



AROUND THE BLOCK

Level Design Document

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Overview

Around The Block is a 2.5D environmental puzzle platformer following the story of Roary the raccoon who is searching the city for their cubs. Each level will consist of four sides of a city block. Along the way, Roary will encounter various obstacles, unlock humorous achievements and get into mischievous situations.

Player Skills

Throughout the game the player will have access to several skills. These skills are outlined in Table 1 below. Basic skills will be taught in the first level, with intermediate and advanced skills being taught and used in later levels.

Skill	Type	Obstacle	Function	Technical Description
Walk	Basic	All Navigation	Player moves in any direction.	Raccoon moves a unit in the direction indicated by player input for the time the input is supplied.
Jump	Basic	All Navigation	Player jumps up and over obstacles.	Raccoon moves a unit upwards and, in the direction, indicated by player input.
Climb	Basic	Climbable Surfaces	Player climbs up a surface.	Raccoon climbs up a tagged climbable surface as indicated by the player. Raccoon will not climb an untagged surface. Action depletes stamina.
Attack	Basic	Breakable Objects	Player attacks. Used to destroy an object.	Raccoon makes attacking motion that will cause damage to any objects within range tagged as breakable.
Sprint	Intermediate	All Navigation	Player moves faster and can jump farther.	Raccoon's walking speed increases and when paired with a jump, the jump's horizontal distance increases. Action depletes stamina.
Sneak	Intermediate	All Enemies	Player crouches and can sneak around.	Raccoon makes a crouching motion and becomes less visible to enemy AI.

Dig	Intermediate	Diggable Patches	Player digs. Can be used to unearth items or bury items.	Raccoon makes digging motion. If raccoon is within range of a digging patch, raccoon unearths or buries an item. Gives Pest Points.
Dodge/Dash	Intermediate	All Navigation / Enemies	Player avoids incoming attack.	Raccoon makes a quick motion making it temporarily immune to incoming attacks from enemies. Action depletes stamina.
Roll	Advanced	All Enemies	Player rolls into a ball and charges.	Raccoon rolls into a ball and moves with greater speed. Breakable balls and enemies take increased damage if they collide with raccoon. Action depletes stamina. Gives Pest Points.
Walk on Back Legs	Advanced	Movable Blocks	Player activates Pest Mode to pick up/push heavier objects.	Raccoon stands up on hind legs, receives stat boosts, and is now able to move objects tagged Movable Blocks. Depletes Pest Points.

Table 1: Player Skills Chart

Game Obstacles

The player will be confronted by many obstacles throughout the game. These obstacles are outlined in Table 2 below. These obstacles will be presented in many different forms depending on the level they are located in.

Obstacle	Challenge Type	Movement	Description	Examples
Basic Surface	Navigation	Static	Standard safe surface that is easily navigable.	Sidewalk, Roof, Driveway, Grass, Balcony
Climbable Surface	Navigation	Static	Surface that typically stretches vertically that provides a lot of grip.	Drainpipe, Vine, Tree
Blockades	Navigation	Static	Object that blocks and obstructs the path.	Concrete Divider, Parked Car, Fence
Breakable Object	Navigation / Collection	Static	Weak object that can be easily damaged and broken.	Trash Bin, Vending Machine, Fire Hydrant, ATM
Interactable Object	Navigation	Varied	Object that can be activated to trigger an event.	Achievement, Flowerpot
Tunnel	Navigation	Static	Small passageway.	Vent, Dirt Tunnel
Moving Platform	Navigation	Up, Down, Left, Right	Platform that moves in a predictable and repeating pattern.	Slow-moving Car
Falling Platform	Navigation	Down	Platform that falls when the player steps on it.	Rotted Beam
Diggable Patch	Collection	Static	Area that can be interacted with to potentially uncover an item.	Garden
Movable Block	Navigation	Static	Large object that requires tremendous strength to move.	Dumpster

Table 2: Obstacle Chart

Game Enemies

There will be many different enemies encountered in around the block. Since the game is less focused on combat, the goal will primarily be to avoid or distract these enemy types. The enemies are divided into categories based on their difficulty type which will be reflected in their locations within the game.

Challenge Level Easy	Health	Damage	Size	Movement Type	Speed	Attack Type	Range	Detection Radius	Description
Dog (Yard)	20	10	Small	Walking	0.5	Melee	1	5	Confined to a fenced space. Chases and attacks raccoon when in range.
Human (Fearful)	N/A	N/A	Large	Stationary	N/A	N/A	N/A	2	Makes noise. Raises pest rating significantly.
Fox	30	5	Small	Walking	1.5	Melee	1	5	Steals items from raccoon. Bites if raccoon enters range.
Squirrel (Black)	10	5	Small	Stationary	0.8	Ranged	10	10	Throws nuts from a fixed position.
Challenge Level Medium	Health	Damage	Size	Movement Type	Speed	Attack Type	Range	Detection Radius	Description
Dog (Patrol)	50	15	Medium	Walking	0.8	Melee	1	5	Paces in a predictable pattern. Chases and attacks raccoon when in range.
Squirrel (Grey)	20	10	Small	Walking	1	Ranged	10	10	Moves in a predictable pattern. Throws nuts.
Human (Aggressive)	N/A	10	Large	Stationary	0.5	Melee	1	2	Uses objects to damage raccoon when in range.
Skunk	30	5	Small	Walking	0.8	Area	5	5	Spray stink which damages and slows down raccoon.
Cat	20	20	Small	Walking	1.2	Melee	1	5	Scratches raccoon when in range.

Challenge Level Medium	Health	Damage	Size	Movement Type	Speed	Attack Type	Range	Detection Radius	Description
Dog (Attack)	60	30	Medium	Walking	1.2	Melee	1	10	Seeks out and attacks raccoon on site.
Squirrel (Red)	30	20	Small	Walking	1.5	Ranged	10	10	Moves erratically. Throws nuts.
Bird	20	30	Small	Flying	2	Melee	20	10	Swoops down to attack raccoon.
Pest Control	N/A	40	Large	Walking	0.5		5	15	Tries to catch raccoon in sack.

Table 3: Enemy Chart

Achievements

In addition to the main goal of finding the cubs within each level, there will be optional achievements scattered throughout the map. These achievements are designed to give more depth to the city environment and to allow the player to have fun being a pest.

Achievement	Description
Fire Hydrant	Attack a fire hydrant to release a jet of water potential soaking nearby human.
Street Art	Discover hidden street art within the city.
Dog Poem	Find haikus written by a dog about its owner hidden in trash.
Cabbage Cart	Destroy the cabbage cart to ruin the salesman's day.
Squirrel Statue	Find all of the squirrel statues to release the white squirrel.
Trash Stash	Discover mountains of trash throughout the city.
Landmark	Find city landmarks.
Make It Viral	Perform in front of humans to become an internet sensation.

Table 4: Achievement List

Level Overview Metrics

Each level will have unique blocks of varying sizes. The approximate sizes of these blocks are listed in Table 5.

Asset	Approximate Length (Units)	Approximate Height (Units)
Raccoon	1	1
Level 1 Block	30	7
Level 2 Block		
Level 3 Block		
Level 4 Block		
Level 5 Block		
Level 6 Block		

Table 5: Approximate Level Metrics

Level 1: Midtown

Player Objectives

Midtown is meant to be a tutorial level which will teach the player the basic skills and abilities they will use in order to play the game. This level is also meant to introduce the player to the main story of the game. Table 6 outlines the player's objectives for the first level and the skills they will be introduced to within the level.

Level Section	Objectives	New Skills
Side 1	Find food/trash for the cubs.	Run, Jump, Climb
Side 2	Collect trash.	Attack, Collect Trash
Side 3	Find restaurant.	
Inside Restaurant	Escape pest control.	Sprint
Side 4	Return to the den.	

Table 6: Level 1 Objectives and Skills

Intensity Graph

The primary goal of Level 1 is to introduce the player to the basic mechanics and to present them with the beginning of the game's story. As such, the level begins with a lower intensity which gradually increases as the player becomes more comfortable with the controls. Near the end of the level, the story picks up with dramatic and timed events, therefore increasing the level's intensity for the climax. The intensity rating of this level are shown in Table 7 and Figure 2 below.

Event Number	Event Description	Intensity Rating
1	Begin game in raccoon den.	1
2	Cubs complain about being hungry.	2
3	Leave den to search for food.	2
4	Climb through/over obstacles.	3
5	Collect trash.	3
6	Cause flowerpot distraction.	6
7	Learn about restaurant.	4
8	Enter restaurant.	5
9	Escape pest control.	8
10	Climb out of dumpster.	5
11	Get through backyard, avoiding dog.	7
12	Get out of alley.	4
13	Go through tunnel.	5
14	Return to den.	6
15	Pest control ambush!	10

Table 7: Level 1 Intensity Ratings

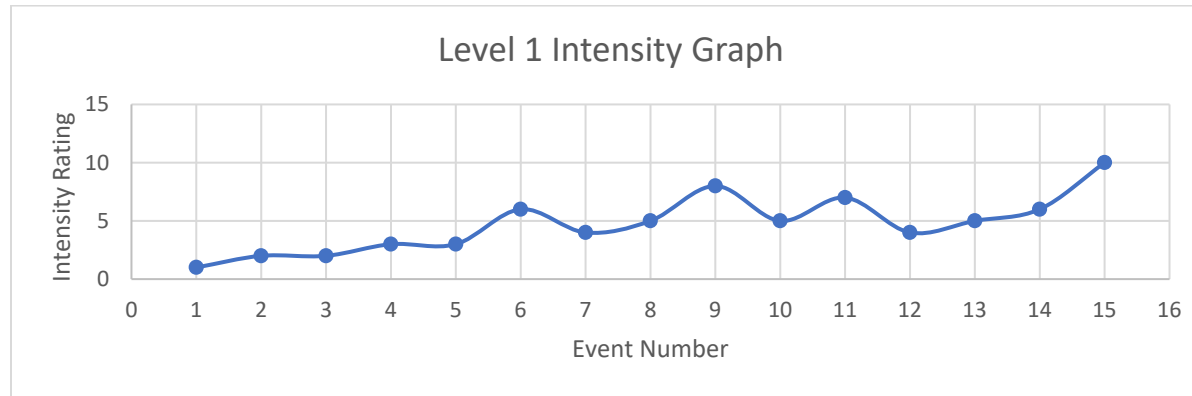


Figure 2: Level 1 Intensity Graph

Distributions

Skill Distribution

The skills distributed across Level 1 are for the most part limited to the basic skills. The main objective of this level is to allow the player to become comfortable with the basic skills, as such the more advanced skills will be introduced in later levels. The skill distribution for Level 1 is outlined in Table 8 below.

Skill	Side 1	Side 2	Side 3	Inside Restaurant	Side 4
Walk	X	X	X	X	X
Jump	X	X	X	X	X
Climb	X	X	X	X	X
Attack		X	X		X
Sprint				X	X
Sneak					
Dig					
Dodge/Dash					
Roll					
Walk on Back Legs					

Table 8: Level 1 Skill Distribution

Obstacle Distribution

The obstacles found in Level 1 are simple and can be navigated using the game's basic skills. The goal was to arrange these obstacles in an interesting way. The obstacle distribution for Level 1 is found in Table 9 below.

Obstacle	Side 1	Side 2	Side 3	Inside Restaurant	Side 4
Basic Surface	X	X	X	X	X
Climbable Surface	X	X	X		
Blockade	X	X	X	X	X
Breakable Object		X			X
Interactable Object	X	X	X	X	X
Tunnel					X
Moving Platform					
Falling Platform					
Diggable Patch					
Movable Block					

Table 9: Level 1 Obstacle Distribution

Enemy Distribution

The first level only has enemies classified as an easy challenge. This is to introduce the player to the in-game enemies without having them pose a great obstacle. The enemies are primarily meant as obstructions which require the player to avoid them. The enemy distribution for Level 1 is listed in Table 10 below. This table only lists the Challenge Level Easy enemies since the other challenge levels will not appear until later in the game.

Challenge Level Easy	Side 1	Side 2	Side 3	Inside Restaurant	Side 4
Dog (Yard)					X
Human (Fearful)		X	X		
Fox					
Squirrel (Black)					

Table 10: Level 1 Enemy Distribution

Level Events

In the Den

This event takes place at the start of the game. During this event, Roary the raccoon in with their cubs in the den when the cubs begin complaining that they are hungry and asking for something to eat. In response, Roary leaves the den to set out into the city to search for food.

Squirrel Introduction

This event takes place on the third side of Level 1. It is simply a conversation Roary has with a neighborhood squirrel where the squirrel informs Roary that there is a restaurant at the end of the block that as recently gone out of business, so everything left over is just sitting there waiting for any hungry raccoon to come along.

Pest Control Attacks

This event takes place in the restaurant between sides 3 and 4 of Level 1. It occurs when Roary reaches the Trash Stash located in the restaurant. While Roary is preoccupied with the trash, pest control bursts through the back door of the restaurant and lunges towards Roary.

Return to the Den

This event occurs at the very end of the fourth side of Level 1 when Roary returns to the raccoon den. Once Roary returns and reunites with their cubs, pest control ambushes the den and drives out all of the raccoons. The cubs run away and are scattered throughout the city. Pest control captures one of the cubs and takes off in the pest control van.

Level Layout

Legend

The legend for Level 1 is shown below in Figure 3. The legend lists the recurring obstacles and environments that can be found within the level.



Figure 3: Level 1 Legend

Side 1

The layout for side 1 is shown in Figure 4. The walkthrough of side 1 is as follows:

- Player begins in den with cubs complaining about being hungry.
- Player leaves the den to search for food.
- Player walks along the sidewalk, jumping up onto a ledge.
- Player jumps over another obstruction.
- Player notices a parked car blocking the path ahead.
- Player climbs up a drainpipe onto a porch roof.
- Player walks across the porch roof and jumps on the car.
- Player jumps from the car onto the adjacent balcony.
- Player walks across the balcony and around the corner.

Side 2

The layout for side 2 is shown in Figure 5. The walkthrough of side 2 is as follows:

- Player walks to the edge of the balcony.
- Player jumps to the adjacent drainpipe and climbs down the house.
- Player walks along the sidewalk and knocks over trash cans to collect trash.
- Player notices a human blocking their path ahead.
 - If the player approaches the human, the human will start yelling and drive the player away.
- Player climbs up the drainpipe and onto the balcony.
- Player knocks flower pot onto sidewalk below causing human to approach broken flower pot.
- Player continues to end of balcony and climbs down vines back to the sidewalk and turns the corner.

Side 3

The layout for side 3 is shown in Figure 6. The walkthrough of side 3 is as follows:

- Player climbs down vines and onto sidewalk.
- Player encounters squirrel in tree who tells them about restaurant at end of block.
- Player walks past park and turns down alley next to restaurant.
- Player discovers back door to restaurant is locked.
- Player climbs up fire escape next to back door.
- Player knocks over pot which conveniently hits doorknob, opening back door.
- Player descends fire escape and enters restaurant.

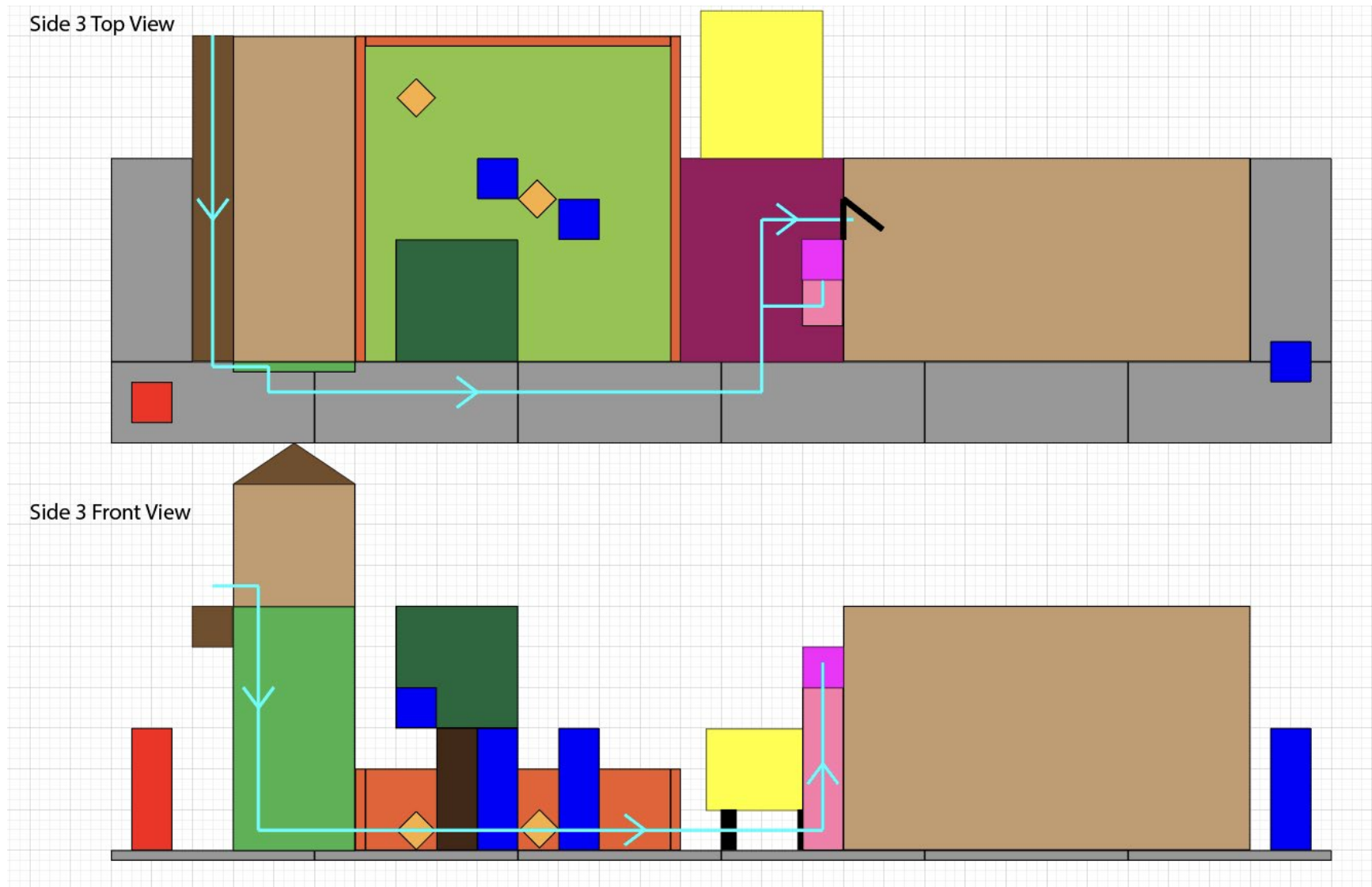


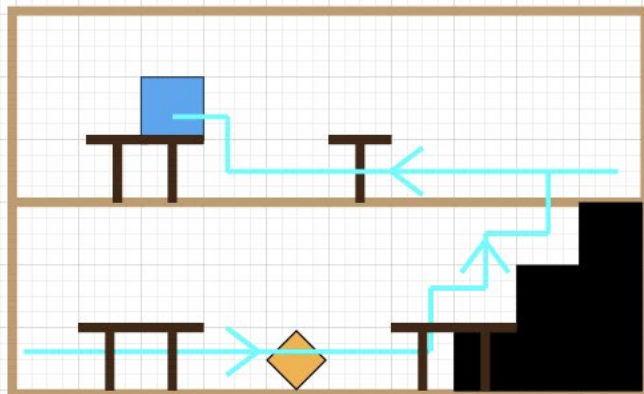
Figure 6: Level 1 Side 3 Layout

Inside Restaurant

The layout for inside the restaurant is shown in Figure 7. The walkthrough of the restaurant is as follows:

- Player enters the restaurant and finds the Trash Stash.
- While player is collecting the Trash Stash, pest control bursts through the back door.
- Player runs up the stairs to the second floor with pest control in pursuit.
- Player crosses the second floor, jumps up onto a table and leaps out of an open window.

Inside Restaurant Side View



Inside Restaurant Top Views

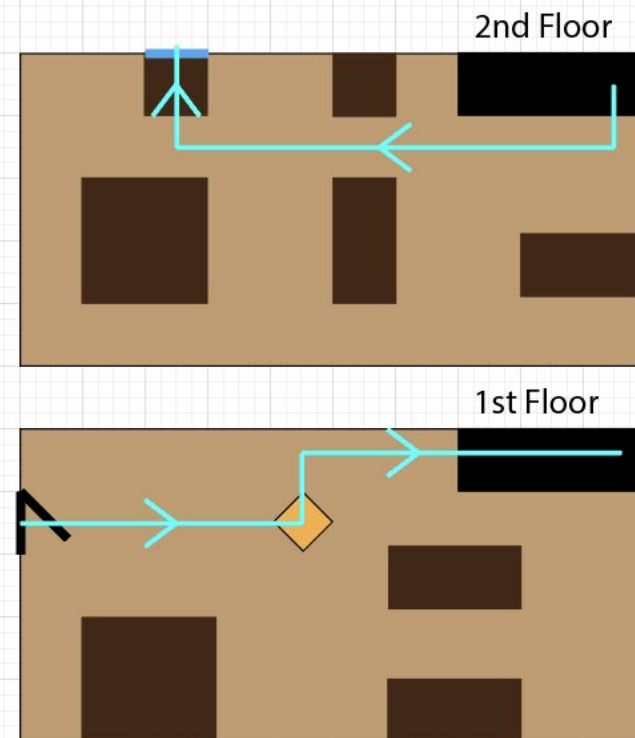


Figure 7: Level 1 Inside Restaurant Layout

Side 4

The layout for side 4 is shown in Figure 8. The walkthrough of side 4 is as follows:

- Player lands in a dumpster next to the restaurant.
- Player climbs into the adjacent backyard.
- Player avoids the dog in the yard and climbs over the fence on the other side of the yard.
- Player emerges from the alley back onto the sidewalk.
- Player encounters a car blocking their path.
- Player turns down another alley and encounters an opening in the ground.
- Player crawls through the tunnel and emerges on the other side of the fence next to the raccoon den.
- Player enters the raccoon den.
- Pest control arrives and drives the raccoons out of the den, capturing one of the cubs.
- Now it is up to the player to find and rescue the raccoon cubs!

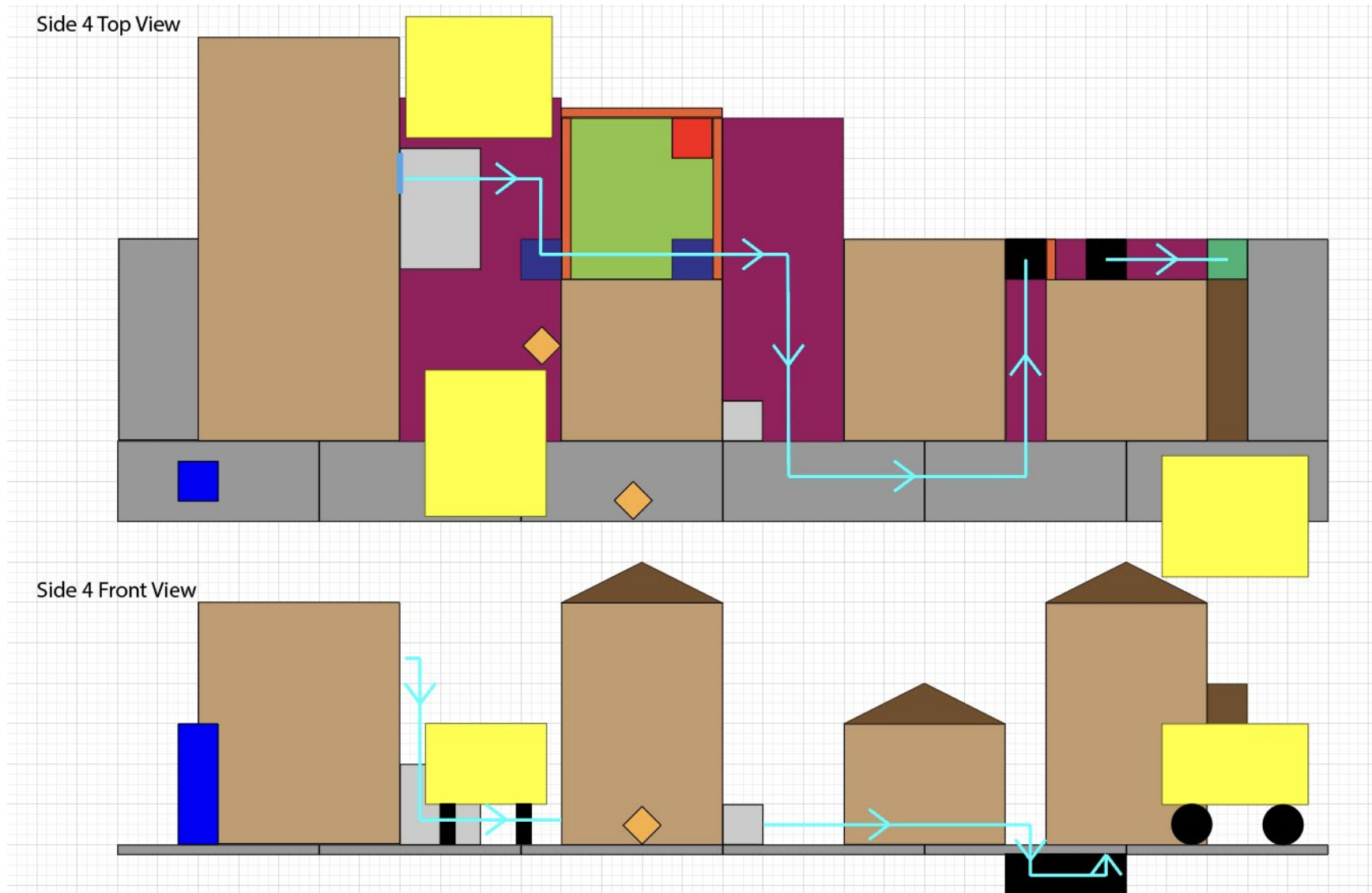


Figure 8: Level 1 Side 4 Layout

Level Overview

Figure 9 below shows a top-down view of the four sides of the Level 1 block. During this level, the player completes a full circuit of the block. They will be able to return to this block later in the game where they will be able to explore and collect any bonus achievements they may have missed.

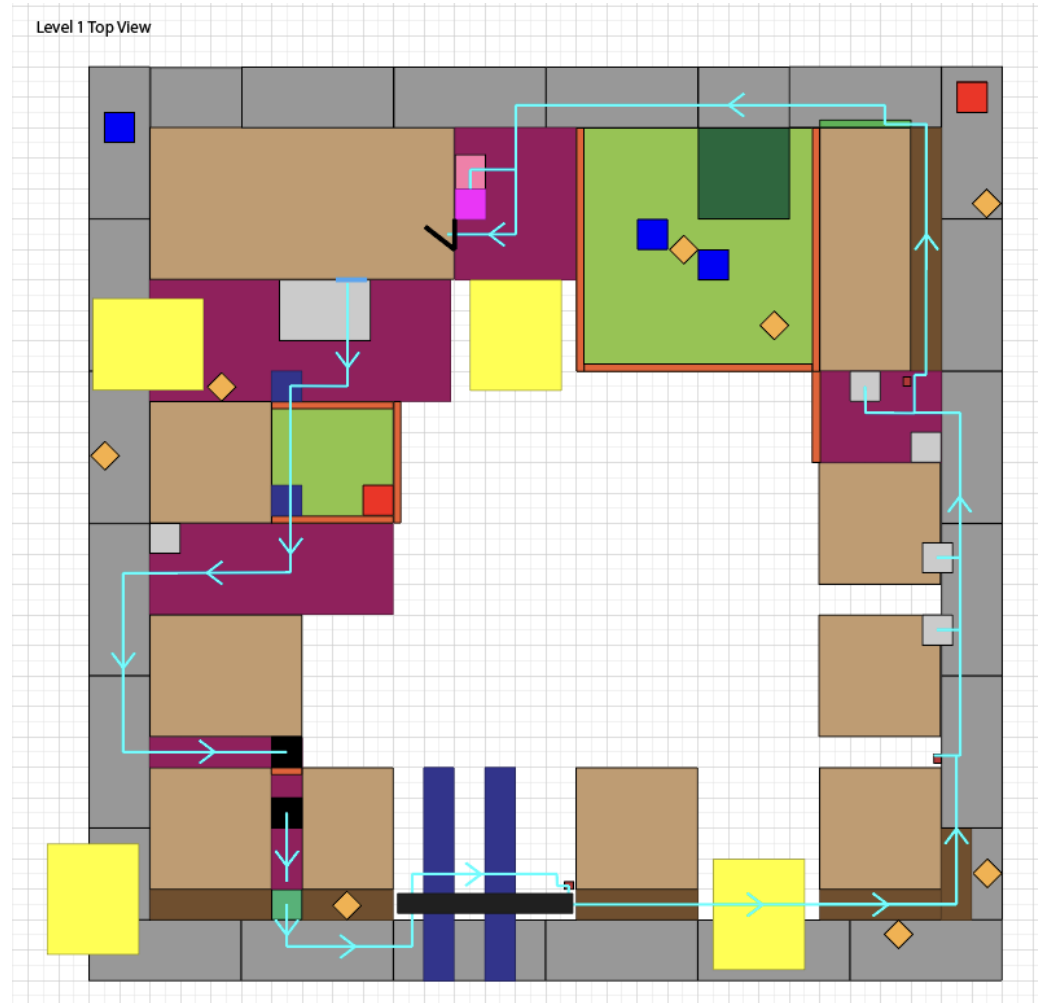


Figure 9: Level 1 Top-Down Layout

Level Asset Inventory

Environment

- Street
- Raccoon Den
- Restaurant
 - Interior
 - Tables
 - Stairs
- Modular House
 - Porch
 - No Porch
 - Obstruction
- Modular Apartment Building
 - Variable height
 - Platform placement
- Fences
- Power Lines

Enemies

- Fearful Human
- Indifferent Human
- Dog (Yard)
- Pest Control
- Squirrel

Interactables

- Garbage Bin
- Drainpipe
- Vines