



Shattered

GDD 101 – Final Project: Design Document

Amari O'Connor

Prof. Bertozzi

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Game Overview

1. Genre/Setting/Theme

- a. Genre:
 - i. Sci-Fi, Fantasy, Mystery
- b. Setting:
 - i. An underwater city, other places far below sea-level (sea-exploration, ravines, caves, sunken ships, underwater city ruins, etc.)
- c. Target Audience:
 - i. *Shattered* would most likely be a game recommended to those who are 17+, simply because of language and possibly partial nudity or romantic relationships. There is no particular gender that I'm looking to be built into the gameplay.

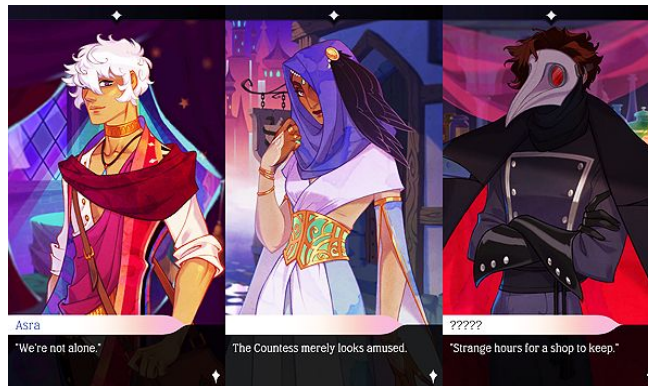
2. Inspiration/Influences

- a. Phoenix Wright: Ace Attorney [Game]
 - i. The Phoenix Wright games are some of the most in-depth and interactive visual novel/adventure games I've seen. They balance the story and interaction very well, along with consistently maintaining an intense amount of detail with every art piece in the game.



b. The Arcana [Game]

- i. The Arcana is a very popular mobile, visual novel game. It not only has unlockable levels, but they also have daily check-in events (Tarot readings, wheel of fortune, etc). The story has several branches and playable paths.



1. A specific feature that I want to similarly implement is a mini-game they have outside of the visual novel. I'm looking to add certain games onto the sci-fi tablet I'm putting into *Shattered*.

3. Elevator Pitch

- a. *Shattered* is a visual novel that falls under a unique blend of science fiction, fantasy, and mystery. There will be a unique (electronic) tablet feature for the player, in-game, that's not similar to features in many other visual novels. The story will not be focused on the struggles of minoritized groups, but an extremely important aspect of the story will be its representation of said groups (POC and LGBTQ+ in particular).

4. Project Description:

This game will be an interactive visual novel game with science fiction and fantasy roots. It's partially focused on the mystery of unknown lifeforms and the disappearance of the player character's (and their friend's) family members. That said,

it's mostly focused on balancing the city's rising panic levels while also investigating the problem. The player ultimately leaves the city, in later chapters, to further look into what's been lurking around the city, and to find where the missing submarine went.

The player plays as the main character (default named) Nova. They're immediately immersed into the game through a barrage of phone calls the character receives about the growing worries of safety in the underwater city. It will be the player's job, along with the main character's friends (Claude and Juno), to solve the mystery of what may be attacking the city and of where their family (and the other authorities) have disappeared to. This storyline takes the player through various underwater locations, from within the city to beyond it and into the depths nearby. Though this story is not heavily based on romantic options, ideally there will be options to romantically pursue different characters to achieve different endings. Additionally, there would be both peaceful and hostile choices to make on a larger scale as the game becomes more serious. This can heavily influence the game's outcome.

The first chapter specifically, however, introduces the player to the exposition of the story and the basic game mechanics. The player is given the basic factors of their predicament. They are also introduced to the two long-term NPCs who will be traveling with them, Juno and Claude. Most importantly, however, they will be taught how their tablet works, what they can do on it, and how their choices can affect the city's safety and state of mind.

5. Story Description (Brief):

- a. Summary: In the underwater city of Zale, a recently built human settlement deep below the Atlantic ocean struggles to stay together among the unknowns of the ocean. When your brother (one of the top authority figures of the city) and other members of the council go missing, and creatures seem to start lurking around the city, you and your friends are left to solve the mystery and keep the city safe. Will keeping the city together mean you have to sacrifice others?

Note - In this document, I will be focusing on the first chapter/demo of the game

- b. Ch 1 Summary: Your brother and the other council members have been missing for a week, and now you're starting to get calls about possible creatures outside the city walls. Your stress has been building and you need to talk to the only other people who might be able to quell your fears, your friends, Juno and Claude. Though you feel better after talking to them, you're still lacking solutions. You decide to accompany Claude to do his work at the edge of the city, where you see a creature you've never seen before. Is it a friend? Or an enemy?

What sets this visual novel apart from others?

1. Narrative - Representation

- a. This narrative is not a story about being a minoritized person, but it's a story about characters part of those communities. In other words, it will hopefully be genuine representation of strong characters who are female, BIPOC, LGBTQ+, and/or other underrepresented communities. [This will be showcased a bit more in the Story section of this document.]

The impact of game worlds and their storylines are harmfully underestimated by society, even by those experienced within the gaming society. Video games are not only a source of entertainment, but a learning tool, a way to explore morality, and ultimately a way to spark conversations over current societal norms. As stated in an article from Washington State University, "Video games are not just games, or sites of stereotypes, but a space to engage American discourses, ideologies, and racial dynamics..." (2003, Leonard, p. 3). It's true that many games perpetuate harmful stereotypes and ideologies. However, it's also true that they can spark meaningful conversations about it. As a BIPOC and LGBTQ+ creator myself, I wish to bring meaningful storytelling and representation to the industry. Science fiction and fantasy based genres tend to heavily under-represent certain communities. I intend to work against

those stereotypes and misrepresentations.

2. Blend of Genres

- a. This game is a unique blend of science fiction, fantasy, and mystery/adventure. These are genres that are not typically blended in a visual novel format.

3. Gameplay Mechanics

- a. [See below, under “Core Gameplay Mechanics”]

Gameplay and Story

1. Core Gameplay Mechanics

a. Sci-Fi/Fantasy Tablet Function

i. Contacts Section:

1. The contacts tab of your tablet shows the player a list of the NPCs they have met and can contact.
 - a. **Known NPCs** would have pictures and contact names; the player would be able to click on these contacts to view their personal profiles (see below).
 - b. **Unknown NPCs** would have blank profile pictures and question marks for their names.
 - c. **Contactable NPCs** would be colored in.
 - d. **Non-Contactable NPCs** would be grayed out.
2. The personal profiles of NPCs under the contacts tab show you the basic information the player has learned about that character. This information can range from simple likes and dislikes, to backstory pieces, memories together (positive and negative), and

your relationship closeness.

ii. Minigames:

1. After certain chapters and milestones, the player collects a new minigame on their tablet. These minigames can be used during breaks between story chapters to have unique interactions with different NPCs.
 - a. After chapter one, the character would collect two minigames, one for Claude and one for Juno.
2. Playing these minigames also helps fill in NPC profiles in your contact list. These profiles are meant to help players inform their decisions later on in the game. They can include anything from simple likes and dislikes to backstory pieces that can lend themselves useful to non-player character motivation.

iii. City Safety and Attitude:

1. This tab will mostly be explained in the section below. However, this section of the tablet allows the player to monitor the city's basic security and stress/worry stats.

b. City Stress and Safety Levels

One of the main goals of the game is to keep the citizens of Zale from becoming too worried or agitated about the issues occurring right outside the borders of the city. The stability of your city is measured by two bars: the worry/stress levels of the city's population and the actual level of safety the city is at (aka the actual amount of danger Zale is in). These, in essence, serve as health bars, once one or the other reach 0, the game turns to a negative story ending.

i. Serenity Levels:

1. This is measured in a similar way to a health bar. It starts at 100, and points are subtracted or added depending on certain choices presented throughout the story. The higher the bar, the calmer the citizens, the lower the bar, the more stressed they are.
2. On the electronic tablet your character carries, there is a section to monitor this.

ii. Safety Levels:

1. This is measured like a rating (Ex. Safety: 5/5). For every choice that compromises the legitimate safety of the city, the rating will decrease (in increments of half or full starts).
2. On the electronic tablet your character carries, the same section as the worry/stress levels, there is a section to monitor this.

2. Gameplay Description (of the demo)

- a. **The player's only controls outside of minigames is the left mouse button to proceed through the story and select menu options. Esc to trigger the "return main menu?" screen**
- b. The player starts at a title screen with the titles and a few buttons (will be covered in the UI section). Once they hit play, they'll be sent to a themed character customization screen where they'll be prompted to enter a name (defaulted to Nova), and choose their pronouns (defaulted to she/her/hers).
- c. Once they pass through the title screen, the screen immediately fades into the story. The player goes through a barrage of phone call dialogue before receiving news of an undeniable problem on the perimeter of Zale. This causes a new sequence of alarmed phone calls that the player character tries to endure before ultimately hanging up the phone and moving away from their desk. After taking a moment to breathe, the player's character decides to go speak with their friends, Juno and Claude, to calm themselves down. As they are leaving, their

cellphone appears on screen to show that someone is calling them. They wonder whether or not they should answer the phone, leading to their first decision.

- d. The player can choose to either decline or accept the call, and doing so will result in a particular change in the city's stress-level.
 - i. If the player accepts the call, they will be notified of an increase in the city's serenity levels.
 - ii. If the player declines the call, they are notified of a decrease in the city's serenity levels.

Either way, the player will be prompted to inspect their tablet, and a skippable tutorial will be conducted on what the Serenity and Safety meters are, and how player choice affects them.

- e. The player is then directed back out of the tablet screen and through the narration of their decision. This takes them to the next scene, Juno's office. The player meets Juno and goes through dialogue with her. After their dialogue, when the player goes to leave and find that Juno isn't following them, they are presented with another choice, call her name or drag her chair with them.
- f. The player makes their choice and follows the story path accordingly. Soon they reach the third scene, where they are greeted by an empty laboratory. The player is given a choice on how to approach the situation, lure their friend (Claude) out by poking fun at him and his cat, or wait for him to finish his work and reveal himself.
- g. After making this choice, the story starts to pick up the pace. The player plays through more exposition that leads up to the rising action of the story.

Not every choice in the game will lead to an entirely different branch of the story. Similar to what we learned about in class, *Shattered* uses the illusion of choice to expand its gameplay while keeping the narrative from being overly complex. For many audiences, "...it's the 'illusion of choice' that we [the designers] often go for. Many games featuring choices that affect the story often 'pinch back' to a singular result (sooner or later)..." (2017 Healy). This was an

important part of writing the script to *Shattered's* demo. Though many of the illusory choices will still impact gameplay (specifically the measurement of serenity and safety points), the story would stay along mostly the same path, except for a few branches towards the end.

3. Story (Detailed)



a. World Building

By 2640, the human population has expanded its outreach, both on Earth and throughout the Galaxy. Settlements on other planets, sky cities, and underwater towns are common in this futuristic realm. However, though expanding and settling at rapid rates, there are still many unexplored parts of the world and its universe. Our story focuses on the underwater city of Zale, a recently built human settlement deep below the Atlantic ocean.

- Zale has been running smoothly for about a year, and so have many of the other underwater settlements. However, far beneath even the deep sea cities that have been built, there are mysterious, unknown lifeforms lurking in the watery depths. These mer-creatures and mutants are not necessarily looking for conflict, but have been displaced and disturbed by the new, unannounced presence underwater. Some are angry, some curious, others scared, and overall, they are seeking answers to their worries. They begin investigating these new humanoid creatures in their large glass bubbles, wondering if they're dangerous or friendly.

b. Main Characters

PC (Player Character)/Nova Callum:

The PC/Nova is the younger sibling of Reid, the Zale city council chairman, and is taking the position of chairman while he's away. Though they are from a middle-class family, their parents in minor government positions and their family has been helping plan the creation of underwater cities for quite a few years. Their brother, Reid, has always been particularly invested in this work because of his deep love of the ocean and its mysteries. So when the opportunity arose for him to help overlook Zale, he immediately took it. After seeing their brother so excited, and after he told PC/Nova about how it was finally a chance to make something of himself away from their parents' work, PC/Nova began thinking about going themselves. Worried about their brother's safety and wanting to step out of their parents' shadow for a while, PC/Nova asked their parents if they could accompany him. Their parents agreed under the condition that PC/Nova stay safely within the city bounds and that they leave at the slightest hint of danger.

Juno Perez:

Juno is the younger sister of Bianca and the head of security in her stead. She's the daughter of a moderately wealthy family that invested in underwater settlements, and thus, she and her sister are part of the council running Zale. Her parents do not live

in Zale, as her mother is the CEO of a rather important company on the surface, and her father is a government official on the surface. Though Bianca was supposed to help govern this settlement, their parents actually urged Juno not to move with her because of the dangers. However, Juno didn't want to leave her sister alone, nor stay with her parents, so her choice was obvious. That said, she rather despises politics, formality, and her own wealth, so she avoids bringing them up as much as possible. Although she acts inept/recklessly, Juno is rather clever and astute, when a job needs to be done, it's done effectively. She works hard, even if it doesn't seem like it, especially if she's passionate about something.

- Personality: Very friendly (extroverted), cheeky, carefree, clever, intuitive, sharp-tongued, disorganized, reckless, and easygoing
- She has brown skin, dark brown eyes, and curly, short, dark dark brown hair w/ dark purple tips and an undercut [Race: Black, Age: 19, Gender: Female, Pronouns: (she/her/they/them), Sexual Orientation: Pansexual]

Concept Sketch:



Claude Murdoch:

Claude is an engineering and technological prodigy. Though he doesn't come from a particularly wealthy or notable family, his parents were recognized and acclaimed astronauts. He grew up fascinated by space and the many wonders his parents described to him, but decided he'd keep his feet firmly on Earth after his parents were killed on one of their expeditions when he was 10. Since then, he's grown up with his aunts and their children. His aunts, both working in STEM fields, continued to nurture his love for engineering and technology. He immersed himself in the knowledge, graduated early, and began his fast track to leaving his mark on the world with his creations. After graduating from college, he was offered a position working on and building underwater settlements for humans. After the construction of a few, and despite his nerves about what happened to his parents, he volunteered to be part of the first settlers to move in. Sensing these nerves, one of his cousins, Liam, offered to move with him. Now they live in Zale together, working as chief engineer and head scientist. He's a workaholic, but it's usually because he enjoys what he does. Despite his seemingly egotistical nature, he's actually quite selfless and will work himself to the bone if it helps his friends.

- Personality: Friendly (but slightly introverted), cold at first glance, snarky, organized, ambitious, somewhat impatient, absolutely brilliant (very book smart).
- He has pale skin, bluish-green eyes, and shoulder-length, dark dark blue hair, [Race: White, Age: 20, Gender: Male, Pronouns: he/him, Sexual Orientation: Bisexual]

Concept Sketch:



c. Other NPCs (only those that show up or are mentioned in the demo)

Clawde (the cat):

Clawde is Claude's cat (named after him).

- Gray and white fur, right eye is orange, left eye is dark green

Concept Art:



d. Chapter One - Up to the end of the prototype (in-depth)

i. [Note - Nova and she/her pronouns are used in this story explanation]

The scene opens in an office at a desk with a computer and several phones or a call panel. Nova has been getting calls from worried citizens of Zale all morning and throughout the past week. The audience finds out that she is standing in as an authority figure while some of the main authority figures, including her brother, are away. We quickly find that she is feeling extremely overwhelmed by the situation. She is unable to give the callers straight answers and seems to already have been nervous about being temporarily in-charge. As the calling continues, we reach a climax of the anxiety when a caller reports a legitimate water leak in the city border. This sends the city into a panic. In fear of being trapped in a drowning city, Nova starts to get more alarming calls, demanding answers, until she finally reaches a breaking point and ends all of the calls. Deciding she needs a break, she goes to find her friends.

Nova heads to the security office to find her friend, Juno. Acting as head of security in her sister's stead, Juno is introduced as a rather easygoing, cheeky individual. Nova walks in to see what appears to be Juno slacking off, playing games and music on her phone, and gives Juno a slight lecture about it. They have a conversation about their predicament and are able to take a moment to laugh at their seemingly hopeless situation. This breaks the tension a bit and introduces the two's friendship. Though Juno is portrayed as somewhat careless, her dialogue shows her using that trait to counter Nova's nerves and calm her down. Nova then gets back on track and decides to drag Juno along to find their other friend, Claude.

They head to Claude's lab and find it in complete disarray. They comment on the strangeness of the disorganization due to the impeccable cleanliness Claude tends to display. After a moment of

looking around the lab without finding their friend, a cat appears from behind some of the stacks of items around the room. Nova introduces the cat as Clawde, Claude's pet. After seeing Clawde and realizing that most likely means Claude is in the lab, Nova waits or finds him and he's introduced into the dynamic of Juno and Nova. The audience learns that Claude is an engineer, and supposedly a prodigy in his field. Juno and Claude quickly make playful, sarcastic remarks towards one another, establishing their unique friendship (with the essence of frenemies).

After this joking dynamic dies down, however, the serious topic and elephant in the room is revealed. They are all stressed, tired, and worried about the situation at hand. They inquire about Juno's progress in contacting the missing authorities or the surface, and it is revealed that Juno actually hasn't tried calling yet. This causes Claude to lash out at Juno for her allegedly carefree, slacker attitude. Juno attacks back with the fact that she's not slacking. She explains that she just doesn't think that the group made it to the surface, given the timeframe and other variables, and that she didn't know how to deal with that. By calling, all three of them know that the situation would become a reality. Nova's brother, Juno's sister, and Claude's cousin would all be declared officially missing and possibly dead. Juno lets this fact sink in, and then storms out of the tense room. ~End of prototype~

Assets/UI

1. User Interface

a. Title Screen

i. Buttons

1. New Game

- a. Opens a new game from the beginning of chapter 1

2. Load Save
 - a. Leads to a log of every save you've made
 - b. The logs have a thumbnail of the screen you were at when you saved, along with the date, time, and chapter
3. View Collected Memories
 - a. This loads a gallery of "memories" you've collected during your games, it's cumulative and does not reset
 - i. These are the memories mentioned under the tablet game mechanic explanation
4. Settings
 - a. This leads the player to a settings page, where the sound can be adjusted, voice acting can be turned on or off, and other display settings can be changed, as well as the language of the game.
5. Exit (exits the game)

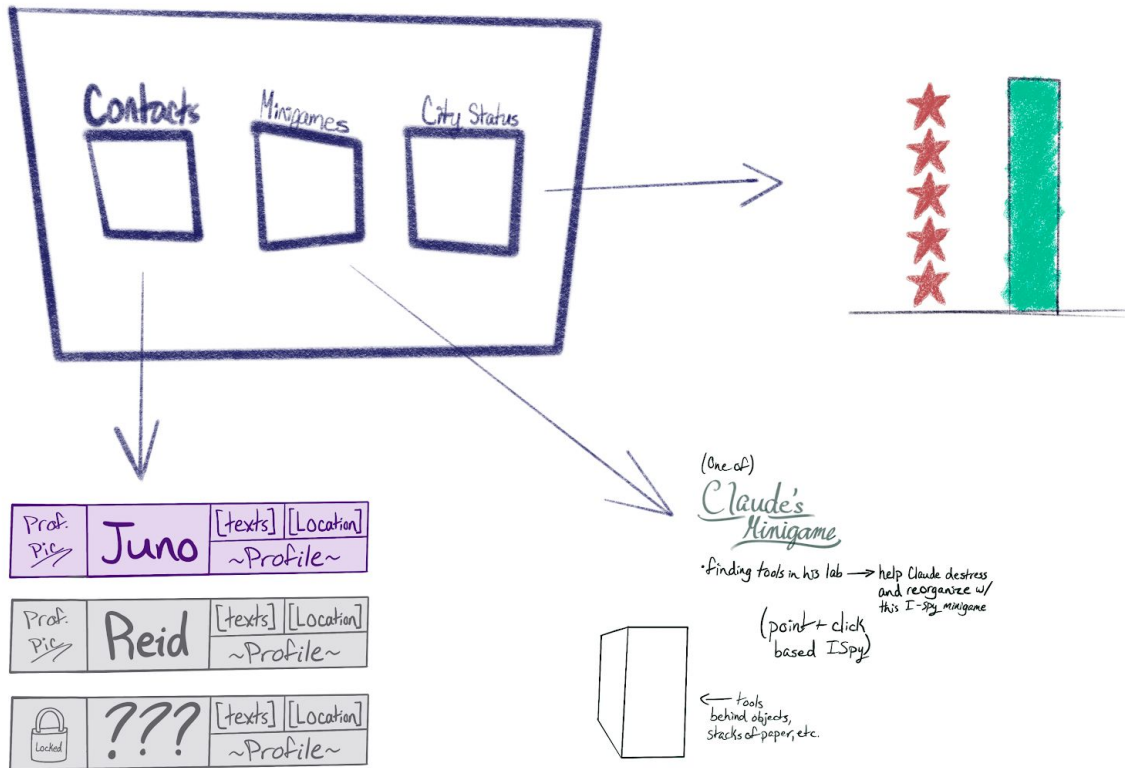


b. During Chapters

- i. Background made according to scene
- ii. A dialogue box at the center bottom of the screen
- iii. Characters placed on the right or left if they are being interacted with
- iv. Buttons:
 - 1. On the edge of the dialogue bar
 - a. Save game
 - b. Load Save
 - c. Main Menu
 - 2. Its own graphic
 - a. Tablet (in the mid-bottom right corner of the screen
 - i. When clicked on, the screen enlarges

c. Tablet Screen

- i. Three tabs
 - 1. Contacts tab
 - 2. Minigames tab
 - 3. Serenity and Safety Levels Tab



d. Loading between chapters

- i. Between chapters, the tablet screen comes up and shows you which new minigames have become unlocked

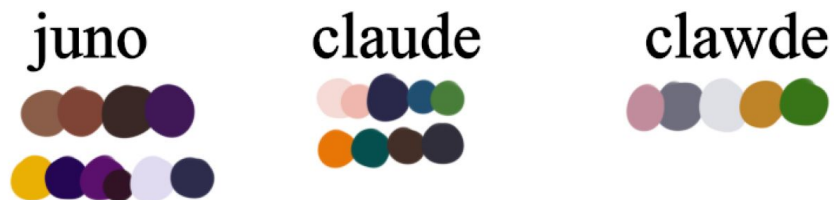
2. Sound

- a. The music would switch depending on the chapter or activity, but the general tone throughout the game should be somewhat ominous.
- b. There will/would be voice acting for every NPC's dialogue, and occasional other interactions.

3. Art - 2D

a. Coloring and tone:

- i. The color scheme of this game should be vibrant and contrasting, there are monochromatic palettes for certain backgrounds and oceanic settings, but for other aspects, especially character design, there should be a lot of contrasting through complementary colors. It's a futuristic, galactic tone, but underwater. The current character color palettes can be seen below:



b. Backgrounds:

- i. In chapter one, there are 3-4 different backgrounds needed
 1. Nova's office

Reference:



2. The security room, aka Juno's office

Reference:



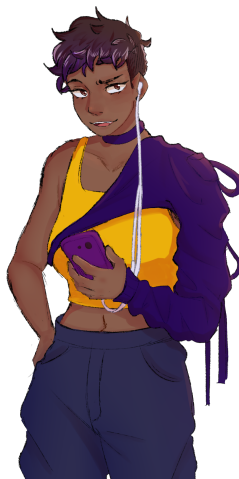
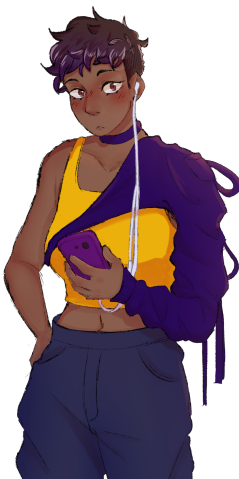
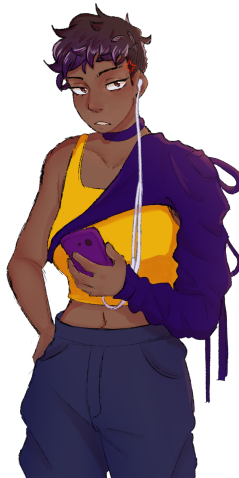
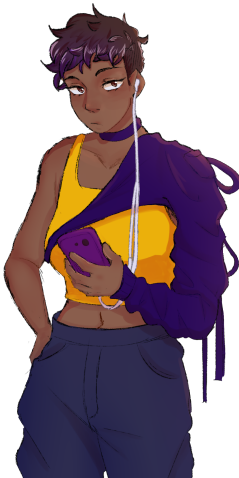
3. Claude's lab - Usually impeccably clean, but currently completely disorganized due to his stress. There should be a visible cat tree or cat toys for Clawde in the lab.

Reference:



b. Character Sprites (art done by @knauxetic on instagram):

Juno:





Claude:



Clawde:



Playtesting my prototype:

I unfortunately only got one chance to playtest my game with a couple of other people. However, the feedback I gained was extremely helpful moving forward. I learned that it was fairly easy to misinterpret the narration with the type of text box I was using. It was a simple graphical switch, but I'm still working on adding other ways to create a more distinctive divide between dialogue and narration without breaking the fourth wall. My test players also mentioned the need for more dynamic graphics throughout the first sequence of dialogue. I added more to the art by adding a call panel on screen, a phone sliding on at the end of it, and various other