

Team Members: (put your main roles below)

Yijia - 2D artist

Rory - Programmer

Liam - 3D artist

Mingjie - 2D artist

Valerie - design doc, level layout, mechanics

Rieson - design doc, scripting and level design in Unreal, help Valerie with design mechanics

Elements needed for Monday 2/21:

- ☒ Elevator pitch (30s)
- ☒ Design Document made
- ☒ Controller layout
- ☒ Paper map of an example level
- ☒ Concept art

Design documentation

Below is the current work in progress for the design document for *The Emperor's Tomb*.

1. Front End

- a. Next Steps

The next step is to present a concept art image, the design doc, controller layout, and a paper map (1 or 2 levels). We will need to do a quick 30-second elevator pitch on Monday 2/21.

b. Purpose and Scope

This game design document should cover any questions that the team has about the game. It should hold information about the design of game mechanics and systems, art style and influences, schedule and production, and maybe some of the technical side of things (tools used, C++ workflows?). It has been written as part of assignment materials due for GAM 651 on Monday 2/21.

c. References (or Research material)

[Some treasures](#)

Queen Ci Xi was buried with a "Night-Luminescent Pearl" in her mouth.

([Source1](#))([Source2](#))

"There're, however, famous edge cases that dead people holding other precious objects in their mouth. Namely, the last dowager queen Ci Xi. It was widely rumored that Ci Xi had a super precious "Night-luminescent Pearl" in her mouth instead of the usual jade items. Night-luminescent pearl is not really pearl, but actually fluorite. Although fluorite doesn't glow, it's theorized some of these stones had phosphorus in them. So it glows in the dark. Nobody knows where this night luminescent pearl is right now. It's lost after Ci Xi's tomb was raided by the warlord Sun Dian Ying."



Game idea: Find two halves of the pearl. When they are reunited, the player has won the game.

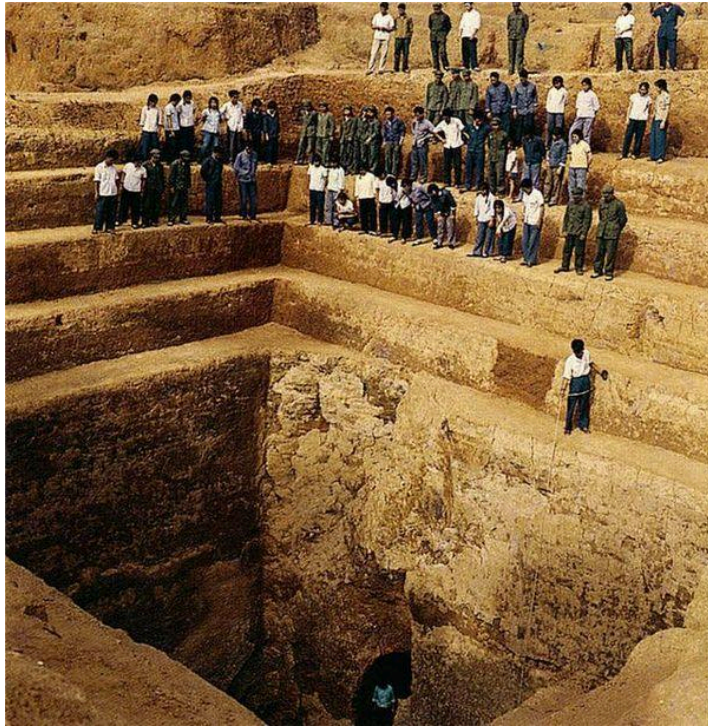


(Cicada-shaped jade, a common burial treasure in Chinese society. Cicadas symbolize reincarnation.

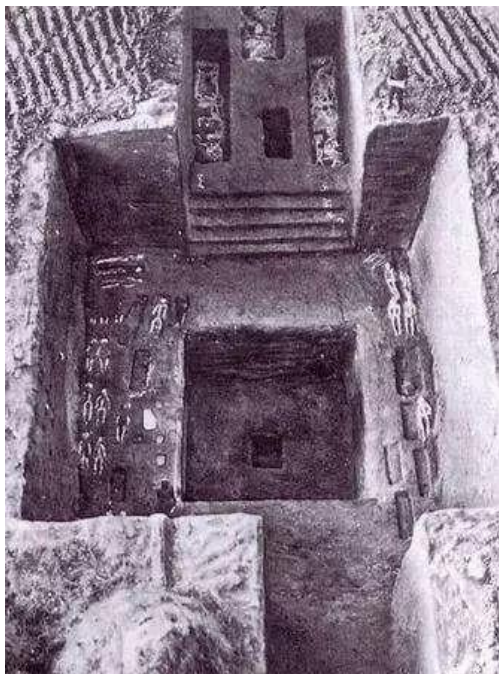
"Considered bad luck to wear grave goods as accessories." [Link to Quora article.](#))



(Image of unfinished stone tortoise, *bixi*, at [Ming Xiaoling](#))



(Image of [Mawangdui](#), a Han dynasty tomb, for reference)



(Image of [Yinxu](#) tomb, a tomb built in 2nd Century, for reference)



(Image of [Four symbols](#), Azure dragon, White tiger, Vermillion bird, Black tortoise)



(Image from [Ming tombs](#), a collection of tombs and mausoleums built by the emperors of the Ming Dynasty, China.)



© Shanghai Museum / Press photo

[Pendant for ceremonial short cloak](#)

Ming dynasty (1368–1644) / Silver.

d. Conventions of this document

Highlighted sections are rough areas that require more consideration.

1. Game Proposal: Core Game Concept

Note: Revision in Progress

The Player character is an alchemist who is trying to search for the ultimate secret to change anything to gold. This person has witnessed the decaying monarchy where the new emperor treats people like cattle and abuses collective wealth – this alchemist aims to find the secret and rebuild the country.

The secret is under this dungeon and only those who solve the puzzle, pass the trial and get approval from the 4 holy animals will be granted this secret.

Working Title

The Emperor's Tomb

Development Team

Rieson Blumer- Game Designer

Liam Fang- 3D Artist

Rory Rao - Programmer

Valerie Wang - Game Designer

Yijia Xin - 2D Concept artist

Mingjie Zhao - 2D Concept Artist

Genre

3D, Third-person, Adventure, Puzzle, Light action, Dungeon.

Story

You play as a treasure hunter in this 3D adventure dungeon puzzler set within the tomb of an ancient Chinese Emperor. The player's mission is to pillage a sacred and valuable artifact secured with the Emperor's entombed corpse. They will have to navigate a dungeon-like tomb filled with traps, hazards, and creepy ancient creatures while solving puzzles to progress deeper into the tomb, until they find the Emperor's treasure.

Key Features

- 3D puzzles: players will need to use their wits to unravel the complexities of the tomb and its challenges.
- Stylized environments inspired by Chinese traditional architecture and art.
- Deadly ancient traps: thrill and danger all the way to the treasure.

Platform

PC.

Distribution

It could be distributed using WebGL to itch. This is a student collaboration project, so no specific plans are made for distribution.

Number of Players and Game Modes

This is a single-player game with a single, "story" mode in which you explore the rooms of the tomb. The tomb is the same every time (not procedurally generated), so there is little replayability (puzzles can only be solved once).

Localization

Currently, this game is developed in only English given the limited time and resources. As the game gets scalable in the future, a localized version in Chinese might be made.

Scope of Production

We aim to deliver a complete playable build with a well-told story, a full level consisting of a moderate amount of small rooms and puzzle challenges, a light-weighted combat experience, essential in-game cinematics, a well-stylized environment, and characters with a solid ending.

In the MVP (minimum viable product), we aim to present the full mechanics along with any essential narrative.

Target Audience

We aim for a T rating for the game's ESRB as there will only be light violence and horror, and minimal blood. This game tries to draw in anyone interested in 3D puzzle adventure games, for example, fans of *Myst*, *The Witness*, and *Zelda: Breath of the Wild*. The concept of playing as a tomb raider or treasure hunter is popular and exciting for players who love *Tomb Raider* or *Uncharted*. People interested in Chinese mythology and history would also enjoy the aesthetic and setting of the game.

Unique Selling Points

There is a unique combination of puzzle gameplay based on ancient Chinese cosmology and philosophy. The player will be excited to play as a treasure hunter in an intriguing stylized environment.

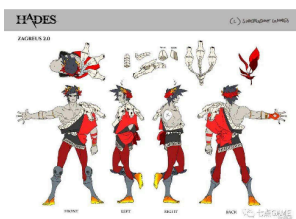
Concept Art or Reference Images

- Environmental concept art or reference images:



(Concept art by Yijia Xin)

- Character concept art or reference images:



(Concept art by Mingjie Guo)

2. Detailed Design: Story and Narration

a. 30 second pitch transcript

"300 years ago, the Yong Emperor's reign came to an end when he was slain in battle by a stray arrow. But it is said that he was entombed with an alchemical secret: the ability to turn stone into gold. In our adventure puzzle game, you will delve deep into *The Emperor's Tomb* - pass its trials and survive its traps to be granted the knowledge that you seek."

b. Background



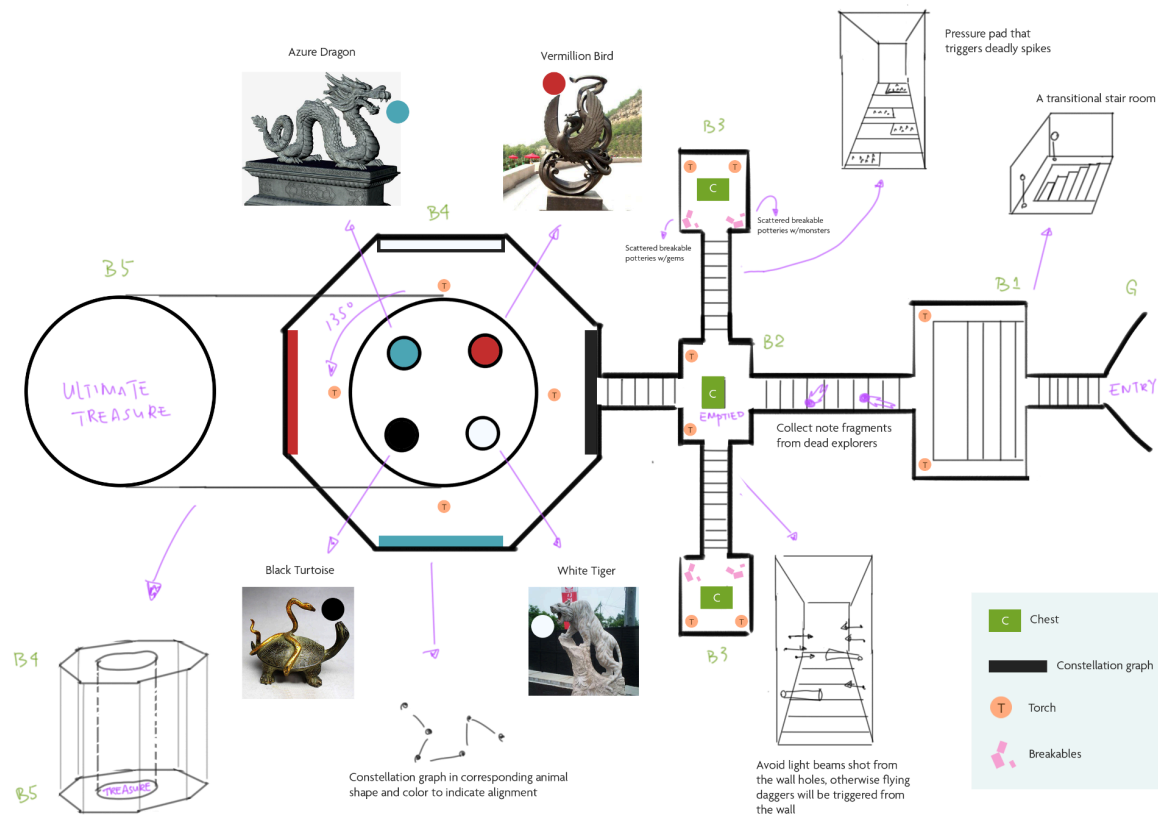
Once upon a time, there was an extremely prosperous dynasty in China, the Yong Dynasty. All the residents had a peaceful and fruitful living where food and drink are ample, fabrics are soft and warm, livestock are strong and productive, and firearms are sturdy and rich. It is no doubt that Emperor Yong brought all this to the world. He loves his citizens and had the ultimate power to provide for them. It is said that Emperor Yong grasped the secret to "touch a stone and turn it to gold, touch a carp and turn it to a dragon".

Despite his magnificent power, Emperor Yong lived for 500 years. After he died, the country started to wane. A legend then went around, saying that Emperor Yong has buried that ultimate secret to turning anything to wonder in a hidden dungeon. Only the one who has passed the trial can access and deploy it. Otherwise, those

unqualified will abuse the power for their own benefits. For thousands of years, emperors, alchemists, fortune seekers have been looking for this path to wonder, but no one so far has succeeded.

Then, an ambitious Chinese alchemist decided to give it a shot. This person has been witnessing the decaying monarchy where the new emperor treats people like cattle and abuses collective wealth – this alchemist aims to find the secret and rebuild the country.

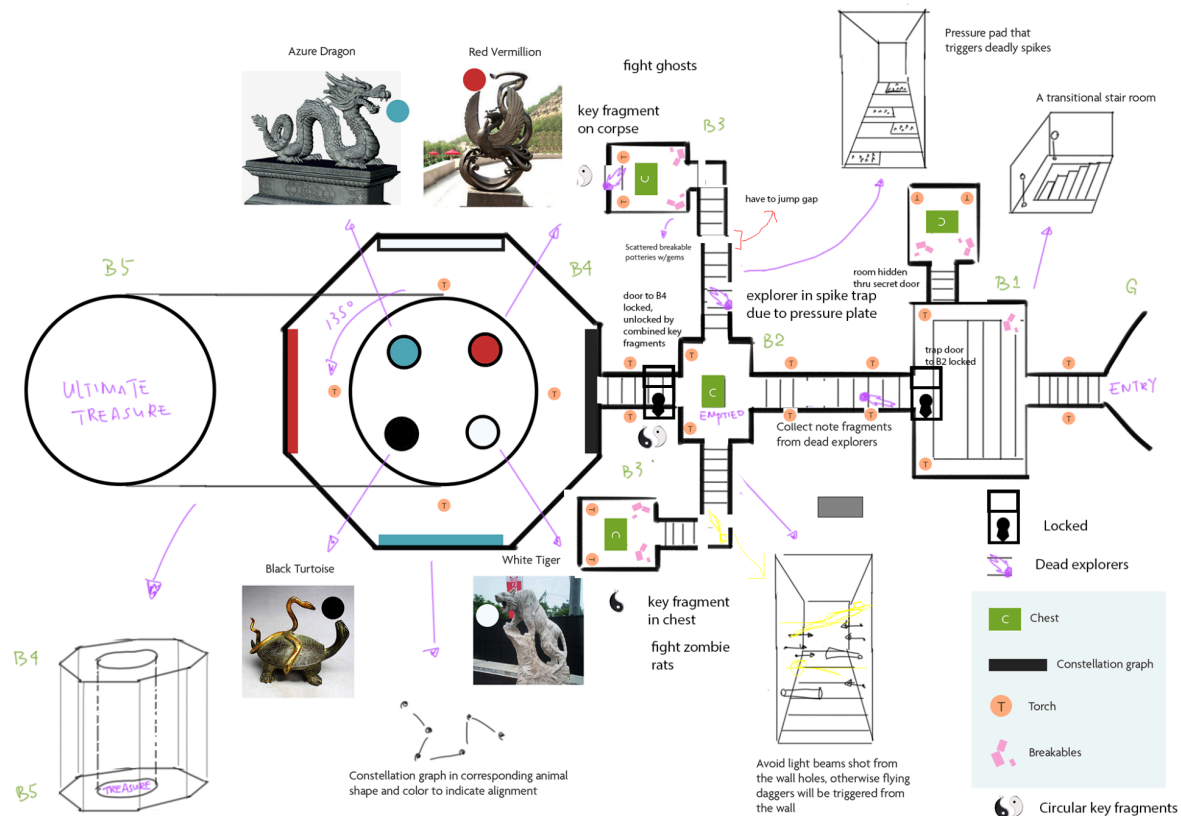
3. Detailed Design: Puzzle Level Design



(puzzle level design by Valerie Wang)

Level Notes

Iterating on player experience to create a more interesting path.



(map suggestion edits)

Ground

Cutscene places player inside first hallway. The door seals behind them, blocking sunlight, and torches along the walls light up.

Gameplay begins. Player takes control at the top of the stairs. On-screen prompt tells them how to move around. They descend to B1.

Basement 1

Suggested change:

Stairway from B1 into hallway to B2 should not be immediately accessible. **Player must interact with a mechanism that opens a trap door in this room** that leads to the hallway to B2. Here, we could teach the player how to swing their sword. For example, maybe there are ropes holding the trap door in place that the player can cut with the sword.

If this is too complex, we could just include a simple lever that the player has to pull in order to progress. This is so the player begins to understand they can interact with objects around them. (This would make more sense as the trap door would have to somehow reset after previous explorers made their way down here -

does the trap door reclose after a certain amount of time? We could set a time limit for the player to explore the tomb based on a timed door mechanism.)

Possible additions to room:

- Some **art or engraving to look at on the wall to the west**, lit by torches.
- Breakables in northeast corner of room that can be smashed with peachwood sword.
- Hidden room to the north?

Stairs to Basement 2 Central Room

Suggested additions:

- There should be some wall torches here to light the bodies of the explorers.
- Just have one corpse here. I think we should have a total of 3 corpses spread throughout B2 and B3

Questions / ideas about the dead explorer here:

- How did they die? Starvation? Did a monster kill them? In what state is the explorer's body? Is it skeletal, mummified, fresh? Is the body-type male or female or can we tell?
- Perhaps they died from a dagger shot from the wall in the lightbeam hallway and dragged themselves all the way here but died of the wound along the way. (Could include a blood trail.)

Basement 2 Central Room

I think there should be a **door here blocking the stairs down to the main puzzle room**. The door opens when you get **two parts of a circular key** and fit it into the door. The key parts could be found in one of the chests and on one of the explorer's bodies.

What was in the empty treasure chest? Does the player open it and find nothing in there or is it already open when the player first sees it?

Hallway to Basement 2 South

Suggestions:

- Before moving into the hallway from the central room, there should be a **small opening or tunnel that the player needs to crouch to get through**. This will prepare them for ducking under light rays in the hallway.
- I think the hallway should have at least 90 degree turn in it to make the path more interesti
- The light beams could come at a series of angles, horizontally, vertically, and diagonally. Maybe some could be low enough for the player to jump over.

Basement 3 South

Enemies: 2-4 zombie rats.

Reward: One half of the circular key, found in the chest.

This should be a bigger area with some room to fight. Treasure chest appears after rats are defeated? Door seals behind player until rats are defeated?

Hallway to Basement 3 North

Suggestions:

- Begin this section with a drop: player falls down a ledge into the hallway. To get back up to B2 Central, they will have to jump up some platforms.
- As the player moves down the hallway, we could include a **gap and a spike pit that the player has to jump over**. This will teach them how to jump.
- When the player first encounters a hallway with the pressure plates, we should **show an impaled explorer** to warn the player and teach them to avoid the pressure plates.
- We could have a series of plates the player can sidestep to avoid, then one row that they would have to jump over.
- Hallway should have at least one 90 degree turn in it to create a more interesting path.

Basement 3 North

Enemies: 1-2 ghosts.

A chest in the room is empty, but there is a dead explorer here that has the second half of the key. A door seals behind the player until they win the fight.

To Basement 4

The player returns with both halves of the key and can now open the door leading to the main puzzle room. Possibly include an IGC of the player fitting the key into the lock.

B4/B5

No dead explorers are in here. You're the first to make it this far.

Question: how does the central mechanism work? Does it spin up like a corkscrew to reveal the coffin. What mechanism does the player use to rotate the central column thing? I'm kind of imagining the elevator in the Forest Temple from Ocarina of Time, but not sure if that's right.



How do we keep the player from discovering the solution to the puzzle by chance? (If they just start spinning it around, would they accidentally come to the solution?)

Mission Objective

The player needs to find the four pearls and return them to the right holy animal.

Playable Characters

The player is an ambitious Chinese alchemist who has been searching for the secret formula of turning anything into gold for several decades. Finally, the player arrives at the dungeon which is said to have that ultimate secret.

Non Playable Characters

None

Enemies

There are hibernated dungeon creatures hidden in buried potteries in the small rooms. Creepy creatures that can cause damage to the players. The looks and behaviors of the enemies are in development.

Failure Condition

The player gets trapped in the dungeon or gets killed by the gadgets/enemies/traps.

Player Actions

Walk, run, jump, normal attack, crouch

Object Interaction

1. Step on pads in a certain order
2. Avoid light beams to traverse
3. Pick up balls and place balls
4. Open chests
5. Break burial potteries

Gameplay Mechanics

1. Sensitive pressure pad that once players step on it, spikes shoot up from the pad to penetrate players.
2. Holes on the walls with eternal-fire-infused lanterns shooting out light beams. Once players overlap with the beams, there will be flying daggers shooting from the walls.

Puzzle Design

There is a [Bagua](#)-shaped main puzzle room with 4 holy animals' statues. Each statue is missing a pearl of a certain color. Players need to find the pearls in the dungeon and return them to the right animal.

There are four different constellation graphs on the wall – the shape of each graph matches a certain animal's statue. The color of the graph indicates which color matches which animal.

Mission Walk Through (In Progress)

1. IGC: A long camera shot to track the player who rides a horse all the way to a long narrow opening of an ancient relic. The player hops off the horse and enters the opening.
- 2.

Other Puzzle Interaction ideas:

1.Collision

2.Break

3.Moving

4.Numbers

5.Teleport

Traps!



Trap ideas:

Basic ideas that I've seen before in games.

1. Step on floor tile, activate arrows that shoot out of walls.
2. Rolling boulder (Indiana Jones). If you take treasure from a pedestal, the counterweight activates a trap.
3. Swinging axes.



4. Fire pillar

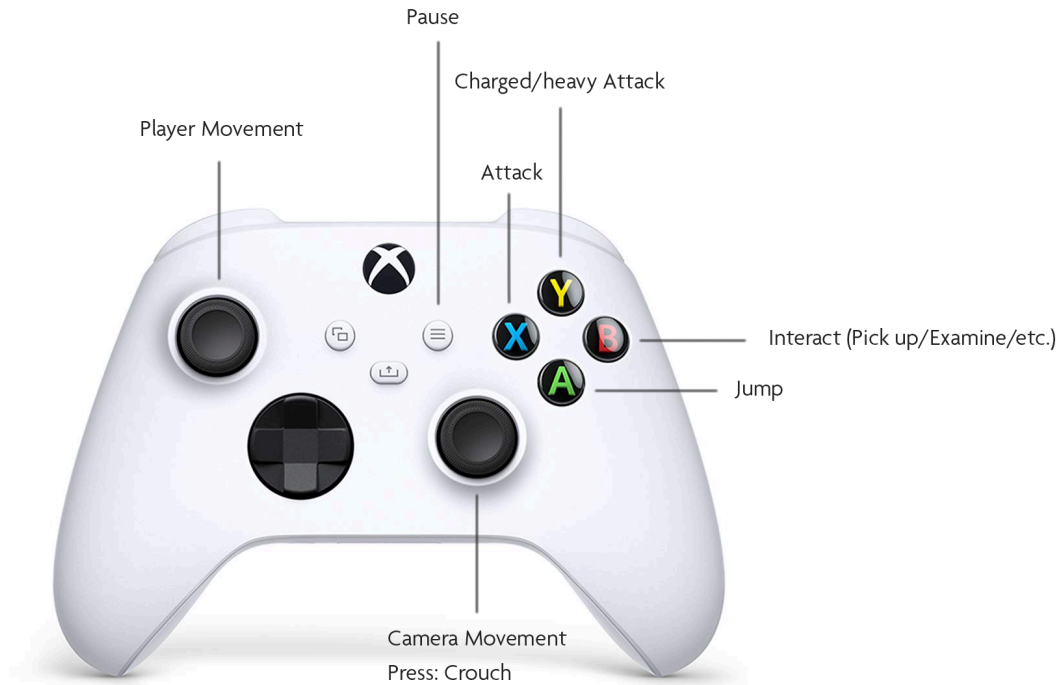


"New" ideas:

- Taking more treasure can "curse" you, making you more susceptible to enemy attacks.
- If you solve a puzzle incorrectly, activate a trap that fills the room with poison gas.

4. Detailed Design: Game Design

a. Controller layout



b. Objectives and Progression

The player's objective is to reach the resting place of the Emperor and find a sacred artifact, after which they have completed the game. There may be other treasures to find along the way. To progress, the player will solve a series of puzzles, moving from one room to the next. For the MVP, there will probably be a maximum of 2 puzzle-rooms for the player to solve before the game ends.

c. Gameplay Loop at Conceptual Level

The player finds clues, objects to interact with, and solves a mechanism that opens the way to continue farther into the tomb.

d. Other, Smaller Loops

Investigate room -> interact with object -> find more clues / experiment -> solve puzzle -> move to next room / object interaction -> repeat.

Look around for something to interact with -> interact with object -> leave interaction -> repeat.

e. Game Systems

Empty for now

f. Player Actions (What does the player actually **do** in the game?)

How does the player interact with puzzles?

Rotate pillars, physically avoid traps, open chests.

g. Example Game Session (from boot up to shut down)

The game can be played in a single session. The player boots on the PC and is in a tomb entrance with stairs descending down (no menu screen?). They solve a simple puzzle to open the first door into the first major puzzle room. They solve the puzzles in that room to open a major door to the next room. Repeat with a smaller room, but a more difficult puzzle. After finishing the second room, the player descends down a hallway and finds the room where the Emperor was interred. They walk up to the coffin and are greeted with a congratulations text and a concept art image of the ancient treasure. The player can then "replay" or "quit".

h. Notes on Gameplay Experience (what do we want the player to feel?)

The emphasis is on puzzles that the player solves once. The experience is not very replayable, but the player will feel clever for solving a series of puzzles that

increases in difficulty. The player feels like an ancient treasure hunter by dodging traps and solving the convoluted mystery of the tomb. The tomb entrance and the place where the Emperor's coffin is are low-lit. They give the player a sense of ritual mystery and veneration.

i. Experimental Design Features (do we have any?)

I don't think we are experimenting with anything new to the industry, as far as design of mechanics goes.

j. Length (how long is the game going to be?)

The game is a maximum of 1-2 hours.

k. Interface (what does the UI, user interface, look like)

Very simple, clean readable text. Not much beyond a simple health bar for the player.

l. Look, Sound, Feel

Look is stylized, non-realistic, and is inspired by ancient Chinese architecture and culture. The game's music could be less melodic and more atmospheric, emphasizing the story of a lonely adventurer in a creepy tomb. Sounds are probably placeholder, but simple sounds for traps being activated, picking up and putting down objects, footsteps, etc. The feel is somewhat foreboding, with a mostly lowlit mood, but there is excitement in exploring and moving deeper into the tomb.

m. Mood

Mood is somewhat creepy, dark, but the challenge is not overwhelming, so there is not much frustration. The player feels smart and confident, but unsure about what is around the corner.

n. Theme

The excitement of raiding a cursed, trapped, puzzle-filled tomb. Everything is built to create a player experience of being a treasure hunter.

5. Detailed Design: Art

a. Description of style

Characters and environment are stylized and made to look vaguely like ancient Chinese architecture. The look is not particular to one dynasty, but captures the feel of a Chinese past, fictionalized into myth. The look will resemble the game *Journey*.

b. Influences

Journey, *Hades*, Chinese architecture and dress.

c. Mood boards

None yet.

d. Reference Images









6. Detailed Design: World

a. Story (Briefly)

An alchemist comes to the ancient tomb of the Emperor of Yong. They explore until finding the secret that will grant them the ability to turn anything into gold.

b. Description of World

The character is investigating an ancient Chinese tomb, perhaps 300 years after the Emperor was interred. The tomb had previously been hidden, lost in time, but the player character found its location.

c. Description of Player Character

An alchemist with the royal guard, determined to find alchemical secrets.

Carries a peachwood sword?



d. Description of Other Important Characters

Emperor: dead and in his coffin within the tomb. In life, he overthrew his nephew in a coup and called his reign Yong ("eternal") despite a war that brought an end to his reign.

e. Backstory

Any important backstory for alchemist?

f. Different Game Areas (Overview)

- Entrance to tomb
- 1st puzzle room
- Hallway
- 2nd puzzle room
- Resting place of Emperor

7. Production

a. Major Development Tasks

- ☒ ~~First pass at documentation~~
- ☒ ~~Controller layout~~
- ☒ ~~First paper map~~
- ☒ ~~Concept art of character~~
- ☒ ~~30 second game pitch~~
- ☒ ~~More concept art for environment~~
- ☐ Design puzzles
- ☐ Figure out how player will interact with puzzles
- ☐ Design paper maps of levels in the game
- ☐ Test puzzle mechanics
- ☐ Build levels
- ☐ Simple walkthrough of game
- ☐ Art the game

b. Evidence of Previous and Potential Success (look to other games that are similar, what did they do well that we can draw from?)

Skyrim traps and puzzles are simple object interaction based on just what you see in environment.

Uncharted uses clues from a journal / notebook to aid you in solving environmental puzzles.

c. Risks and Alternatives

The risk of doing a 3D game is that it takes more time to build 3D levels and produce 3D models and props. Since this needs to be a playable game, it doesn't need a high level of polish. We can delete the second puzzle room if it proves too difficult to implement. As long as we have a beginning (tomb entryway), middle (1-3 puzzles in a room), and end (find the Emperor), we have made a successful prototype game.

d. Market Research

A similar game could be: *Gunfire Reborn*. Also has a tomb / dungeon area in similar art style, but it is an FPS.



e. Resources

Unreal Engine, Maya?, Blender?

Put any other important production resources here.

f. Legal Analysis

Using inspiration from history, but the game uses only its own intellectual property.

The game is not being sold.

g. Cost and Revenue

The game is paid for by the time and skills of students. This is a student project and it's not being sold. It may be made available via WebGL on a place like itch.io.

7. Schedule

a. Timeline

Game is due before Spring Break.

Monday 2/21: present concept art image, design doc, controller layout, paper map (1 or 2 levels). Give 30 second elevator pitch as if in front of an audience.

Archived ideas.

The player is a nameless treasure hunter who has come to explore the Changling tomb where Yongle Emperor Zhu Di is laid to rest. They seek the Pendant of Night, an artifact of jade that the Emperor was entombed with. The artifact is said to shroud the wearer in darkness, allowing them to pass unseen. The treasure hunter has been hired to retrieve this artifact for an ancient guild of assassins that seeks to use it.