

## Technical Design Document V2 - Mystery Adventure

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# ***KIMMIE REID: SUBTITLE TBD***

### **Overview:**

Kimmie Reid (*Subtitle to be decided*), is a mystery adventure game set in late-2000s Los Angeles. The player controls Kimmie Reid, a popular celebrity waking in a dream-like reflection of Hollywood devoid of any signs of life. In this alternate world, she will use the camera on her flip phone to gaze into a parallel spirit realm to witness events from the past, and solve puzzles that cross the planes of space and time.

### **Requirements:**

In line with the main features intended for the game, players will explore areas in the "physical world", controlling protagonist Kimmie's movement from a third-person fixed camera perspective through enclosed areas (such as but not limited to, building interiors, public parks, street blocks or her own home), that are interconnected via a basic fast travel system made available through her phone. The camera angles will change mimicking a style derived from the late-90s to early-2000s survival horror titles, with our main inspirations being *Resident Evil: Code Veronica X* and *Silent Hill*, which feature 3D environments while still utilizing fixed camera angles.

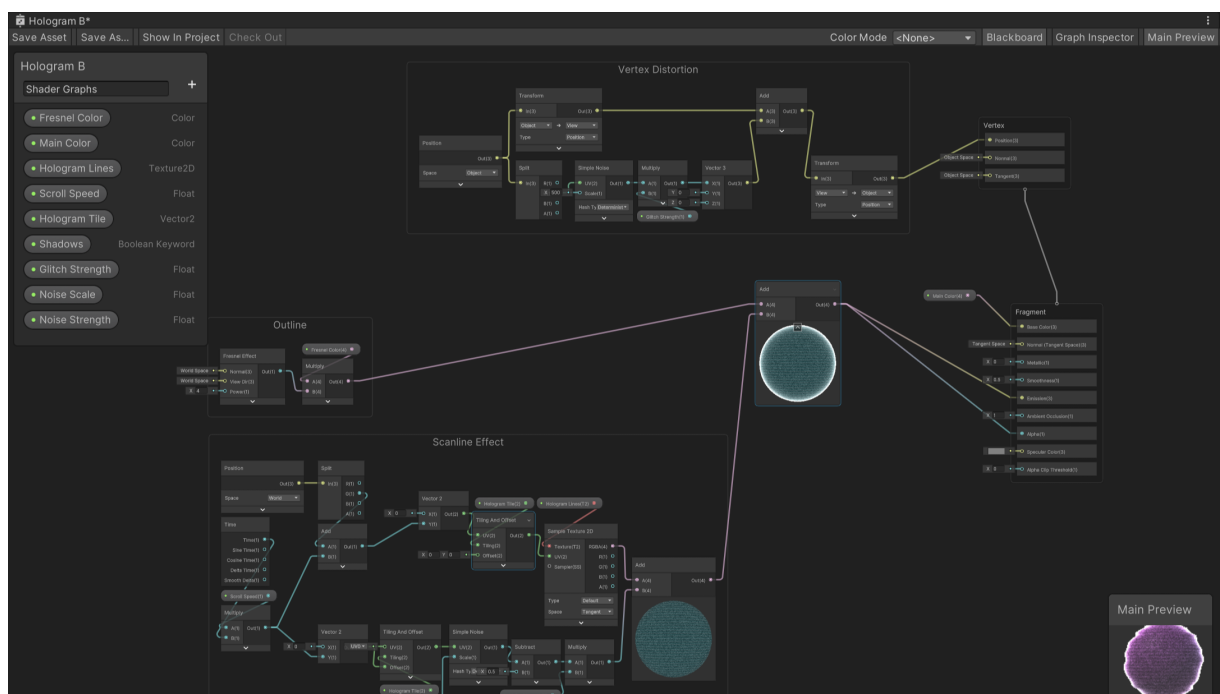
Using Kimmie's phone, players will typically be able to access the 'Photo Realm', which is a space parallel to the "physical world", with the main difference being its more abstract appearance and first-person camera perspective -- literally looking through Kimmie's eyes as she navigates the Photo Realm using the camera viewfinder on her phone's screen.

The camera mechanic is crucial to our game to encourage freedom of visual perspective and will act as an 'Inventory' system to collect important items within the game's scenes, while also acting as triggers to progress through the game. Players will take pictures of 'points of interest' using Kimmie's flip phone camera -- which can see into the "photo realm". Images of the hidden items from the Photo Realm will be saved to an in-game gallery and categorized by a PhotoInfo class associated with each -- which we call a 'metadata' system. Part of the information collected in 'PhotoInfo' analyzes objects within range of the camera using a combination of ray casts and colliders, and then attaches the appropriate context to a photo/gallery entry.

**The Drama System:** We have implemented a feature we had coined "The Drama System" in order to help manage the overall progression in our game and to track "Quests". With it we are able to set objectives that require the completion of various tasks or triggers, which will add to the respective quest's "Progression" integer and be compared to the total number of tasks in a given Quest.

As part of these tasks, this system also instantiates and manages various prefabs when necessary. When the count is reached a bool will be triggered to complete the quest itself. We are using the term "quest", but in practice this system will be used for all overall progression. External code can

**Shaders:** We have developed two main shaders as types of signs and feedback for the player. A 'hologram' and an 'outline' shader. The hologram shader in particular is important due to the implementation of it as a means of signifying and singling out spirit entities, while the outline shader is to serve as a means of outlining points of interest for the player in the overworld. These shaders can also be used to make various materials in order to differentiate via the color and opacity of the shader to determine importance and other necessary factors.



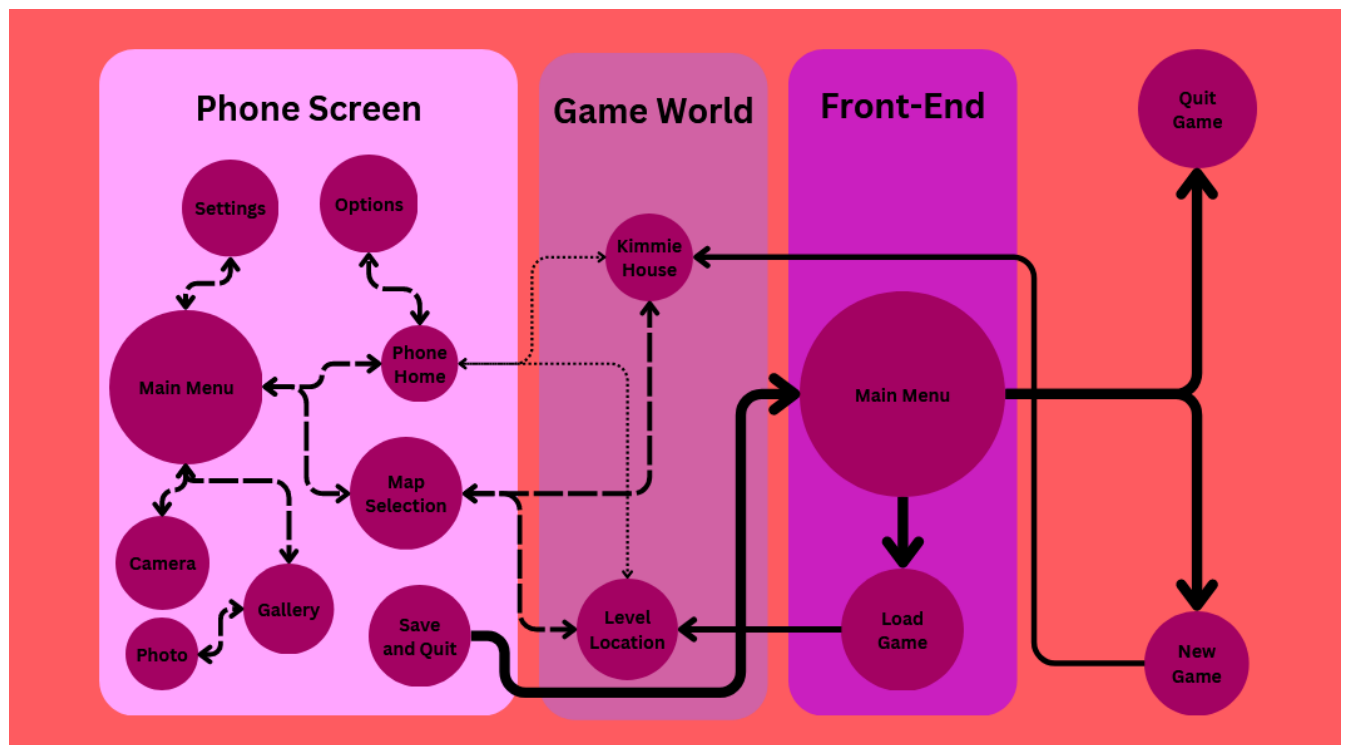
## Non-Goals:

Initial brainstorming floated the idea of adding a form of combat into the game, but as of right now, this is considered outside of scope as it is most important our more experimental approach to 'photography-based gameplay' and adventure game puzzles is executed effectively.

A potential combat system would have the player combining special keywords or phrases to create 'spells' to fend off hostile spirit entities in the physical world. However we are still interested in pursuing a more stripped-back approach to dangerous entities to create additional tension for the player.

The features present on Kimmie's phone also have the potential to be expanded immensely, as in the case of item descriptions or an in-game encyclopedia/codex, flavor text can be communicated if the player chooses to "upload" their taken photos to an in-game social media app present on the phone, with comments posted by mysterious entities providing flavor text or lore details.

## Screens:



The plan is to have a title screen, in the prototype currently under work we likely will only have two areas, maybe only one. There is a basic fast travel system currently present through phone which may be expanded down the line, and a pseudo social media mechanic that serves as a story and hint vehicle.

The player can choose to start the game in the title screen and handle other possible options in a final version, from here once they start they will enter an intro sequence to convey some of the story

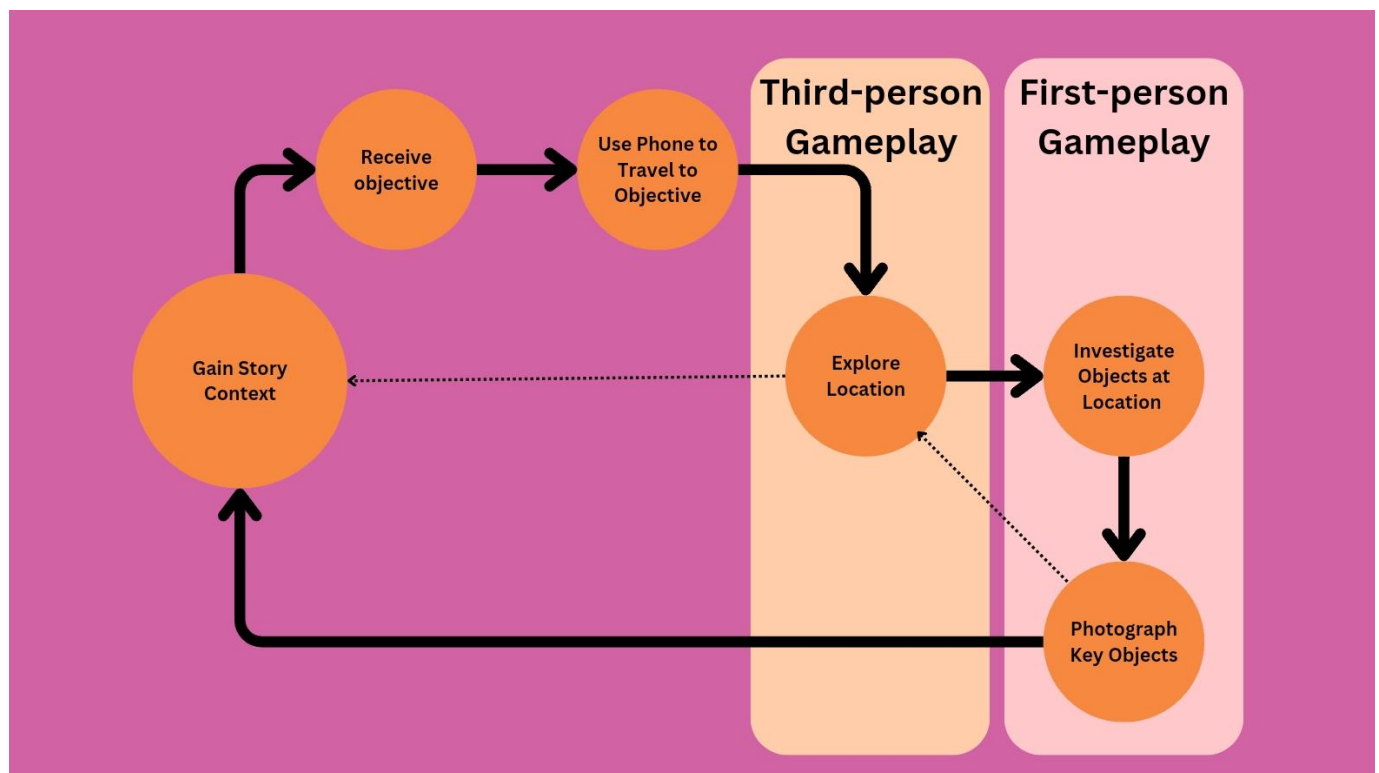
info (this may not be fully present in prototype). The player then begins in Kimmie's bedroom in a casual outfit.

From here they should already be able to access the phone which would have various options such as taking photos, posting on social media (the social media system is not currently implemented however), and perhaps map selection. This room would serve both as tutorial and main hub the player will return to later.

The goal is for the phone to have the ability to post photos taken in the main map to a social media-like app, from here "AI entities" will post messages from a preset pool based on what objects are in the photo, or other information within the PhotoInfo class' metadata, like the location. These entities will ideally also have schedules and later personalities when interacted with in a more complete version. When taking photos, the player looks through the phone screen in first-person, and when they are not using the phone, the level navigation plays out in third-person using fixed camera angles. The phone will have its own UI separate from the main game UI.

There are plans for a loading scene that involves a metro system, which would serve to indicate the transition from phone fast travel to location. Only for said load screen to at some point in the narrative would derail and become a level in itself. This is currently not in scope though.

### Game Flow:



## Tools:

- For this project we are mainly sticking to Blender for asset creation, because it is free and easy to use. (**Blender 4.0.1 LTS**)
- For the Game itself we are using Unity, specifically an URP scene so as to not overwhelm lower powered PCs in the project team and without. (**Unity 2022.3.11f1 LTS**)
- 2D concept work is being handled both via Clip Studio Paint (**Clip Studio EX 2.0**) and Photoshop.
- We want to try to make use of various things taught recently such as classes, dictionaries, lists, etc. for managing various aspects such as the social media responses, the camera photo storage and classification of camera objects..
- We are using UnityDevOps for the overall repository management of the project.
- We plan on building blockouts in the game world through use of probuilder and other tools in Unity Directory like Visual Graph, Shader Graph, etc.
- Similarly add-ons in blender that facilitate the rigging, animation of assets, as well as the generation of Modular assets to populate the world.