

Meeting Notes

UMass GameDev - 2023-24

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September 28th

- Game topic ideas:
 - Action-adventure
 - Drama
 - Platformer*
 - Visual novel?
 - Horror
 - Explorers Abandoned Ship
 - Turn-Based RPG
- Platformer:
 - Abilities, such as double-jump, dash, hazards to dodge, invincibility, upgrade abilities, skill tree?, combat abilities, armor?

- Big connected map
 - Unique enemies that do different things
 - Bosses
 - Difficulty levels
 - More/less lives
 - Preset characters
 - Breakables (w/coins)
 - Theme & lore, such as Gothic, lush area theme, ancient civilizations such as Mesopotamian, Egyptian*, Indian, Chinese, Indochinese, ruins
 - Story in Egypt
 - Myths
 - Ability states
 - Different colors
 - Each state from God
 - Appease Gods
- To-do:
 - Unity (C#)
 - Github/Notion/Whiteboard
 - Trello
 - Research Egyptian myths
 - Concept Art
 - Next week, we will flesh out these ideas to form a to-do list!

October 5th

- TODAY'S GOALS:
 - flesh out idea
 - create to-do list
- Egyptian Myth theme
 - Myth of Osiris - play as Horus and fight against Seth (for revenge)
 - Horus is a God of the sky, war, hunting, healing. Has a falcon head
 - Left eye represents sun, right eye represents moon. Controls their movement
 - Sky based abilities? double jump? dash?
 - Ultimate ability - different areas are accessible at day/night
- Big interconnected map
 - Tile system
 - Divided into sections/regions
 - each section has purpose
 - some areas locked behind abilities (revisiting areas)
 - Different settings
 - NPC hub (royal area)
 - safe areas between dangerous areas
 - Dungeon (tomb?)

- Changing day/night ability
 - you can change day/night to access different places/abilities
 - Uses “mana” system
 - Possible separate manas for each time of day??
- Breakables
 - pots (w/ stuff in them?)
 - sarcophagus (w/ special stuff in it? gain an ability/powerup?)
 - rocks, cactus, breakable background objects
 - breakables give “mana”, hp
- Lives? checkpoints?
- Mini bosses
 - Minions of Seth?
 - similar to koopalings/Hercules 10 labors. On the way, Horus has to fight other stuff in the way
- Enemies
 - Mummy/ghoul
 - Followers of Seth (with his blessing)
- To do's:
 - properly set up github ! (give perms)
 - build tile system/level builder
 - concept art for characters

October 12th

Today's Goals:

- Continue to flesh out idea
- Discuss approach to building basic systems
 - Tile system
 - Player movement
 - Other basic features required for the rest of the game to work
- Any other “To-do list” items (concept art, brainstorming, etc.)
 - Use [Trello](#) to keep track of progress.

What we discussed last time:

Egyptian Myth theme - the game follows the Myth of Osiris.

- The main character, Horus, tries to get revenge on the antagonist, Seth, for killing his father and cutting his eye out.
- Horus is the God of the sky, war, hunting, healing, which could be inspiration for his abilities. Horus also controls the sun and moon.

Changing day/night ability - Horus controls the sun and the moon, so maybe he has an ultimate ability that switches between day and night

- Different areas of the map are only unlocked at day/night
- Uses “mana” system or some other resource

Other Ideas

Big interconnected map - There's one big map that's divided into various subregions that represent different locations/settings

- Ideas for locations/settings include: NPC hub (royal area), safe areas between dangerous areas, and dungeon/tomb
- Some areas locked behind abilities you unlock later, encouraging the player to revisit areas
- Some objects are breakable (pots, sarcophagus, background objects) which may drop "mana" or hp
- Horus has to complete several "trials" in different locations, maybe fighting mini-bosses along the way, and fighting Seth himself at the end.
- Enemies include mummies, followers of Seth, etc.

Today's Notes:

- Combat focus with small puzzles sprinkled in
 - When backtracking, some unlockable areas are behind puzzles
 - Mostly focused on combat in the main progression
- Map:
 - Go along Nile. Starts in South, work your way up, capital (Memphis) is crossroads, maybe hub
 - Delta slowly opens up more and more after Memphis
 - Capital is based on Memphis (today is in ruins), sort of hub world
 - Encounter locations (pyramids, tombs, etc)
- Fast travel/hub area in the sky
 - Talk to Gods, get their powers
 - Only have so many powers at a time (slots?)
 - If fast travel, it's unlocked later in the game
- Low framerate flat characters - looks like hieroglyphics
- Sun/Moon ability requires asking either God
 - Said God shows up on screen for a second?
 - Horus changes appearance depending on time of day
 - Sometimes Ra's sister shows up when switching to day
- Cool Gods that we can maybe incorporate:
 - Nun (first god, from Nile)
 - Thoth (god of time, space, moon)
- IMPLEMENTATION: Moving in/between rooms
 - In room, screen scrolls with character
 - At end of room, screen stops scrolling (less important)
 - Doors that you can go through (by pressing up input)
 - Door brings you to different room (fade to black)
 - Get introduced to Unity tools for this
- Weapons?
 - Each God has a weapon

October 19th

Today's Goals:

- Continue to refine and expand upon ideas
- Identity more [to-do list](#) items and progress

Our Concept So Far:

Egyptian Myth theme - the game follows the Myth of Osiris.

- The main character, Horus, tries to get revenge on the antagonist, Seth, for killing his father and cutting his eye out.
- Horus is the God of the sky, war, hunting, healing, and controls the sun and moon* (*contradictory with other myth)

Large Map with Points of Interest

- Horus travels along the Nile, starting South of Memphis, and then branching out into different paths along the delta afterwards.
- Along the Nile there are various locations and dungeons that you can explore/fight.
- In the sky there's a hub that allows for limited fast travel.
- There's Gods in the sky hub, which can lend you one of their powers or a weapon. The amount of powers you can have at a time is limited.

Changing day/night ability - Horus controls the sun and the moon, so maybe he has an ultimate ability that switches between day and night

- Different areas of the map are only unlocked at day/night
- Requires permission from either Ra or Thoth.
- Changes Horus's appearance.
- Banter with Ra and his sister sometimes?

Art Style - Based on hieroglyphics. Low framerate flat characters.

Other Ideas

- Some objects are breakable (pots, sarcophagus, background objects) which may drop "mana" or hp
- Horus has to complete several "trials" in different locations, maybe fighting mini-bosses along the way, and fighting Seth himself at the end.
- Enemies include mummies, followers of Seth, etc.

Progress:

- The character can now move, jump, and the camera follows him. You can go through doors to go from one room to another
- Movement is a little buggy right now but is fine for testing
- Concept art for Horus is done (and looks awesome!)
- To Do: Tile System/Level Builder - shouldn't be too hard to add thanks to tutorials.
- Once the tile system and other basics are done, we can start building a basic prototype of the game and test if features work well together!

Today's Notes:

- To-do: basic Melee combat
 - Basic melee attack
 - Basic enemy/punching bag
- To-do: tile system/level builder

- Placeholder tile set
- Breakable objects
- Placeholder art in general
- Nocturnal vs [other word] hazards and enemies
 - Mummies are nocturnal
 - Seth followers at either time?
 - Cost? Free?
- Other abilities
 - Geb - earth god, rock abilities
 - Something related to the river rising/falling
 - Isis - god of protection and magic. Abilities related to those
- Three ability slots - offensive, defense, etc and whichever God you drop into that slot determines which one it uses.
 - In short, one from each god, one from each ability type.
 - Offense slot is God's weapon
- Seth's abilities are related to him being the god of violence, chaos, and strength. Sandstorm ability?
- Set animals are one of the more advanced enemies
- Health bars above enemies? Only above mini-bosses?

October 26th

Our Concept: (for reference)

Egyptian Myth theme - the game follows the Myth of Osiris.

- The main character, Horus, tries to get revenge on the antagonist, Seth, for killing his father and cutting his eye out.
- Horus is the God of the sky, war, hunting, healing, and controls the sun and moon* (*contradictory with other myth)

Large Map with Points of Interest

- Horus travels along the Nile, starting South of Memphis, and then branching out into different paths along the delta afterwards.
- Along the Nile there are various locations and dungeons that you can explore/fight.
- In the sky there's a hub that allows for limited fast travel.
- There's Gods in the sky hub, which can lend you one of their powers or a weapon.

Changing day/night ability - Horus controls the sun and the moon, so maybe he has an ultimate ability that switches between day and night

- Different areas of the map are only unlocked at day/night
- Requires permission from either Ra or Thoth.
- Changes level: nocturnal vs diurnal hazards and enemies. Examples: mummies would be nocturnal, Seth followers would be at either time but would change appearance, etc.
- Changes Horus's appearance.

Art Style - Based on hieroglyphics. Low framerate flat characters.

Other Ideas

- Some objects are breakable (pots, sarcophagus, background objects) which may drop "mana" or hp

Abilities - You can mix and match abilities from the Gods to get an edge.

- Visit the sky hub and shop around for various abilities from different Gods.
- Each ability is either offensive, defense, or utility.
- There's only 3 ability slots: offense, defense, and utility. Each God has 1 of each.
- You can also only have one ability from each category and only one from each God.
- Horus has to complete several "trials" in different locations, maybe fighting mini-bosses along the way, and fighting Seth himself at the end.
- Enemies include mummies, followers of Seth, etc.
- Set animals would be an advanced enemy.

Today's Goals:

- We have a solid vision for our game now! Let's develop a plan to realize that vision.
- Three main questions:
 - What do we have right now? What's missing?
 - What's working? What could be better?
 - How do we get from where we are right now to our vision?
- We will fill out the [Trello board](#) more.
 - What do we need to do, and what are the steps we need to take?
 - Break down each task into smaller steps. This will make it less daunting, and more clear what the system actually looks like.
- If we have time, we can brainstorm more for the concept, but I think it's time we focus on realizing that concept.

This Week's Progress:

- There's now a tile system and level builder!
- You can now melee attack a basic enemy (doesn't fight back yet)
- Placeholder art and animations from the Unity Asset Store have been added. These are only temporary! We'll add our own art eventually.

Today's Notes:

- To do: basic projectile attack
- To do: basic AI for enemy
 - Navmesh+? Brackeys?
 - Add movement - detection zone for player around enemy
- To do: breakable objects
- Later to do: improve/flesh out player movement
- We should make a basic attack list
- Floaty controls
 - Double jump
 - Mid air dash

- Dive? Ground pound??
- Third ability category: Utility
- Seth can make an eclipse.
 - Makes every enemy appear?
 - Sun eclipse vs Blood moon? Forces time of day
 - Killing minion/destroying object or something causes forced TOD to be lifted
 - Have to access shrine to change TOD
- Abilities
 - Geb - earth god, rock abilities
 - Nun (first god, from Nile) - Something related to the river rising/falling
 - Isis - god of protection and magic. Abilities related to those
 - Ra - sun god, fire abilities
 - Thoth - moon god
 - Baal - god of thunder
 - Babi - funny joke god
 - Random gods that don't do anything as a joke? Heh?
- Combat style - Hollow Knight/Blasphemous
- Stage Hazards
 - Quick sand
 - Discuss next time

November 2nd

Today's Goals:

- Similar to last week, we'll discuss and coordinate our next steps in development, before pivoting to fleshing out the overall idea more.
- For discussing implementation/road map, we'll again be asking:
 - What do we have right now? What's missing?
 - What's working? What could be better?
 - How do we get from where we are right now to our vision?
- We'll add a few things to the [Trello board](#) again. Remember, take a big "to-do list" item and break it down into smaller steps.

This Week's Progress:

- [Tutorial](#) on how to setup and use Github and Unity!
- Basic enemy AI
 - Enemy patrols an area by walking back and forth.
 - If player is closeby, it walks towards player until it's close enough to attack
- Right click will now fire a bullet. The bullet will move forward until it hits something, and deal damage if that object has health.
- The melee attack (left click) and the new projectile attack both have a new 1 second cooldown.

Our Concept: Moved to [its own document!](#)

Development Notes:

- New bigger demo level
 - Bigger level
 - More enemies
 - More variety/features
- Figure out soft collision
- BREAKABLE TILE OBJECTS
- Background Image

Brainstorming Notes:

- Stage Hazards (we wanted to discuss this but ran out of time)
 - Quick sand
 - Fire
 - Flamethrower trap (turns off and on)
 - Spikes
 - Falling spike
 - Squasher (something from the ceiling that tries to squash the player)
 - Statues
 - Different types of stationary enemies (active at different TOD)
 - Monster Statues: Only move when the player faces them?
 - Rolling boulder (Indiana Jones style)
 - Arrow trap
 - Swinging pendulum
 - Ground opening
 - Trapdoor or moving wall platform
 - Timing running over it correctly
 - Spring/trampoline “trap”
 - Temporary tiles/switch platforms (magic)
- Stage Hazards Details
 - Night/Day switch platforms - switch at different TOD
 - Night/Day switch platforms switch in intervals during eclipses
 - Not instant death - deals damage but most of these won't kill you immediately
- Collision style: Minecraft style/soft collision, take damage?
- Health bars: only above important enemies such as mini-bosses. Bosses have health bar pinned to top of screen. Player Health bar is UI element.
- Leveling system?
- Invincibility frames
 - Character flashes
 - Lasts ≥ 1 second
- Progression:

- Must kill certain bosses before you can fight Seth, but you can do it in any order technically
- Easier bosses are earlier in Nile/map
- Some bosses you should really have certain abilities first! (not required, but helpful)
- Get info from NPC on what the boss does beforehand
- When you die, Anubis is like “you died again lol” and you have a portal back to the most recent “checkpoint”
 - Anubis tells a different joke every time
 - Joke related to how you died
- Special Blood Moon/Solar Eclipse Enemies?

November 9th

Today's Goals:

- Just like the last 2 weeks, today we'll discuss how to implement the ideas we already have, then flesh out the concept even more.
- When discussing implementation, we should specifically think about content this week
 - Should we add a new enemy or two? An ability?
 - What do these features look like?
 - How do we implement these features? What are the steps?
- When discussing the overall concept, we'll be fleshing out the specifics of what we've already agreed on, similar to what we did last time.

This Week's Progress:

- Bigger test level! This new test level is much larger and uses all the features currently in the game, including warps to other scenes. It's big and has lots of room for expansion, making adding and testing new content much easier.
- Refactored the warps (doors and exits between scenes) to be better/easier to use.
- Added a health bar for the player to the corner of the screen. It slides from red to black as the player takes damage.
- Breakable Pots. Attacking damages it, and enough damage destroys it. It has very very basic animations for now.
- The first animation for Horus has been made! Below is the idle animation for Horus, which plays when he's not moving.



Development Notes: ([Trello Board](#))

- To do: basic hazards. Spikes, Arrow trap, Falling spike, Rolling Boulder
- Ranged enemy
- Placeholder sound effects (placeholder: roblox oof)
- End game when you died (Game Over) using fade effect

Brainstorming Notes: ([Concept Outline](#))

- Traversing Nile: what does it look like?
 - Bridge area connected by door
- Fight Gods to unlock their abilities.
 - The Gods are the bosses. Seth has brainwashed them
 - Lore Explanation: Horus has some item that cures the brainwashing but he has to beat them up first to get close enough/weak enough.
 - Horus's Mom Isis is brainwashed so Horus's dad doesn't come back to life
 - "Seth Curse"
 - After you beat a God's dungeon, area is somewhat pacified and area look changes (lifting the curse)
 - Seth follower enemies never pacify.
 - One or two pacified enemies become new NPCs and are willing to trade good items
- The offensive ability for each God is a weapon
- Upgrade Gods and their abilities
 - final level for fighting Seth?
 - Upgrade abilities with levels
 - Get levels from major accomplishments
 - Get xp/souls from normal stuff
 - Price raises with any ability upgrade for all ability upgrades
 - Max ability requires "God souls" from killing mini-bosses (only first time, maybe 1% drop rate after that?)
 - Next time: flesh out/discuss in detail
- You get all abilities at very very end of the game (cut scene)

- Glide ability/triple jump for wind God
- Fourth ability slot: passive
- Seth doesn't get portal back from Anubis at end of the game ("chaos is banished")
- Abilities of certain types are made to counter other elemental types
 - Some have different interactions and trade offs (using water on fire creates smoke)
- Multiple phases for each boss

November 16th

Today's Goals:

- Start with our usual discussion of implementation and adding to the Trello.
- Then we'll spend the rest of the meeting discussing the progression of the game in depth
 - Take our ideas from last time of visualize them
 - Nail down specific details
 - We'll use the whiteboard to draw out the progression like a flow chart

This Week's Progress:

- Added damage particles
- Added spike tiles that damage anything that falls on them
- Added audio system for sound effects and music
- Added invincibility frames
- Added a background
- Minor changes: gave all enemies and pots soft collision and fixed bugs

Development Notes: ([Trello Board](#))

- Unfinished To Do's:
 - Other basic hazards (Arrow trap, Falling spike, Rolling Boulder)
 - Range enemy
 - End game when you died (Game Over) using fade effect
 - Background image
- Basic version of TOD ability
- Add ability slots. Show that ability has been activated. Abilities don't need to do anything yet.
- Separate player health script from ObjectHealth

Brainstorming Notes: ([Concept Outline](#))

- Note from last time: we wanted to flesh out the ability upgrade system
- boss classifications - don't have to fight non-gods, but it can help you!
- Full bosses
 - have to beat
- "mini-boss" = lesser gods

- big reward - god souls
- shortcuts
- one off
- connected to a God
- ~1 lesser God per God
- deity
 - lot of a common resource
 - just a big enemy (___ of Seth)
 -
- Keep it simple! Don't overload amount of resources
 - Souls
 - Godsouls
 - XP - TALK ABOUT NEXT TIME

November 30th

Today's Goals:

- Just like last time, we'll start with our usual discussion of implementation and adding to the Trello.
- Then we'll delve back into the progression discussion
 - Take our ideas from last time of visualize them
 - Nail down specific details
 - We'll use [Lucidchart](#) to draw out the progression like a flow chart

This Week's Progress:

- Boulder Trap
- Arrow Trap
- Added the ability to change the time of day using Sun/Moon Shrines
- Added a new interact system
- Added a way to remember data across scene reloads (player health, time of day, etc.)
- Separated the playerhealth from the object health
- New SFX
- Minor changes and bug fixes

Development Notes: ([Trello Board](#))


- Maybe draw/brainstorm map/level ideas

Brainstorming Notes: ([Concept Outline](#))

- Resources (where we left off last time)
 - Don't overload the game with too many
 - Souls
 - Godsouls

- XP - ???
 - We'll need to balance the exact numbers, figure out what prices work
- Shouldn't be grindy
- Items
 - healing potions
 - buff potions
 - artifact slot - boosts one ability type
 - explosive consumable
 - In general, items should be consumables or artifacts
 - Get from breaking pots, opening chests, etc.
- Mimic enemy (chests)

December 7th

For those who don't know, this document can be found on Discord in the [#resources](#)  channel, along with details on the game's concept.

For those who are new, all the details about our game can be found in the [Concept Outline](#), but here's a brief summary:

- 2D Platformer featuring combat and abilities, similar to Hollow Knight, Metroid, and Shovel Knight.
- Loosely based on ancient Egyptian myth (specifically a modified version of the myth of Osiris).
- Play as Horus as he tries to defeat Seth, who has mind controlled several other Gods. Defeat each God Seth has mind controlled one by one until you fight him in the final battle.
- When you defeat a God, you can then buy their abilities, which are themed after them (Sun God has fire abilities, Nile God has water abilities, etc.)

Today's Plan:

- Today, we'll get anyone new up to speed on the game, discuss implementation/progress, and return to our progression discussion.
- We'll discuss the points above and answer questions.
- Then, we'll talk about implementation. How do we make our ideas a reality?
 - We'll discuss coding and stuff like usual
 - Depending on how many new art people show up, we may discuss illustrating/animating our game.
- Finally, we'll delve back into the progression discussion.
 - We'll start by refreshing ourselves because for many of us, it's been a while since we've discussed this.
 - Take our ideas from last time of visualize them
 - Nail down specific details
 - We'll use [Lucidchart](#) to draw out the progression like a flow chart

This Week's Progress:

- Added a ranged enemy that shoots a bullet from a distance rather than a melee attack
 - Added a falling spike trap that falls from the ceiling
 - The scene now resets when the player dies
 - Improved jumping to make it more consistent
 - Made more game objects tiles
-

Development Notes: ([Trello Board](#))

- Implementing abilities

Brainstorming Notes: ([Concept Outline](#))

- Resources (where we left off last time)
 - Don't overload the game with too many
 - Souls - upgrade abilities, buy items?
 - Godsouls - final upgrade for abilities
 - XP/Levels - NO. Not included
- Option 1: Ability upgrades give permanent stat increases
- Option 2: Ability level increases a base stat
 - Example: lvl 4 attack ability will give you +4 damage on top of weapon damage
- Option 3: Stat increases after boss fights/milestones
- Poison, status effects
- Map scrolls out like papyrus
- cut scenes are in hieroglyphics
- weapons based on egyptian tools

December 14th

Last meeting of the semester!

Today's Goals:

- Since this is the last meeting of the semester, I would like to briefly discuss what our plans are for the break and beyond.
- Then, we'll have our normal discussion of implementation and adding to the Trello Board
- Finally, we'll return to brainstorming the progression of the game.

This Week's Progress:

- Added Pause Menu
- Added Souls and Godsouls
- Added Ability effects system
- Changed the way player stats is held
- Refactored pre-existing features

Future of GameDev Club:

These are some things I've been thinking about recent I'd thought I'd share:

- To be clear: we won't be meeting over break, but feel free to work on the game in the meantime (but also no pressure to work on it!)
 - I want to have some sort of basic prototype ready for the engagement fair on January 25th.
 - I'll have my laptop with the game open. People will play for at most a minute to see what we're doing.
 - Probably only needs to be one level.
 - Other than that, we just need to add some working abilities.
 - This will be my main focus this winter break.
 - I also plan to do a big round of promotion at the start of the semester.
 - More posters, the engagement fair, sending out emails, and maybe some events (pizza party, game jam).
 - I want to continue to grow the club so we can make more progress on our game.
 - I also am thinking of doing a game jam sometime next semester, but that's not set in stone.
 - Participants are given 24 - 48 hours to make a game from scratch based on a one word theme.
 - It would probably be one weekend in February or March.
 - There would be a big promotional lead up to the event.
 - Best game gets a prize!
 - Low budget, low effort event from an organization standpoint.
 - If anyone else has any additional thoughts on winter break or the future of the club in general, let's discuss below! If not, we can move on.
-

Development Notes: ([Trello Board](#))

- Basic "tutorial" level for engagement fair
 - Chatboxes for Osiris
 - Music inspired by [this](#)
- Art
 - Style guide
 - Tiles

Brainstorming Notes: ([Concept Outline](#))

- [I don't remember what happened this meeting or why there's no notes here 🙄]

January 26th

Today's Goals:

- Welcome to the GameDev club! If you're returning from last semester, welcome back!
- Quickly re-introduce ourselves

- Refresh ourselves on the game's concept, and play the demo!
- Discuss goals for the near future on getting our game closer to completion
- Brainstorm: fill in the gap in our game concept and answer questions

Summary of our game:

- **Logline:** Our game is a combat focused 2D platformer set in ancient Egyptian mythology, where Seth (god of violence, chaos, etc) has cast a mind controlling curse on many of the other gods to take over the world. The main character Horus (god of the sky, etc) must fight each mind controlled god to lift their curse, then use their abilities to defeat Seth once and for all.
- **Progression:** The player has some control over what order they fight the gods in, and must visit each of their themed areas to defeat all of them.
 - To beat the game, the player must kill every god, then defeat Seth at the end.
 - Horus starts at the bottom of the Nile river delta at the city of Memphis, where he can then take different paths to fight different gods.
 - The player must beat a god in order to go further up the Nile delta, where they'll have more paths to choose from.
 - Each god has a themed area, with unique enemies and a lesser god (mini-boss).
 - After the god is defeated, their themed enemies become friendly because the curse is lifted.
 - There's also a "sky hub" the player can teleport to for fast travel to places they've already been, and talk to gods they've saved to get their abilities.
 - Lesser gods aren't required to fight, but give you substantial rewards such as a shortcut on the map, or valuable "god souls."
- **Abilities and Upgrades:** After you defeat a god, you unlock their set of 4 abilities. However, you have to choose which one from the set to use, and level them up with souls and god souls.
 - Each god has a set of abilities you can unlock after defeating them.
 - There's 4 ability slots: offense, defense, utility, and passive.
 - Passive abilities are always active, while the other 3 types need to be manually activated and have a cooldown.
 - Offense abilities change your normal weapon.
 - Once you unlock a god's abilities, you can drag their icon into one (and only one) of the 4 ability slots.
 - This means you can only have one ability of each type, and only one from each god.
 - This forces the player to make decisions on what abilities from what gods they want to use.
 - When killing enemies, you collect souls. These can be used to upgrade a god's abilities.
 - Upgrading an god's abilities will upgrade all their ability types (think that your upgrading the god itself)

- The first upgrade only costs a few souls, but each purchase raises all prices across the board for all gods.
- The final upgrade of an ability requires god souls, which drop from lesser gods.
- The player's base stats also increase after defeating each god.
- **Changing Time of Day:** The player can change the time of day when they encounter a Ra or Thoth shrine (sun and moon gods), changing the environment, enemies, and affecting abilities.
 - The player can decide whether it would be more advantageous for it to be day time or night time.
 - Changing the time of day can cause different enemies to spawn, different traps and level hazards to appear, and make abilities stronger or weaker.
 - Seth can force the time of day with eclipses and blood moons
 - A solar eclipse forces it to be night time
 - A blood moon forces it to be day time
 - Horus has different appearance during day/night
- **Art Style:** The art style will be a cartoonish version of hieroglyphics.
 - Animations will be low frame rate, characters are flat and move stiffly.
 - UI elements are stone tablets.
 - The few cutscenes in the game are pictures on stone slabs, as if the Egyptian people are retelling the story.
 - Below is the only completed art for the game thus far (the main character, Horus). We hope to make a lot more art this semester!



- More details can be found in [this document](#).

Development Notes: ([Trello Board](#))

- Better, more complex enemies.
- Upgrades

Brainstorming Notes: ([Concept Outline](#))

- Paper fog of war
- Isis is a boss!!!
- Tooltip for ability slots
- certain abilities are more effect against certain enemies (in an elemental way)

February 2nd

Today's Goals:

- Today, we'll settle into our normal routine.
- We'll start by discussing the progress we've made over the last week, then adding to our to do list.
 - Because not a lot of coding was done, we can discuss in detail how to do the things we added to the last week.
- Then, we'll brainstorm more, filling in more details about what the final product will look like.

This Week's Progress:

- First music demo!
- Documentation: I added comments to the top of every script we've written to make it easier for new users to understand the current code.
- Cleaned up the [Concept Outline](#) to be more organized and helpful.

Development Notes: ([Trello Board](#))

- New entity controller system
- Menus
 - Upgrading UI
 - Ability Inventory
 - Map
 - Main Menu
 - Settings

Brainstorming Notes: ([Concept Outline](#))

- Brainstorm enemy types, Gods, and themes in the future
 - basic melee/range
 - flying enemy

- stationary enemy
- Anubis weighs your heart when you die like in the lore.
- More interesting/lively levels
 - locked doors?
 - (tod statues)
 - moving platforms
 - collapsing platforms
 - more background objects (bushes, etc.)
- Only Gods should have dialog for the most part.
 - speech bubble next to head during gameplay
 - stone tablet at bottom of screen when stopping gameplay
- Checkpoints are statues that let you teleport to the skyhub.

February 9th

Today's Goals:

- Discuss this weeks development progress and what to add to the to-do list
- Continue brainstorming

This Week's Progress:

- Anubis death scene
 - When you die, you now respawn in the underworld where Anubis is
 - He gives you a portal that brings you back to the last scene you were in
 - Currently, there's no proper respawn points so I just put temporary ones at the start of each scene
 - In the future, Anubis will tell a joke related to how you died

- Style Guide!

(<https://discord.com/channels/621071878928203793/622073763705651210/1205407577459007508>)

- Lots of art!
-

Development Notes:

- Story
- More breakables

Brainstorming Notes:

- <https://discord.com/channels/621071878928203793/622075002946191360/1205528109512654920>
- Ideas for enemies
 - mummies
 - Seth follower (basic but diverse enemy)
 - enemy that throws fireballs

- Flying enemy that dives down
- Venus fly trap
- ghost that disappears and reappears after a second
- mimic
- Static Statues: Stationary enemies with different variants (active at different TOD)
- Monster Statues: Only move when the player isn't facing them, like weeping angels.
- Enemy that throws big water/fireballs very slowly. Cancels out other projectiles
- Accessibility settings
 - colorblindness mode?
- Loots and items
 - More breakable objects and give them loot
 - Crates
 - Sarcophagus
 - Enemies occasionally drop loot related to them
- Gameplay loop
 - short-ish levels between themed areas. This is where shortcuts can be used if unlocked.
 - One big level that's broken up into different areas.
 - Boss at the end

February 16th

Today's Goals:

- Discuss this weeks development progress and what to add to the to-do list
- Continue brainstorming
- Side note: if there's any ideas for improving this weekly formatt, feel free to suggest it now or on Discord!

This Week's Progress:

- Anubis will now tell a joke related to how the player died

Development Notes:

-

Brainstorming Notes:

- Gods have red eyes when evil
- Seth
 - final boss
 - chaos

- mind control
- Geb
 - rock god
 - tutorial boss
- Sobek
 - Crocodile
 - Swamp
 - Croc enemies
- Wadjet
 - Cobra god
 - poison
 - spawn a snake
- Hapi
 - water god
 - flooding
 - shoot yourself up with water
- Khouso
 - time god
 - slow down/speed up stuff
- Shu
 - wind god
 - gliding
 - tornado
- Bastet/Sekmet
 - Cat god with evil/good version
 - stealth, invisibility
- Isis
 - Healing/magic god
 - shield ability
 - healing ability
- Babi
 - funny joke god
 - black censor bar
 - censored swears
 - practice god
- Ammit is Anubis's service animal
- Next meeting: concept art for gods?

February 23rd

Today's Goals:

- Discuss this weeks development progress and what to add to the to-do list
- Continue brainstorming, specifically focusing on each god's themes

This Week's Progress:

- Added warp obelisks
 - The player and press E to set their spawn at one
 - The player can hold E to warp to the Skyhub
 - Added a very basic version of the Skyhub
 - Hapi art
 - Started organizing art document
-

Development Notes:

-

Brainstorming Notes:

- God order
 - Tier 1: Geb
 - Tier 2: Isis, Sobek
 - Tier 3 left: Baal, Khonsu, Hapi
 - Tier 3 right: Shu, Cats, Wadjet
- Possible locations for Gods:
 - Geb: Memphis
 - Isis: Saqqara
 - Sobek: Sumenu
 - Wadjet: Buto
 - Cats: Taremu
 - Hapi: Elephantine
 - Khonsu: Edfu
 - Shu: Heliopolis
 - Baal: Cairo
 - Seth: "Sethopolis" (Alexandria)
- Themes and levels
 - Spend a meeting or two drawing all the level layouts
 - Discuss god personalities
- Skyhub
 - Ma'at - God of truth, balance, order, harmony, law, morality, and justice.
 - Ma'at in charge of Skyhub and you can manage your abilities when talking to her
 - Also a guide
 - To upgrade your abilities you talk to the gods who own them.
- Story/writing
 - e

March 1st

Today's Goals:

- Discuss this weeks development progress and what to add to the to-do list
- Continue brainstorming. There's some stuff leftover from last meet
- The club has shown interest in a game jam. What would we like to do for it?

This Week's Progress:

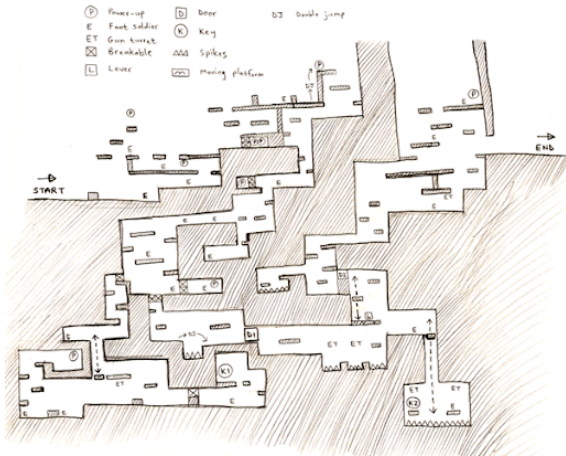
- I was really busy and didn't do shit for the game this week unfortunately
-

Development Notes:

-

Brainstorming Notes:

- Lesser god ideas
 - Isis -> 4 sons of Horus ([link](#)), Nephthys ([link](#))
 - Sobek -> Anhur ([link](#)), Ammit ([link](#))
 - Bastet/Sekhmet -> Mihos/Maahes ([link](#)), Bakht ([link](#)), Hathor ([link](#))
 - Baal -> Tallay ([link](#))
 - Shu -> Tefnut ([link](#))
 - Khonsu -> Heh/Hauhet ([link](#))
 - Hapi -> Ashe/Ash ([link](#)), Nun ([link](#))
 - Wadjet -> Serqet ([link](#))
 - Set -> Akr ([link](#)), Wepwawet ([link](#))
- God Personalities
 - Seth curse makes gods have no impulse control and more violence and volatile
 - Anubis - bored and just wants to watch the drama unfold. Mischievous. Dad jokes.
 - Anubis and Sobek are buds or something. They also co-parent Ammit.
 - Osiris - more dad jokes or british royalty
 - Hapi - Friendly, easy going, but strong temper (doesn't take anyone's shit). Uncle/Aunt who's got your back.
 - Wadjet - over-the-top, loud, boisterous (italian). Big personality.
- Four sons of Horus are a boy band
- Khonsu head sphere thing is actually a frisbee type projectile
- Themes and levels - spend a meeting or two drawing all the level layouts



- sarcophagus with Osiris in it to give tips and tutorial bits at relevant moments
- Skyhub
 - Ma'at
 - Anything else about the skyhub? What does it look like?
- Story/writing
 - e
- Club member of the month: Bella (she brought markers)

March 15th

Welcome back from spring break!

Today's Goals:

- Discuss this weeks development progress and what to add to the to-do list
- Continue brainstorming. There's some stuff leftover from last meet

This Week's Progress:

- Started work on Ma'at's ability inventory

Development Notes:

-

Brainstorming Notes:

- Ability Inventory UI layout
 - Drag and drop
 - description of each ability
 - Fullscreen for more screen real estate
 - Quote from god instead of lore paragraph
- God location themes
 - Geb - fresh ruins as Geb is actively destroying the city of Memphis

- Isis - oasis, plants, vines around buildings, lots of birds, beetles
- Sobek - swamp, reeds, city partially flooded with swamp water
- Baal - lots of rain and wind
- Hapi - Periodic flooding where you have to get to high ground. Flooding mechanic in boss fight.
- Khonsu - switch between different periods in time where the city was in different states (construction, thriving, ruins). Used for puzzles.
- Wadjet - snake jungle
- Shu - clouds you can jump on. Wind that blows you back unless behind wall
- Cat god - lots of cats everywhere that have made a mess. Cat hoarder's house but a city.
- Seth - constant statues of Seth and posters. Really show him being self-absorbed. Stronger versions of seth followers.
- Sphinx lesser god for the cat gods? Tom and Jerry minigame where you have to hide in a literal game of cat and mouse.
- Skyhub
 - Ma'at
 - Each god has their own building in the skyhub that looks like it's from their themed city. Throne room/workshop/hang out spot.
- God Personalities
 - Seth curse makes gods have no impulse control and more violence and volatile
 - Anubis - bored and just wants to watch the drama unfold. Mischievous. Dad jokes.
 - Anubis and Sobek are buds or something. They also co-parent Ammit.
 - Osiris - more dad jokes or british royalty
 - Hapi - Friendly, easy going, but strong temper (doesn't take anyone's shit). Uncle/Aunt who's got your back.
 - Wadjet - over-the-top, loud, boisterous (italian). Big personality.
 -
- Story/writing
 - e

March 22nd

This Week's Progress:

- Isis concept art
- I've been busy and also tired so I haven't done any coding
- fuck spring allergies!
- Budget approved for an end of year pizza party (\$50)

Development Notes:

-

Brainstorming Notes:

- Boss fights - what does each boss do and what are their abilities
 - When you enter the boss room a dialog box pops up and then the fight starts
 - Each boss has three phases. Each phase unlocks a new attack pattern.
 - Boss bar at top of the screen.
 - Hazards that are active for the duration of the boss fight.
 - City has a “dark aura” effect that goes away when the boss is defeated.
- Specific boss fights
 - Geb
 - throws rocks at you (phase 1)
 - boulder hazards
 - ruined city boss arena
 - summon protecting wall that breaks after it takes too much damage (phase 2)
 - summons rock golem enemies
 - takes rocks off of himself and throws them at you and they become enemies (phase 2)
 - obvious weak spot that stuns him
 - slow but hard hitting attacks
 - Geb can stomp to create an earthquake that causes rocks to rain from the sky that you have to dodge (phase 3)
 - Rock tornado that protects him (phase 3)
 - Isis
 - Heals herself (charging up).
 - She needs to cast her spells and that’s when she’s vulnerable.
 - Minions that she can heal if you don’t kill them quick enough (phase 1).
 - Shield around herself (phase 1)
 - Shield around her minions (phase 2)
 - She can cast a debuf on you (phase 2)
 - She can float up and cast a beam on energy (phase 3)
 - She can revive her minions (only once per minion) (phase 3)
 - She can wrap you in her mummy bandages as one of her debufs
 - Sobek
 - Minecraft evoker fangs but it’s crocodiles (phase 2).
 - Mud wave that you have to jump over. Crocodiles can jump out of the mud wave (phase 3).
 - Flexes muscles to give himself temporary buff (phase 2)
 - Tail sweep (phase 1)
 - Summon crocodile enemy that comes out of the mud (phase 1)
 - “Goes berserk” - goes on all fours and charges at you (but you can dodge it) and bite attacks (lots of damage) (phase 3)
 - Baal
 - Has to charge up for his abilities like Isis

- Big singular lightning strike where he throws a lightning bolt like zeus. Longer charge up time. (phase 2)
 - Smaller but clustered lightning strikes (phase 1)
 - Summon temporary cloud enemies that can zap you. Slow moving and predictable lightning strikes that stun you (phase 1)
 - Lightning dash attack (phase 3)
 - Summons protective lightning around him (phase 2)
 - Lightning shifts color from yellow to blue to white
 - Shockwave that you have to jump over. If you don't it stuns you (phase 3)
 - Hapi
 - Water level frequently rises and falls during the boss battle (phase 1)
 - Environment has lots of platforms that you can go to to escape flood
 - Hippos (phase 1)
 - Reeds that trap you
 - Geysers
 - Water Laser (phase 3)
 - Giant fish jumps out of water (phase 3)
 - Fish that grabs you and you have to try to escape (phase 2)
 - Water tornado that goes across the water (phase 2)
 - Khonsu
 - Changes surroundings to different time period (phase 1)
 - Projectile attack that reverses when it hits something so you have to dodge it twice (phase 1)
 - Heal himself by reversing time on himself (phase 2)
 - Drops projectile onto you that's from a random time period (old chest, car) (phase 2)
 - Hour glass in background that flips and the hazards flip with it.
- God Personalities
 - Seth curse makes gods have no impulse control and more violence and volatile
 - Anubis - bored and just wants to watch the drama unfold. Mischievous. Dad jokes.
 - Anubis and Sobek are buds or something. They also co-parent Ammit.
 - Osiris - more dad jokes or british royalty
 - Hapi - Friendly, easy going, but strong temper (doesn't take anyone's shit). Uncle/Aunt who's got your back.
 - Wadjet - over-the-top, loud, boisterous (italian). Big personality.
 -
- Story/writing
 - e

March 29th

This Week's Progress:

- Next week will be big! No more exams for me

- We'll continue our discussion of the gods' boss fights

Development Notes:

-

Brainstorming Notes:

- Sobek has frog buddies
- Cat gods actually have a giant cat tree for their city
- God Personalities
 - Hapi -
 - Friendly, easy going, but strong temper (doesn't take anyone's shit). Uncle/Aunt who's got your back.
 - Hapi smokes lotuses and gets high. He also asks you to smoke and if you say yes it gives you a game over
 - Cats - alcoholics/wine mom.
 - Isis - milf. the sweet kind though. She's the one normal person. can't see glass cause she's a bird.

April 5th

Today's Goals:

- Briefly discuss spring carnival (April 18th)
- Continue last week's discussions

This Week's Progress:

- Progress on the ability inventory
- Lots of concept art

Development Notes:

- e

Unfinished Discussions:

- Specific boss fights
 - We did Geb, Isis, Sobek, Baal, Hapi, Khonsu last time.
 - Hapi
 - Hook attack?
 - Khonsu
 - Changes surroundings to different time period (phase 1)
 - Projectile attack that reverses when it hits something so you have to dodge it twice (phase 1)
 - Heal himself by reversing time on himself (phase 2)
 - Drops projectile onto you that's from a random time period (old chest, car) (phase 2)
 - Hour glass in background that flips and the hazards flip with it.

- Tail trip (phase 1)
 - Wing block (phase 2)
 - Shoot poison feathers (phase 2)
 - Dive attack where one of the heads tries to bite you (phase 3)
 - Wrap around attack to paralyze the player and you have to try to break free (phase 3)
 - Scorpion minions
 - Snake minions
- Shu
 - At the top of a bunch of platforms with hazards and he tries to push you into the hazards while you try to reach him
 - Tornado that swirls you around and then spits you out
 - Cardinal direction based wind attack
 - Wind projectile (phase 1)
 - Spawn cloud where player is and you have to dodge it or else it will bounce you away
 - Fog enemies. Some are real, some are fake.
 - Spawns a huge storm with wind blowing away from him. But close to him there's a safe area that's the eye of the storm (phase 3)
- God personalities (under Seth curse)
 - Hapi is angry more often?

April 12th

Today's Goals:

- Discuss ability inventory layout
- Continue previous discussions
- **!** Spring Carnival next Thursday! Get any art or features you want in the Spring Carnival build done before then!

This Week's Progress:

- Drag and drop functionality for the ability inventory is complete and bugfixed.
- Drew up a sketch for what the actual layout will look like
- Adjusted other UI elements to scale correctly with resolution and aspect ratio

Brainstorming Notes:

- Inventory UI: done on white board
- Boss battles
 - Shu
 - At the top of a bunch of platforms with hazards and he tries to push you into the hazards while you try to reach him
 - Tornado that swirls you around and then spits you out (phase 2)
 - Directional based wind attack (phase 3)
 - Wind projectile (phase 1)

- Spawn cloud where player is and you have to dodge it or else it will bounce you away (phase 1)
 - Fog enemies. Some are real, some are fake. (phase 2)
 - Spawns a huge storm with wind blowing away from him. But close to him there's a safe area that's the eye of the storm (phase 3)
 - Every time you hit Shu he moves to another part of the map.
- Bastet/Sekhmet
 - Bastet is a defensive mode (tank) and Sekhmet is an offensive mode (glass cannon)
 - When one attacks the other one follows with a delayed weaker attack (aftershock)
 - Switches modes when she switches phases (Sekhmet, Bastet, both)
 - In phase 3 they're both there but can't go too far from each other and share health.
 - Big axe swing (tennis racket aftershock) (phase 1)
 - Tennis racket swing (big axe aftershock) (phase 2)
 - Roar that decreases attack (phase 1)
 - Roar that decreases defense (phase 2)
 - Sekhmet does big charge up attack and Bastet guards her (phase 3)
 - Cat minions
 - Bastet drinks blood from river to heal while Sekhmet guards her (phase 3)
 - Wine barrels spawn throughout the fight that you can knock into the river which will make Bastet more drunk. While doing so the river turns from red to purple and Bastet heals less.
- Seth
 - Summons minions from previous boss fights by turning objects into them.
 - Very chaotic boss fight because he's god of chaos
 - Copy a random other god's move for each phase
 - only from current phase
 - random from a preselected list of the most aggressive and flashy moves
 - Mind control projectile you have to break free from (phase 3)
 - Changes time of day a lot
 - Fire explosion (phase 1)
 - Goes invisible and then melee attacks you (phase 2)
 - Phase 1 options:
 - Geb's rock throw
 - Khonsu's reverse time projectile
 - Wadjet's venom bite but adapted for him to make sense
 - Sekhmet's axe swing with the Bastet echo/aftershock
 - Phase 2 options:
 - Sobek evoker fangs
 - Baal's lightning bolt throw
 - Hapi's water tornado

- Khonsu's drop an object
- Phase 3 options:
 - Isis energy beam
 - Baal's lightning dash
 - Shu's eye of the storm

April 19th

Last meeting of the semester !

Today's Goals:

- Discuss continuing work on the game throughout summer break
- What went well this semester, what can be improved, and what we can do next semester.
 - With brainstorming (mostly) done, focus more on production?
 - Events like game jams?
 - How to improve the first meeting experience?
 - How to get more people engaged?
- I also plan to send out an end-of-semester survey to the whole Discord to get feedback from people. What questions should be on it?
- Wrap up any unfinished discussions

This Week's Progress:

- Ma'at ability inventory finished!
- Implemented Horus's idle and run animations!
- Implemented ability type icons! (although I need to fix them. I *might* (?) know what's wrong with them)
- Expanded club fair level for Spring Carnival (today from 7 to 10!)
- Created a new build for the Spring Carnival. I'll create a proper installer for it soon so everyone can play!

Reflection Notes:

- Informational pamphlets for new members!!!
- Game jam start of next semester
- More specific roles for artists
- Specific poster for specific roles
 - coders
 - background artists
 - animators
 - musicians
 - assets/sprites
- Development roadmap
- End of semester survey

Brainstorming Notes:

- Prologue: Seth chopped Osiris into “as small pieces the artists were willing to draw.” Isis put Osiris back together, but Seth didn’t like that, so he threw a tantrum and mind controlled all the gods.
 - Seth’s motivation is that he wants the throne because he feels he deserves it.
 - Horus is link from breath of the wild (quiet, capable, dumb), but more unhinged
 - Ra and Thoth send Horus to fix this problem because it’s his family issue but they will help with changing the time of day.
 - Tutorial starts - Osiris pops out of a coffin and gives basic instructions
- Every boss has a very short cut scene at the start and end of the battle
- If you say yes to Hapi’s drug offer you tweak the fuck out before getting a game over (don’t do drugs kids)
- After Seth fight Seth goes to underworld and instead of Anubis giving him a portal back he forces Seth to do “community service” aka watch Ammit (who uses him as a chew toy)

Have a great summer break! I hope to see you guys again next semester!