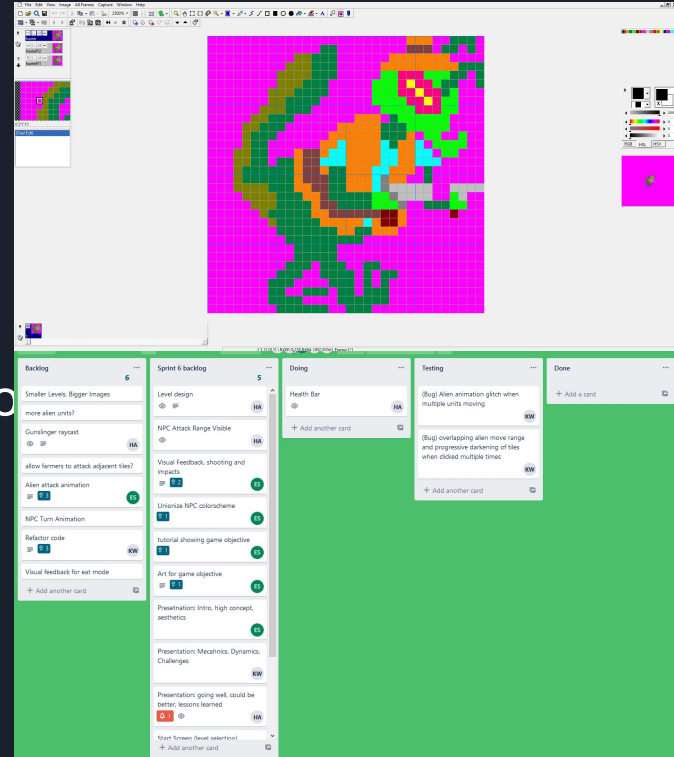
# Technical Challenges

- Phaser documentation
- Grid based game layout
  - Matrix representing sprite locations
  - JSON tilemap representation
- Enemy AI
- Using other programs and scripts
  - Easystar (pathfinding)
  - Tiled (map making)
  - GraphicsGale (sprite art)



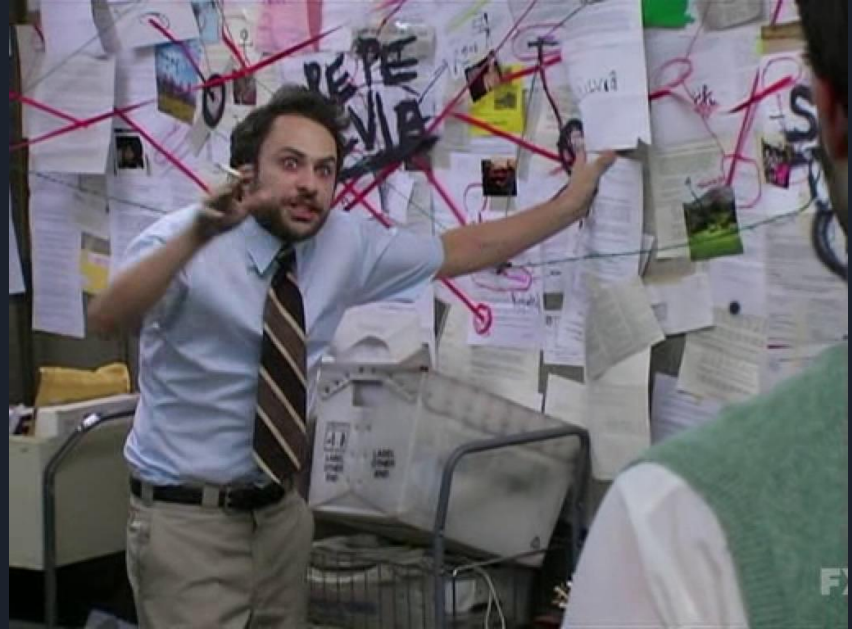
# What Is Going Well?

- Art Pipeline using GraphicsGale
  - Uniform 32x32 sprites
- Level design pipeline using Tiled
- Task assignment meeting using Trello
- Version control system
  - Separate branch for each member
  - Master only updated at end of sprint



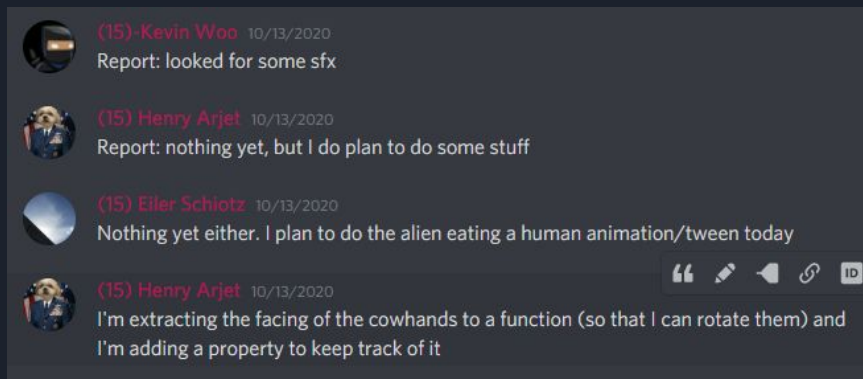
# What Could Have Gone Better?

- Phaser wrangling
- Code organization
- Tracking sprint progress
- Mutual support
- Regularly pushing changes



# What We Learned

- Check-ins are vital
- Silence is a bad sign
- Refactoring only gets harder
- Someone needs to step up
- Git, Easystar, Tiled, GraphicsGale



**Questions?**

