

Game Design Document

Game Title: Buggy Town!

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1. Game Description/Summary

Buggy Town! is a collection of single-player minigames designed for younger players. This casual game aims to be an introduction to video games and focuses on easy-to-understand rules and design. *Buggy Town* tells the story of a newcomer to a small, close-knit community. Andy, the Ant and player character, just moved into the house down the path and can explore the town for friendly folks to interact with. The residents of Buggy Town are welcoming but aren't afraid to put a newcomer to work. Be expected to help them out while receiving gifts and furniture to decorate Andy's new home in the town.

Throughout the town, you'll meet the honey shopkeeper Beez the Honey Bee, the café owner Polly the Polyphemus Moth, and the farmer Rhino the Rhinoceros Beetle. Help Beez in the shop by stacking some products for her in the window; be careful, though, as they aren't always the easiest to keep standing up. Assist Polly in the café during a lunch rush before it's too late; match the orders to the customers before they get ticked. Team up with Rhino on the farm to wrangle the fleas and catch what you can before time runs out. Don't worry if you miss some; Rhino has no hard feelings.

After helping out the townsfolk, mosey on down to your new house, and you'll be able to design and layout what you've received from your neighbors. Not enough items yet? Don't fret! There are still more days when the townsfolk need help. Stop by the shops and see if you can score better than before, and you might be able to gather more furniture to upgrade your home. If designing homes isn't your thing, check out the new sticker book and see what's left to collect. Depending on the score you grabbed in one of your neighbor's minigames, you may be in luck getting a shiny new addition to your collection. Usually, they carry about three on them, so try checking in with them more than once to gain those stickers!

2. Target Audience/Platform

The game targets a younger audience by offering a simple game experience to expose them to gaming. It offers replayability and easy-to-learn mechanics for young minds to understand. Ideally, the game's full release was initially on itch.io for web browser play. Still, consider expanding it to other devices like iOS, Android, or even Nintendo to captivate a wider audience of kids. These platforms would fit the audience because children typically have access to these devices compared to bigger consoles like PlayStation, Xbox, and computers since adults tend to be geared towards these devices instead. For a sense of nostalgia, however, the browser PC version would help kids understand how a mouse and keyboard can function together and give help with dexterity. Most adults nowadays grew up with Windows Vista and Windows 7 games. *Buggy Town* can offer the same experience for their children as their parents did for them. Moreover, if most of the audience is playing on a phone or tablet, they'll just be tapping and dragging their finger across the screen. The PC and the Nintendo Switch release would hopefully help increase engagement in the game and provide a better experience.

The game would be rated E for Everyone for marketing purposes since it's developed with children in mind. Most of the mechanics and story are straightforward and have little complexity in their understanding. All three minigames are elementary enough for kids to understand without a parent or guardian to work with them side-by-side. *Buggy Town* can provide children with independence in their activities while assuring parents that it doesn't expose their children to potential harm in terms of development or judgment, unlike other mainstream games on the market.

3. Game Story and Characters

We begin our story overlooking the small forest town of Buggy Town, USA. Here, we'll find the local townsfolk carrying on their daily duties. Andy the Ant is a recent tenant from the big city looking to make his way in the world. After hearing his grandfather grow up in this town, he wanted to see what all the great stories were about. Unbeknownst to Andy, the city isn't quite what it used to be. After settling in a small house just down the road from the center of the town, Andy makes his way over to meet some new people. Here, he comes across a few neighboring townsfolk. Beez, the shopkeeper, runs the Honey Pot that supplies everyone with fresh local honey. Polly, the café barista, keeps things lively, running the mom-and-pop café that's been here for generations; pretty big shoes to fill, Polly! Last but not least, we meet Rhino, the farmer; he's almost always the friendliest face you'll see when visiting and always tries to put a smile on people's faces. Andy can't wait to meet everyone and see what this little town is about.

Upon first look, the player has about three choices on the first day. They could take Andy to Beez, Polly, or Rhino for an initial meet and greet since they aren't open for business, but they could implore him to visit the next day instead. During the first day, the player can meet with each of the different NPCs, but it doesn't matter in which order they choose to do it. This theme of deciding which to do first isn't too important to the game overall; it's up to the player which character they want to talk to first before continuing to the rest of the game. Throughout the narrative, the player will notice that nearly all of the choices to make are preset and don't require much thinking, an example being that the first day's goal is to set up the NPCs and what Andy, the player, should expect in the coming week. The idea of meaningful choices isn't found in *Buggy Town!*, since according to Morrison's article "Meaningful Choice in Games," meaningful

choices require awareness, gameplay consequences, reminders, and permanence (Morrison 3) as the player progresses through the overall narrative of *Buggy Town*, limited agency and meaningful choices await the player, as everything is predetermined from the beginning in their experience.

Let's look at Andy's story; the main character goes on an adventure to find himself amidst his grandfather's old town. Since Andy grew up in the big city, he isn't exactly accustomed to the simple life of living in a small rural village or making close-knit connections. Once Andy makes it to Buggy Town, he realizes that all he has is the clothes on his back and an empty living room. Andy opens his suitcase to find a bundle of cookies from Mom, a couple of photos from Dad, and grandpa's old scrapbook from when Andy was a kid. Looking through the book, Andy reminisces his stories and memories with his grandpa. One of the pages seemed to stop abruptly; he didn't remember the book doing that. With newfound knowledge, Andy decides to attempt to finish what his grandpa started and complete the book with his adventures in Buggy Town.

With this begins Andy's new adventure of exploring the town after taking the morning to move in. The player can interact with any different characters, regardless of order. Irrespective of the character spoken to, none of the other NPCs will acknowledge if they talked to them first, second, or last. When the player starts to speak to Beez, she greets him with a simple hello and talks about how he's new to town. Once the player starts talking more with Beez, they discover that Andy is a silent protagonist and won't be speaking much throughout the narrative. The more you talk to Beez, the more she tells you about her shop, the Honey Pot, and how she sells fresh jars of honey every morning. Beez then hints at the fact that Andy can always come by and help her out with getting the jars in order. Walking further into town, the player will come across the

character Polly, who runs the café named Nectar. Polly is more on the sheepish side, which the player can take notice of with the three ellipses at the end of each of her sentences. She tells the player that the café is closed because it is her day off. Polly also hints to the player that since it's the only café in the area, she could use the help if he can. Once the player walks to the edge of the right side of town, they'll come across Rhino, the farmer. He begins to explain to the player that he wrangles up nearby fleas that are pestering the city, and he could benefit from someone like Andy coming by the ranch and helping out. Once the player has talked to all the characters, it begins at nightfall and ends on the first day of Andy's new life in Buggy Town.

The next day brings new information to the player about the minigames each character offers for Andy to help around the town. What makes it even more exciting is that after completing these minigames, the player is rewarded with different pieces of furniture to help add a personalized touch to Andy's house. Initially, players can engage in minigames or strike up conversations with the NPCs. After the first encounter with each minigame and NPC, players can revisit these activities at their discretion during the rest of the week. Conversations with NPCs add depth to the storyline and provide valuable insights into their personalities and backgrounds. As another incentive, players receive stickers for Andy's scrapbook after interacting with a character a set number of times. Each NPC has three unique stickers, and upon completing a set for every character, a grand Buggy Town festival unfolds. This festival serves as the culmination, acting as the "end" of the game and treating players to a showcase of credits, marking the completion of their journey in this charming virtual world. The following is the background story the player and Andy discover after talking with the NPCs throughout the game.

Beez, a resilient and nurturing character in the bustling world of Buggy Town, stands as an emblem of maternal strength and hard work. As an older single mother of five adorable baby

bees, she is the proud owner and operator of the beloved Honey Pot establishment. Having spent her entire life in Buggy Town, Beez envisions a future in the same buzzing community even after her well-deserved retirement. To her, Andy is not just an employee but another cherished addition to her family, and she showers him with a motherly affection that is as sweet as the honey she sells. Beez, a dedicated sports enthusiast, unwinds by watching weekend games and finding solace in the competitive spirit. Despite the challenges of being a single mom, she openly acknowledges the hard work required but expresses contentment, confessing that she wouldn't have it any other way. In moments of contemplation, Beez has entertained moving closer to her sister's family for additional support, demonstrating her genuine and caring nature. Her favorite pick-me-up is a comforting cup of Earl Grey tea from the nearby Nectar café, a small luxury she indulges in whenever possible. Grateful for the assistance she receives, Beez is not only a business owner but a pillar of strength and gratitude in the heart of Buggy Town.

Polly, a shy and introspective teenager in Buggy Town, shares a similar age with Andy, yet her world is distinctly different. As the only child of parents who tirelessly manage the bustling Nectar Café, Polly often finds herself in the company of her thoughts. Despite her parents' coffee-centric business, Polly prefers tea, savoring the delicate flavors coffee lovers might overlook. Fueled by a passion for science, particularly botany, Polly immerses herself in the world of plants and takes delight in identifying various trees by their leaves. Her unique dwelling, perched in the branches of the tree that hosts the Nectar Café, epitomizes her close connection to nature. With a natural reserve that makes forging friendships challenging, Polly appreciates her genuine connection with Andy, expressing gratitude for their conversation. In a rare display of curiosity, she extends an invitation to visit Andy's decorated home, revealing a desire to bridge the gap between her solitary world and the community around her.

Rhino, a seasoned farmer in Buggy Town, has devoted years to the unconventional profession of flea farming, spurred by a past flea outbreak that left a lasting impact on him. Determined to prevent a recurrence, Rhino toils tirelessly year-round, ensuring the well-being of his flea farm. Despite the bustling bug life in Buggy Town, Rhino acknowledges Andy's inherently rural disposition, recognizing him as more of a country bug. Rhino's connection to the Big City, where he was born and raised, evokes a bittersweet nostalgia. His children still reside in the city, and while he wishes for more frequent visits, he hopes to plan a trip to see them next winter. Rhino, once yearning for a pet flea during his youth, now manages a full-fledged farm, reflecting the twists of life. In a surprising revelation, he engages Andy in a conversation about art, disclosing his background as a classically trained painter who attended art school in the big city. Amidst the buzzing routine of flea farming, Rhino's artistic roots add a layer of complexity to his character, showcasing the multifaceted nature of life in Buggy Town.

4. Gameplay and Interaction

Upon starting the game, the player encounters a straightforward title screen featuring play, options, and exit buttons. The play button will lead the player into an introduction of Andy arriving at Buggy Town; the options menu will lead the player to volume and full-screen controls, and the quit button will exit the game. After the short introduction sequence is over, the player is greeted by Andy standing outside of his home and ready to explore the rest of the town for his first day. Andy can move back and forth using the WASD or arrow keys on a keyboard and jump up with the Space bar (except there's nowhere for him to jump to; it's just for fun). If the player begins walking towards the left, they'll be greeted with the end of the map and cannot explore further. If the player starts walking towards the right, each NPC outside their shops will greet them; they can interact with them by pressing the E key on the keyboard.

After the first day of interactions, the player can begin talking with the characters and play their respective minigames. As noted above, the more you talk to the characters, the more you learn about them; however, you need to play their minigame alongside this dialogue to get an authentic experience. To get a better visual of the mechanics, Schell offers a method called the String of Pearls; "The idea is that a completely non-interactive story (the string) is presented in the form of text, a slideshow, or an animated sequence and then the player is given a period of free movement and control (the pearl) with a fixed goal in mind" (Schell 265). The string of *Buggy Town* comes from the dialogue before or after player each character's minigame, while the pearls are the minigames themselves. Each character, Beez, Polly, and Rhino, has a different set of pearls for the player to uncover. Because the game markets to children, this mechanic gives a simple approach to what it takes to discover lore about the game and to strengthen problem-solving skills further to find the plot of *Buggy Town*!

Getting into the minigames, this is where most of the interactivity and agency the player will experience through their time playing *Buggy Town*! On the second day that Andy's in town, the player only has the option to play one minigame before nightfall; the same goes for the third and fourth days to finish the rest of the games. Beez's minigame involves stacking honey pots in the store window without letting any fall off the sill. The player enters a new scene with a background that looks like the window sill of the Honey Pot overlooking parts of the forest around Buggy Town. Here, the player's goal is to stack up the jars without having any tip over in a specific time limit. The more jars the player can stack, the better chance they have of getting a rare piece of furniture to decorate with. In the top left corner of the screen, the player will find the timer and score counter to know where they stand and how much time they have left. The top right corner will hold a pause button and a character icon of Beez overlooking the activity. Once the player has reached the time limit, they will see a high score screen displaying the furniture piece they received. They'll then be greeted with a continue button to head back to the town to either talk to Beez or continue into town.

In Polly's minigame, the player matches customer orders to the drinks she has made for them. The player stands behind the café counter, with customers appearing on the right and orders from Polly coming in on the left. Three customers will be present with timers above their heads and a picture of what they ordered. The player must click on the matching drink order and match it with the partnering customer. If the player fails to get the order in time, they lose points; if they can make the order, they gain points. The game keeps going in a loop until the timer goes out, meaning the café is closed for the day. Similar to the first game, the top left corner will hold the timer and score counter, while the top right corner will hold a pause button and a character icon of Polly overlooking the activity. Once the player has reached the time limit, they will see a

high score screen displaying the furniture piece they received. They'll then be greeted with a continue button to head back to the town to talk to Polly or continue into town.

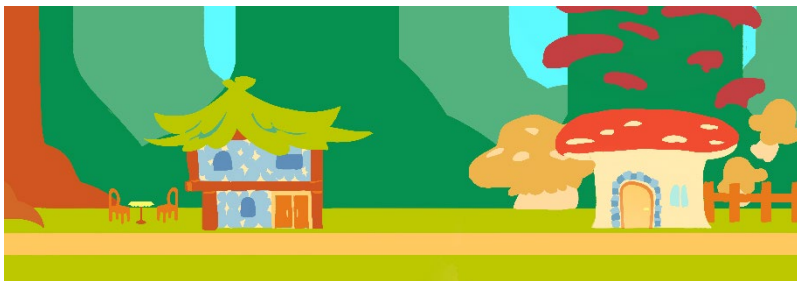
Rhino's minigame requires the player to catch fleas from the trees into a basket Rhino gives you. The player begins the game by standing underneath a tree while carrying a basket to collect fleas falling from above. The game challenges players to collect as many falling fleas as possible before the timer runs out. Failing to catch a flea decreases the player's point total, while successfully grabbing more fleas increases points. Collecting multiple fleas creates a combo effect and brings more engagement to do better to get the best score possible. The higher the score, the better the furniture piece they can collect. Once again, like the previous games, the top left corner will hold the timer and score counter, while the top right corner will hold a pause button and a character icon of Rhino overlooking the activity. Once the player has reached the time limit, they will see a high score screen displaying the furniture piece they received. They'll then be greeted with a continue button to head back to the town to either talk to Rhino or continue into town.

The inspiration for these minigames stemmed from Koster's perspective on how game atoms function, as discussed in his thoughts. He uses an abstract method of a few different steps – input, model, feedback, and mastery (Koster 3). Each minigame uses this as a stepping stone to allow the player to feel engaged with the content without getting bored over time and offers the replayability the rest of the game depends on. Another element that helped develop the game's overall mechanics was Marx's idea on how to format a script for games. Completing behind-the-scenes variables is critical in timing the minigames, dialogues, and prizes received throughout the week. An example of this is getting the last sticker for any of the characters; the player needs to have talked to them two other times, received the two previous stickers, and completed the

minigame at least once to gain the last holographic sticker. It's all compromised of if statements upon if statements, an example being if the player has talked three times and the player has this sticker or has both stickers (Marx 294-296).

5. Game Design

Buggy Town mainly takes place outside, talking to the different townsfolk outside their shops. Below is the final rendition of what the town looks like; it uses two separate pictures to better capture the details of Andy's home: Beez's Honey Pot, Polly's Nectar café, and Rhino's



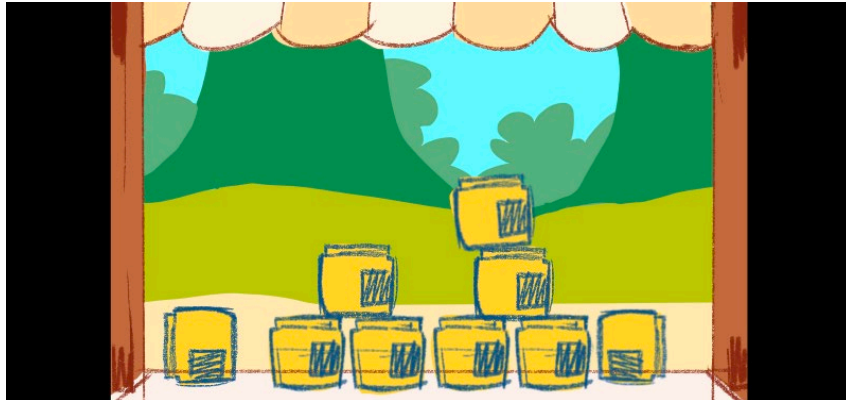
ranch from right to left. The pictures to the left of this text show the house and honey shop on the top while the café and ranch are in the bottom photo. During your time in town, the player will hear faint music to give some ambiance to the

surrounding area. The inspiration for the city's setup comes from the old Windows Vista game *Purple Palace*. It gives the player a better understanding of navigating the world compared to other games with a more open-ended area mapping. *Purple Palace* is a point-and-click



style game rather than a keyboard-and-mouse game, so it's a bit simplistic but gives the information needed to make a town good-looking without becoming complicated. The

minigames, on the other hand, take inspiration from games like Papa's Pizzeria. Using Beez's



minigame as an example, the player's goal is to stack jars in a certain amount of time.

When looking at how a typical game of Papa's Pizzeria goes, the player

only has a certain amount of time to complete a task before the time runs out. This same schematic goes for all three of the minigames; the player is



given a task and must complete it to the best of their ability before time runs out.

The preface for having such simple gameplay and mechanics is because it's marketing towards children. Referring back to other games with open worlds like Starfield, Fallout 4, and Skyrim, they're a bit too complicated for some kids to figure out. Drawing inspiration from Papa's Pizzeria for the different NPCs' minigames enables Buggy Town to be enjoyed by all ages.

Moreover, the inspiration for the dialogue mechanics the player experiences derives from the way Poptropica games play. The difference between the Poptropica dialogue system and how *Buggy Town* will function is that Andy is a silent protagonist, and the player won't have the option of making different choices throughout the story. It pertains to a visual novel in a way that

lets kids listen and read the story to follow along with the plot better than most, hopefully. The



image on the left exemplifies the introduction dialogue the player will encounter when starting the game. The game's dialogue compares to the example on the right of

Poptropica's style of dialogue, giving the player three choices to talk further and investigate with the person of interest to gather intel for the specific island. Also, taking inspiration from Poptropica, each island on the game's main map offers a minigame and plot to discover as you further explore and



explore. *Buggy Town* incorporates this theme throughout the narrative and gameplay the player will find from their time getting to know the characters and town alike.

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The pictures of *Buggy Town* provided are courtesy of Yvette Garcia, the artist responsible for the game's development. Instagram: <https://www.instagram.com/yvesworkshop/> Twitter:

<https://twitter.com/YvesWorkshop>