



Level Design Document by Ken Stevens

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## Story

Children and young adults love the racetrack at an amusement park with a pirate theme known as “Pirate Ship Adventure”. The track combines ships and cars in a location where many families arrive to board cruise lines. The location is beautiful, situated in south Florida with palm trees and scenic views as it is beside a gold, sandy, beach. Families come here to have fun and enjoy the park. The main characters are children 5-17 and their parents and grandparents. They enjoy the ride in the race car on the pirate-themed track. There will also be employees of the park who will help the guests to go on the ride and clean the cars and grounds.

## Environment

Florida, on the coast, in Port Canaveral and near the many cruise ship docks. Warm location sandy beach palm trees, fun atmosphere.

## Setting

Amusement Park, beach with palm trees near the ocean.

## Characters

- Children,
- Young adults
- Parents
- Car jockey
- Cleaning employees

## Features

- Track
- Race cars
- Giant pirate ship jump
- Windmill decoration
- Entrance/exit
- Trees
- Boulders
- Beach

## Themes

- Racer-adventure
- Carnival atmosphere
- Pirate

## Reference

Environment



Florida location Palm trees, rock formations, skull icon



Racetrack



Beach environment

Setting

Amusement Park race track



Pirate ship



Pirate park feel

Characters



drivers of the race car



Driver with friends



Families



Workers at the park

## Features



Amusement Park Race Car



Racecar





Pirate ship jump

## Themes



Pirate ship



Car racer adventure



Race Car Pirate ship adventure

## Program

### Arcade Racetrack in Unity 3D

The player is in an arcade race car ride that must navigate a course in an amusement park with three different course options.

### Gameplay

Control Keys:

W forward

S reverse

D right

A left

Countdown to start

### Track

3 Options:

1. The ship jump
2. The watermill
3. The ramp

All options navigate through a mountain and take several sharp curves to come back to the starting point. There are buildings and a windmill and watermill sights along the route.

# Metrics

## Characters

### Average size humans

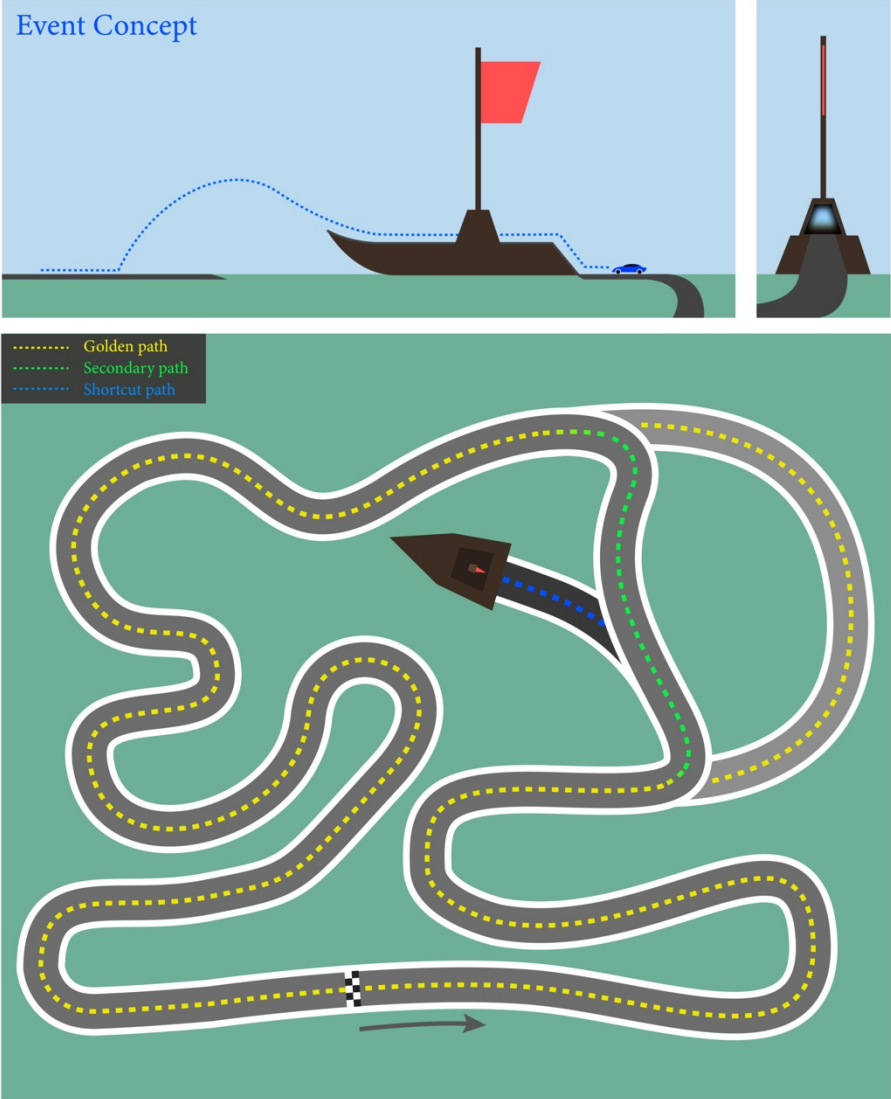
- Adults 5-6 feet
- Children's minimum height requirement is 48" (4 feet).

## Features

- Countdown to start
- 3 min track with 3 circuits 9 curves
- 6-foot pirate ship jump

# Diagrams

Parti of pirate ship jump and track flow diagram.

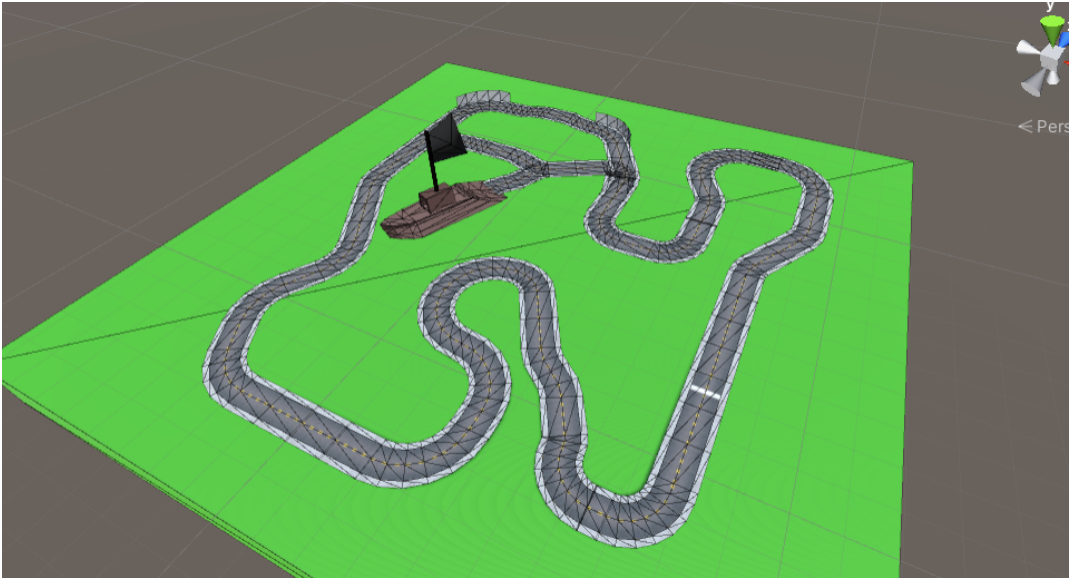


Layout - Topography

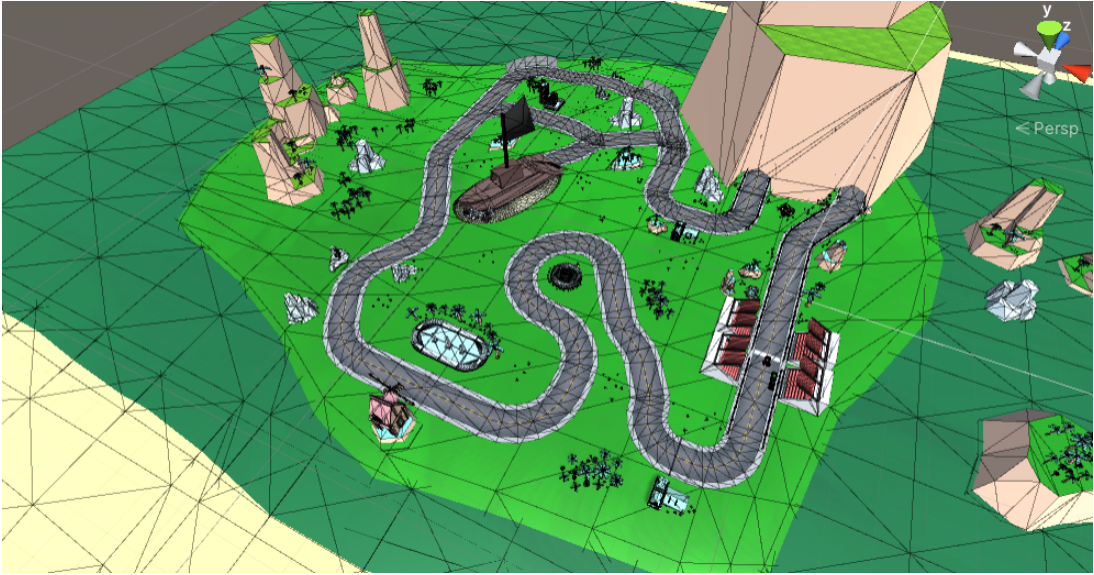


# Comparative Screen Shots

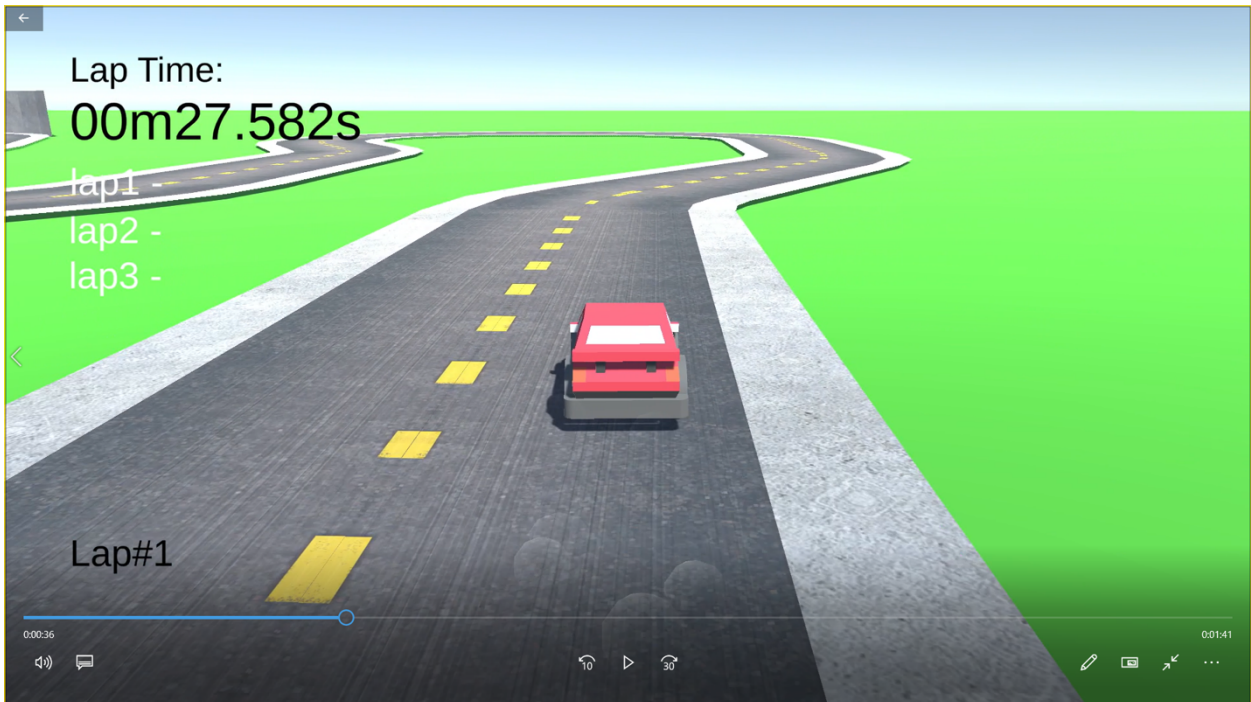
## Map



Layout map - Before



Layout map - After



Before- Just as the player leaves the start into the first curve



Before- Just as the player leaves the start and heads into the first curve and mountain tunnel.

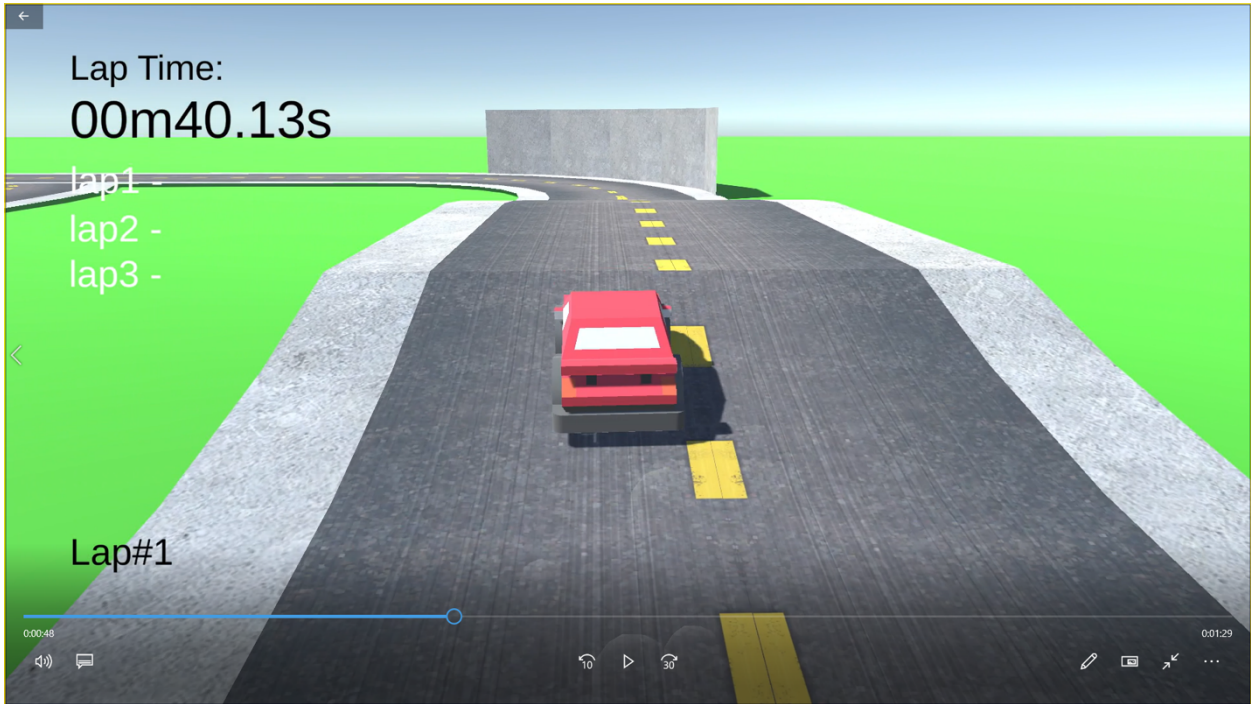




Before- As the player starts into the second curve



After - As the player exits the mountain tunnel and heads into the second curve.



Before – Golden path option heading over the ramp.



After – Golden path option heading over the ramp see water mill to the left and palm tree grove to right.



Before- Golden path straight away, ship jump to left.



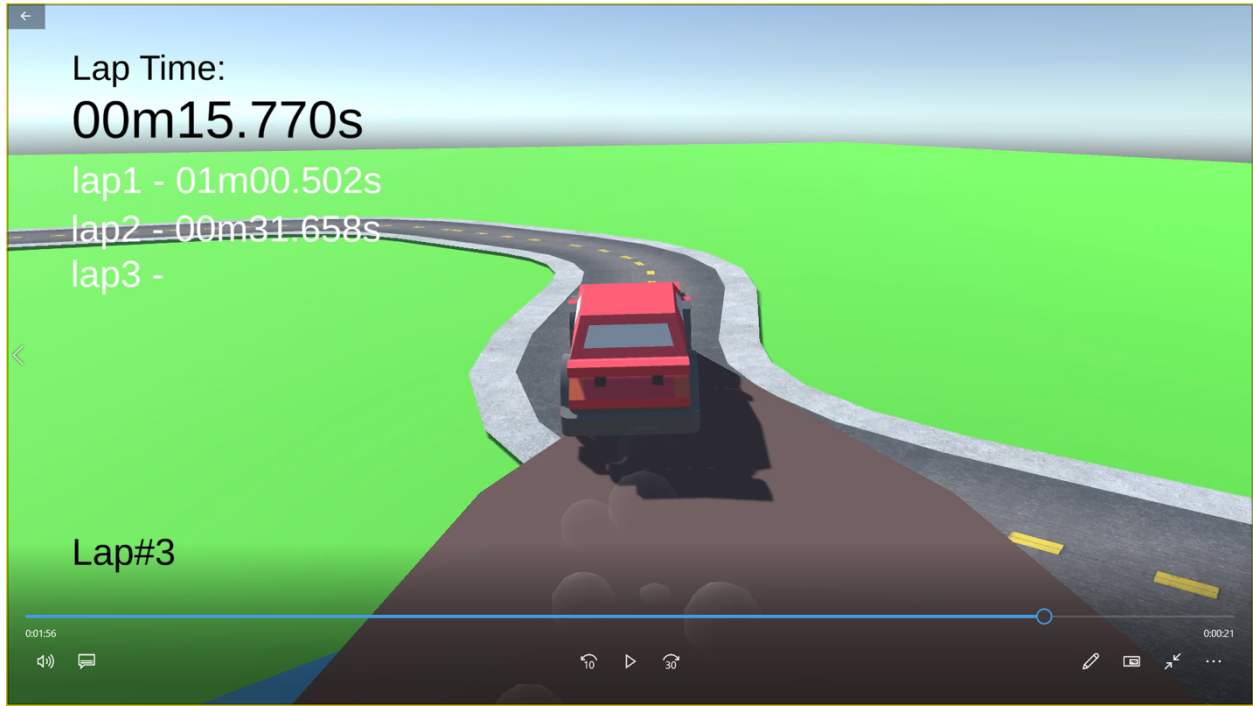
After - Golden path straight away, ship jump to left first sighting of windmill and beach and ocean visible off into the horizon.



Before- Alternate path choices, ship jump to left.



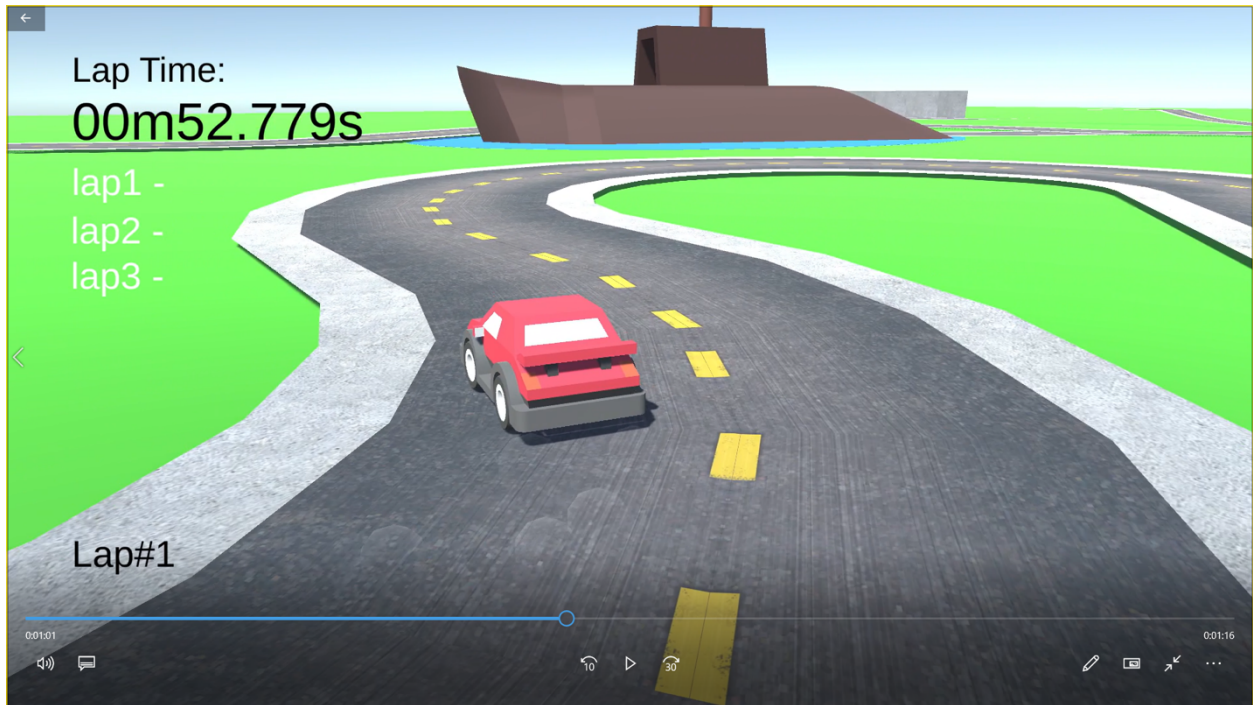
After- Alternative path choices, ship jump to left. Watermill to the right, rich landscape of the amusement park with large rock formations in the background.



Before- Alternate path choices, ship jump.



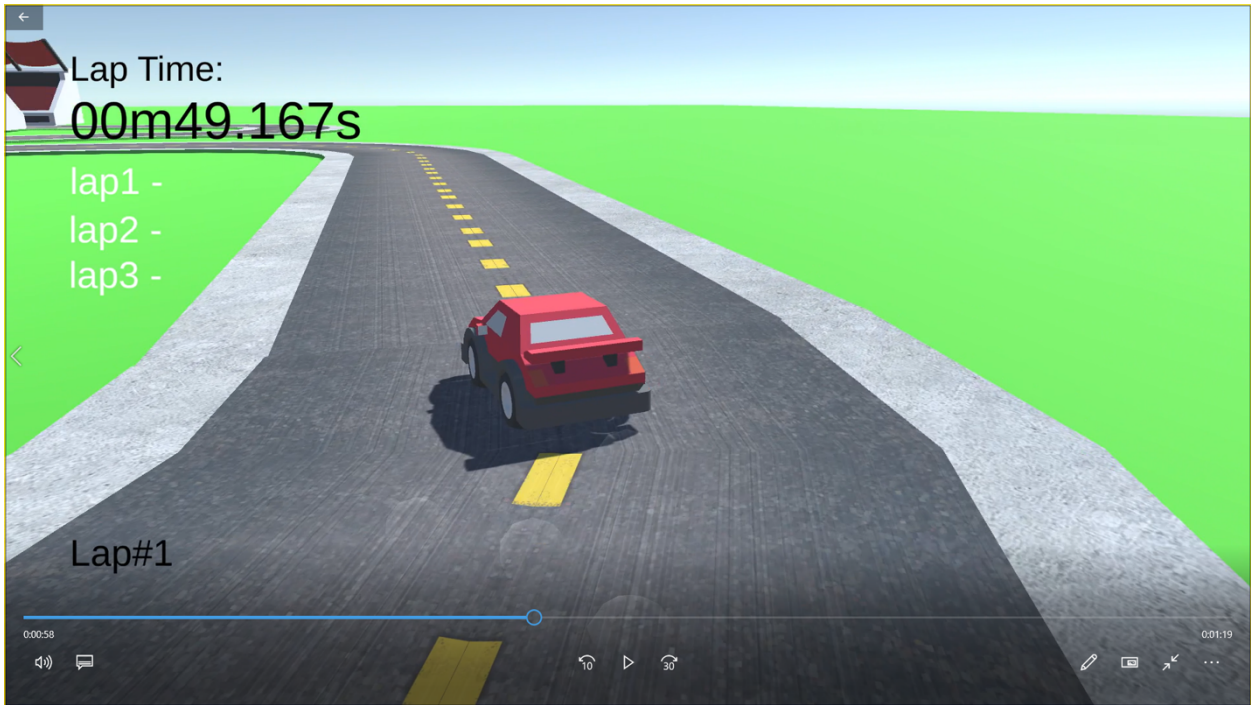
After - Alternate path ship jump exit. Ocean and beach are in the background and windmill to left.



Before- Rounding one of the last curves, the ship jump is in the background.



After -Rounding one of the last curves, the ship jump in the background along with the topography of the amusement park. Fountain and garden to the right.



Before – Final “S “curve, the finish is visible in the background.

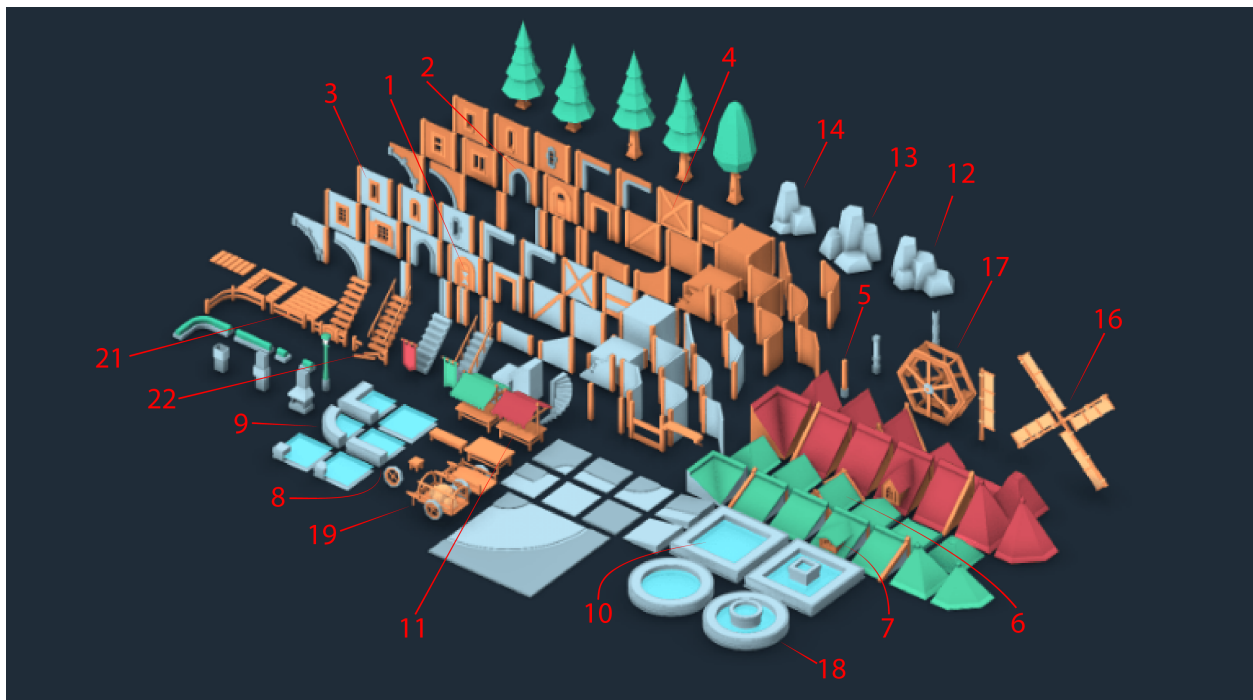


After - Final “S “curve, the ocean and beach are to the right as well as the windmill overhead and pool with statues on the right the finish is barely visible in the background with the palm groves and rock formations.

## Schedule

Region	Kit	Sub	Object	Use	Image
Racer	FTK	Base	Wall_door	2	1
	FTK	Base	Wall_wood_doorway_round	4	2
	FTK	Base	Wall_wood_window_stone	17	3
	FTK	Base	Wall_wood_detail_cross	12	4
	FTK	Base	Pillar_wood	4	5
	FTK	Detail	Roof_gable_top	2	6
	FTK	Detail	Roof_window	2	7
	FTK	Base	Fountain_edge	4	8
	FTK	Base	Fountain_curve	4	9
	FTK	Base	Fountain_square	1	10
	FTK	Base	Stall_red	2	11
	FTK	Detail	Large_rock	7	12
	FTK	Detail	Large_StoneA	9	13
	FTK	Detail	Rock_wide	9	14
	NK	Detail	Large_Rock F	4	15
	FTK	Hero	Windmill	1	16
	FTK	Hero	Watermill	1	17
	FTK	Hero	Fountain_round_detail	1	18
	FTK	Hero	Cart_high	1	19
	NK	Base	Cliff_half_corner_stone	4	20
	FTK	Base	Fence	105	21
	FTK	Base	Broken-Fence	11	22
Note:	<b>Fantasy Town kit (FTK)</b>				
	<b>Nature Kit (NK)</b>				

Fantasy Town Kit





Region	Kit	Sub	Object	Use	Image
	NK	Detail	Rock_tallH	3	23
	NK	Detail	Rock_small E	3	24
	NK	Detail	Rock_small F	3	25
	NK	Detail	Rock_tallA	4	26
	NK	Detail	Rock_LargeF	4	27
	NK	Detail	Rock_smallC	8	28
	NK	Detail	Statue_oblisk	3	29
	NK	Detail	Statue_head	1	30
	NK	Detail	Tree_Palm_short	54	31
	NK	Detail	Tree_Palm_detailed_tall	41	32
	NK	Detail	Tree_Palm_bend	73	33
	NK	Detail	Tree_Palm_detailed_short	30	34
	NK	Detail	Grass_Large	117	35
	NK	Detail	Platform_grass	3	36
	NK	Detail	Crop_leafA	76	37
	NK	Detail	Regular_grass	65	38
	NK	Detail	Flower_purpleC	25	39
	NK	Detail	Flower_redC	9	40
<b>Customized</b>		Hero	Curve Road Mountain	1	
		Hero	Ship	1	
		Base	Ocean	1	
		Base	Island	1	
		Base	Track 1	1	
Note:	<b>Fantasy Town kit (FTK)</b>				
	<b>Nature Kit (NK)</b>				

Naure Kit

