Document

Team Hungry Project Caterkiller Documentation

Created by Anthony Le, Hansen Han, Isabella Olivieri, Cole Schantel
Link to canvas assignment

Experience Overview:

Join Detectives Jiminy Cricket and Itsy Bitsy as they uncover a visceral and horrifying case. This is a linear narrative experience with four different endings, each ending is dependent on the player's actions.

A crazed psychopath has started killing dozens of innocent civilians in the subways of New Bug City, and it is up to Detective Jiminy Cricket and Itsy Bitsy to solve the case before any more tragedies ensue.

A brief description of the primary gameplay mechanics:

- Clue detection: the player must look at a highlight clue for a certain amount of time to progress
- **Event triggers**: When the player walks into a certain location, it will activate certain events such as dialogue or cinematic sequences.
- Dialogue system: the player's choices affect the outcome of the experience
- **Gun mechanics**: the player must hold back from shooting their partner, Itsy Bitsy.

The player will play the game as Detective Jiminy Cricket, and as he talks to Detective Itsy Bitsy, the player is given choices that will determine Jiminy and Itsy's relationship to one another.

Neutral Ending: If the player has good relations with Itsy Bitsy, then the game will trigger the positive karma route.

Bad Ending: If the player chooses the bad relations with Itsy, then the game will trigger a negative karma route.

There is a secret gun hidden in the very front of the subway train which opens up two new endings.

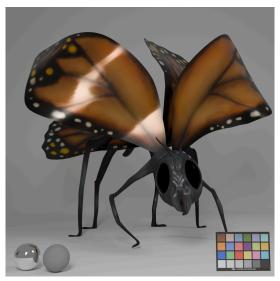
Good Ending: If the player reaches the butterfly intro sequence with the gun, then the good ending will appear with no tragic death.

Worst Ending: If the player decides to shoot Itsy, then when the player reaches the end, they will experience the worst ending in which everybody dies.

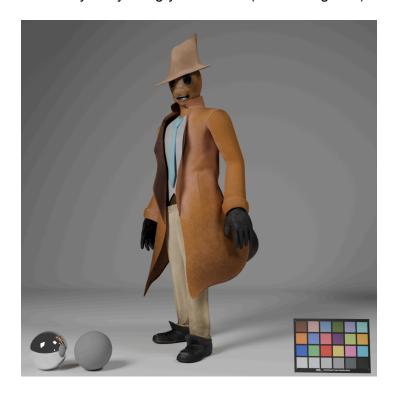
Link to Comprehensive Game Flow Chart Image
Link to Endings Flowchart

Screenshot Documentation:

Characters



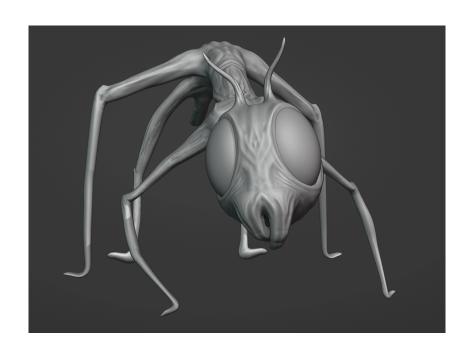
Butterfly/ Very Hungry Caterkiller (Main Antagonist)



Detective Itsy Bitsy (Companion)



Ant Npc (used for dead bodies and neutral ending cutscene)





Clay In Progress Sculpts

Environment



The subway station, modeled by Anthony and Cole. Based on the concept art created by Isa.





The subway train, modeled by Anthony and surfaced by Anthony and Hansen. Concept art by Isa













Character Concept for Itsy Bitsy, Main logo design & menu environment, modeled and surfaced by Hansen.

City backdrop created by Isa.



UI buttons created by Isa.



Icons created by Isa.

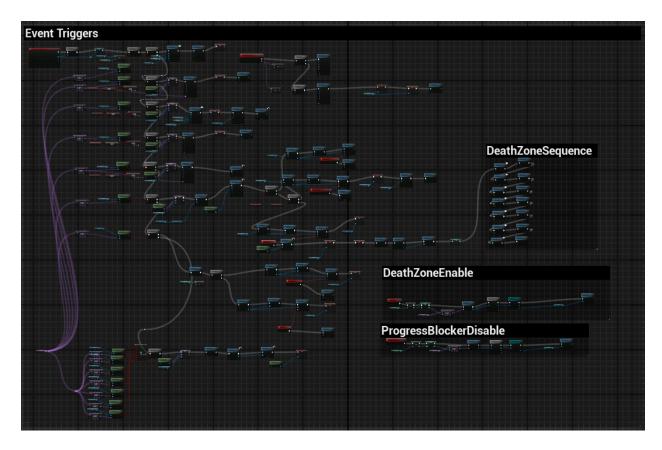


Blueprints

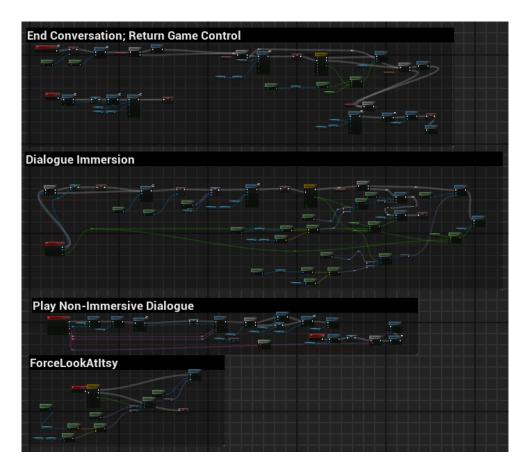
The majority of the game's logic takes place within the character blueprint, the dialogue blueprint, and Itsy's NPC actor blueprint.

There are several core functions in the character blueprint that drive the game's progression:

- Event triggers
- Clue detection mechanics
- Dialogue system and immersion
- Gun mechanics



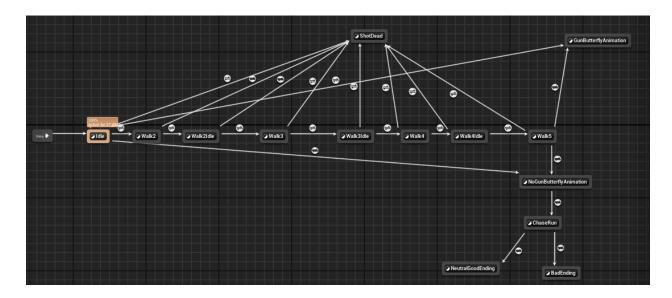
This is a node tree that comprises the logic behind the event triggers. When the player overlaps with an event trigger actor in the environment with a custom assigned gameplay tag, it will execute a string of code tied to that tag.



This is some of the core logic behind the dialogue, the majority of the dialogue functionality is written within Itsy's NPC actor and the Dialogue Base blueprint.

The immersion refers to when the player has entered choice dialogue, and the camera is forced to focus on a particular subject.

There is also a non-intrusive dialogue where it will play dialogue without the need for choices and maintain regular gameplay input.



This is the graph of Itsy's animation through the game. We decided to have Itsy's animations be played sequentially in order to save time from having to figure out NPC pathing and non-root animations. This method allowed Itsy's animation to be created as one single sequence and simply cut up the animation into several different sequences based on progression blocks. Idle animations and the death animation were layered additively on top of the frozen last frame of each animation.



The gun was very straightforward, changing visibility of a light source and a muzzle flash image upon the player's click input. If a line trace hits Itsy's NPC actor then it will activate the bad ending and his death animation.

Individual Contributions:

- Cole: Animations, Character Models, Rigging, UI, Sound Design, Voice Acting, Script
 Writing
- **Anthony**: Programming, Modeling, UI/UX, Sound Design, Level Design, Technical Design, Voice Acting, Script Writing
- **Isa**: Concept Art, UI Textures, 2D Animations
- Hansen: Concept Art, Surfacing, Modeling, Logo Design

Player Feedback:

Issue: Players in older builds were confused on how to progress and what to do

Answer: so ui indicators and progress blockers were added

Observations:

- Players liked the multiple endings and figuring out how to get them
- People would die in the train chase a lot because it was hard to see how fast it was crushing without looking back, and looking back usually made you slow long enough to lose
- People liked the style and visual appeal of the game, people really liked the ending animation screens

Individual Reflection:

Anthony Le:

Overall, I believe that this project was very successful and I am satisfied with how the end result came out to be. Our premise seemed to be pretty simple but it turned out to be much more of a technical challenge that I had to overcome. Were it not for the need for programming the logic of the experience, it would have been a much smoother ride trying to develop this experience.

As I had never done Unreal blueprinting before, I had no idea what to expect regarding balancing ambition for the project and technical (or time) limitations. Although me and Cole, who first came up with the idea for the project, thought that the structure of the game was not too ambitious and would be simple to implement, it ended up being much more of a burden on me as the programmer as I had to program everything.

If things had turned out differently, I would have loved to be working on more models and animations instead of spending so much of my efforts on this project in the blueprinting menus. This was cascaded with the fact that I was additionally doing all of the coding for the other studio class, and so it just became an incredibly draining activity to be scripting almost everyday for the entire second half of the semester.

Given the chance to start these kinds of projects again, I would have definitely spread out my responsibilities in balance with all of my other responsibilities in other classes. This would have definitely resulted in a reduction of the scope of the project, but would have been a far smoother development experience and better for my health both physically and mentally.

I loved working with Cole, Isa, and Hansen on this project and would absolutely work with them again on future projects. Their work is very high quality and were committed to their roles on the project.

Cole Schantel:

https://docs.google.com/document/d/1GX2CLcxxtWcayLOAqAB9DIG-0kFVilhi1mHXBmk4E_E/edit?usp=sharing

Hansen Han:

I had a valuable experience and learned a lot from each team member through this project. As we worked on the project together, I felt that all the team members had excellent skills and expertise. Their works were very creative and artistically inspiring to me. As a result, I was able to realize my own shortcomings and understand the areas that need to be improved in the future.

While working on it, I tried many new attempts, but I also experienced many failures. However, the feedback I received from the team members in this process helped me greatly to solve and develop problems. In particular, I was grateful for the attitude of actively trying to help from my team members whenever I asked them about the things I was struggling with. In addition, this project provided me with the opportunity to learn and utilize various tools and technologies. I tried to meet the requirements of

the project by using tools such as Maya, Blender, and ProCreate as well as the Unreal Engine. If I have an opportunity to be in a project again, I would like to deal with the program tools more skillfully and be more helpful to the team. Also, It would have been better if I had made additional props for the subway, such as electronic boards and information signs.

In conclusion, this project enabled me to broaden my artistic perspective and grow my personal skills beyond just performing tasks. Also, I was able to gain knowledge about the pipeline of game production which I had no experience with before. Through collaboration with Anthony, Cole, and Isa, I was able to learn a lot and gain confidence in my future challenges. I feel really grateful to all the team members and I would like to work together again if there is an opportunity to collaborate.

Isabella Olivieri:

This project was my first time ever doing environment art, and I realized that I really enjoy it! I learned how to paint more cohesive lighting, especially with the subway interior concept art. Also, with these being my first environment illustrations, I feel like I learned how to better simplify background elements while emphasizing details closer to the viewer. Designing the UI buttons and team icons was also a fun new learning experience—I enjoyed having to make something simple yet cohesive with the rest of the 3D background.

Working with a team and following a production schedule similar to a real project timeline was a great learning experience. I felt as though I got to experience something close to what it would be like to work on a "real" industry project, which I felt was really valuable.

If I did the project again, I would have liked to make hand-drawn textures like blood and silly posters/ads on the inside of the subway train and subway walls. I would have also liked to learn a bit of the programming, as I have no current experience with it and feel like understanding the basics could help with future projects. Overall, however, I would manage my time much more efficiently—I felt pretty overwhelmed with this and my other classes and failed to properly plan and organize my work, therefore I completed less than what I think I could have achieved given proper planning.

Everyone on the team communicated professionally and was open to feedback, making the project truly feel like a team effort. The work produced by everyone was exceptional, and was completed efficiently and with high quality. I'm grateful to have worked with Anthony, Cole, and Hansen and would be more than happy to collaborate again with them on future projects!