Stunt Crasher by BoneCracker Games

Thank you for purchasing Stunt Crasher! You can add your own vehicles, levels, obstacles, ui elements, scenes and reskin the game with your imagination. This documentation will guide you how to do them in shortest and cleanest ways.

Package includes

- Car controller with audio, particles, damage, skidmarks, and more,
- Upgradable cars with engine, boost, and bonus multiplier,
- Destructible 3 player cars with individual parts such as hood, trunk, doors, wheels, and more,
- Customizable 3 individual scenes,
- 8 Prop models (With LOD) and 5 scene environments such as big stadium, forest, and more,
- Global shared settings manager,
- Complete out of box project ready to build for any platform. Tested on Android, iOS, WebGL, and Windows.
- Full functional demo with given assets.

Editor Extensions Features;

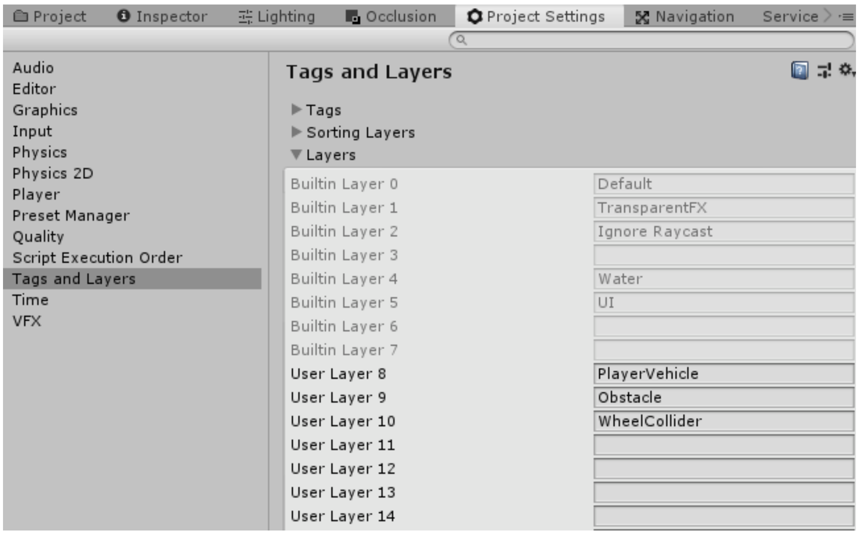
- Creating new levels and their new obstacles
- Creating new player vehicles
- Editing shared settings

Table of Contents

First to Do!

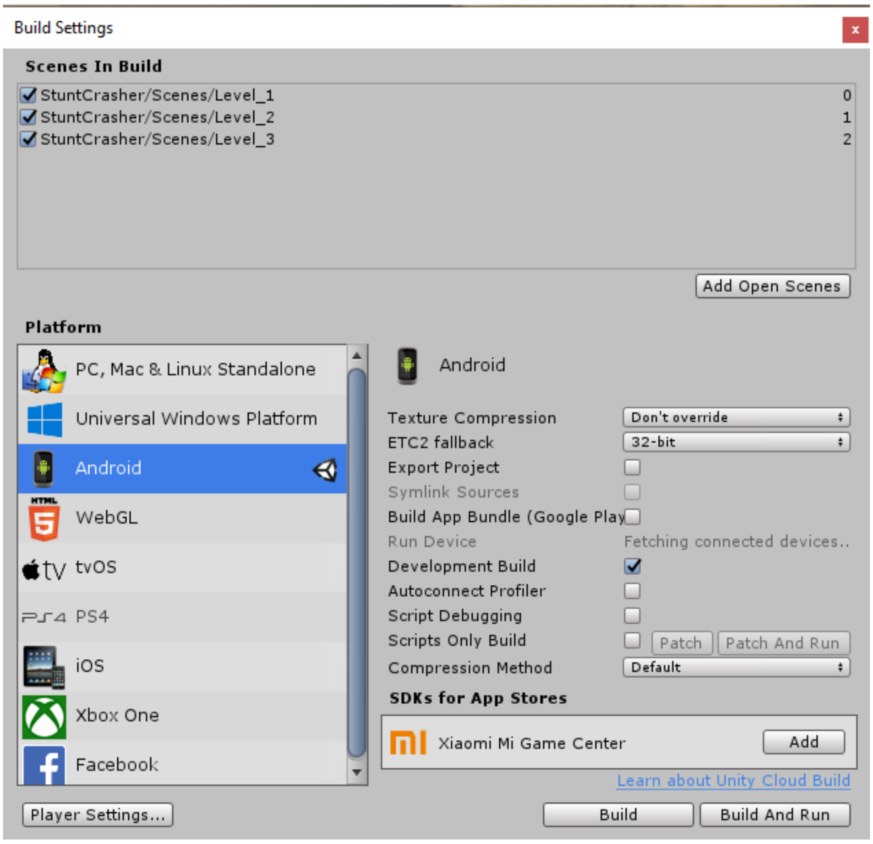
Before importing the package, be sure your active platform is your target platform. Open Build Settings and switch platform to your target platform before importing the package. This will save your time.

After importing process, please check your Tags & Layers and Build Settings before using the package. Your Tags & Layers and Build Settings must be exactly same with this;



Tags and Layers

Builtin Layer 0	Default
Builtin Layer 1	TransparentFX
Builtin Layer 2	Ignore Raycast
Builtin Layer 3	
Builtin Layer 4	Water
Builtin Layer 5	UI
Builtin Layer 6	
Builtin Layer 7	
User Layer 8	PlayerVehicle
User Layer 9	Obstacle
User Layer 10	WheelCollider
User Layer 11	
User Layer 12	
User Layer 13	
User Layer 14	



Scenes In Build

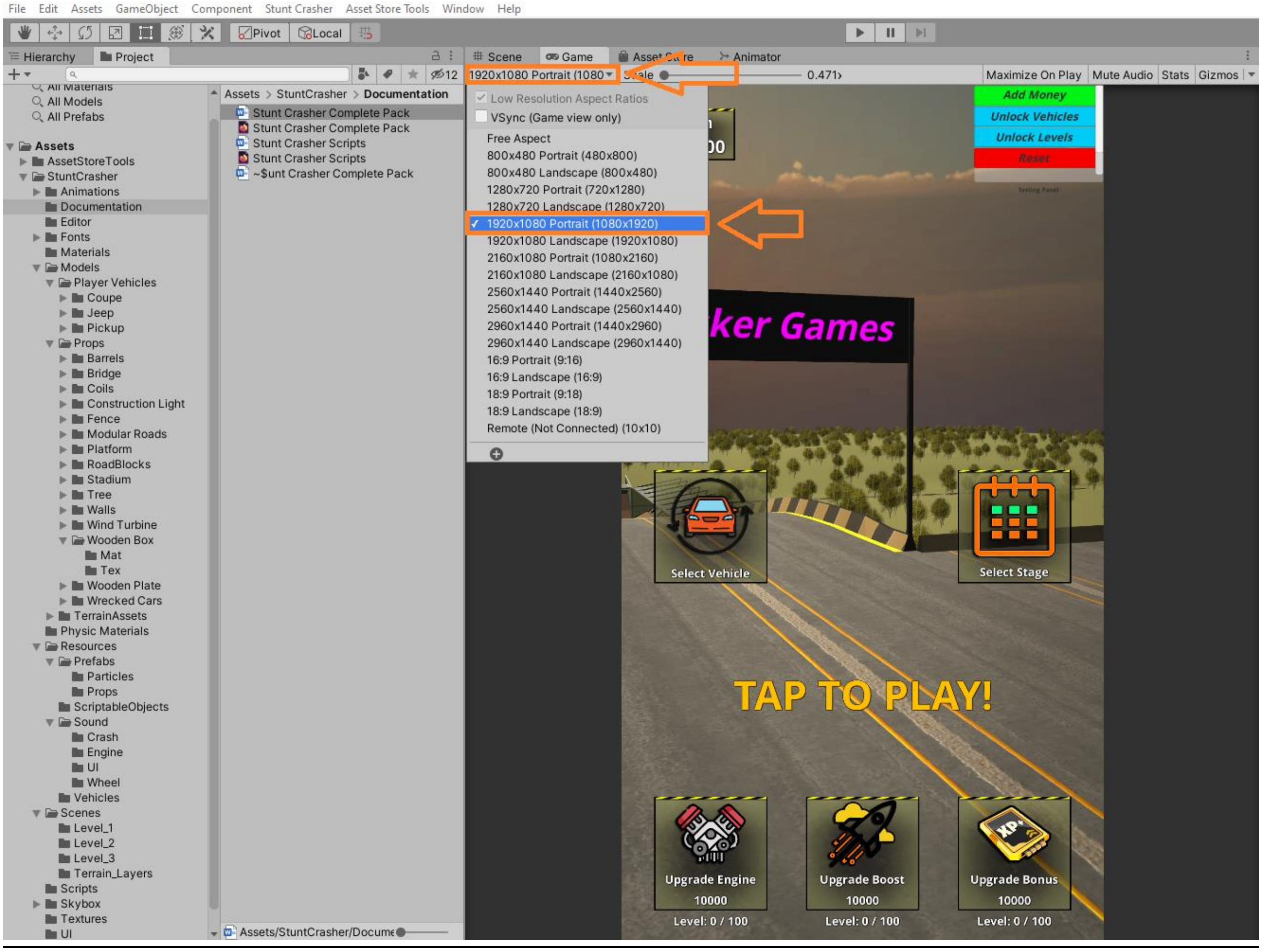
- ☑ StuntCrasher/Scenes/Level_1 0
- ☑ StuntCrasher/Scenes/Level_2 1
- ☑ StuntCrasher/Scenes/Level_3 2

Android

Texture Compression	Don't override
ETC2 fallback	32-bit
Export Project	□
Symlink Sources	□
Build App Bundle (Google Play	□
Run Device	Fetching connected devices..
Development Build	☑
Autoconnect Profiler	□
Script Debugging	□
Scripts Only Build	□
Compression Method	Default

(If your Project Settings are not imported as seen in screenshot, you have to import Project Settings manually)

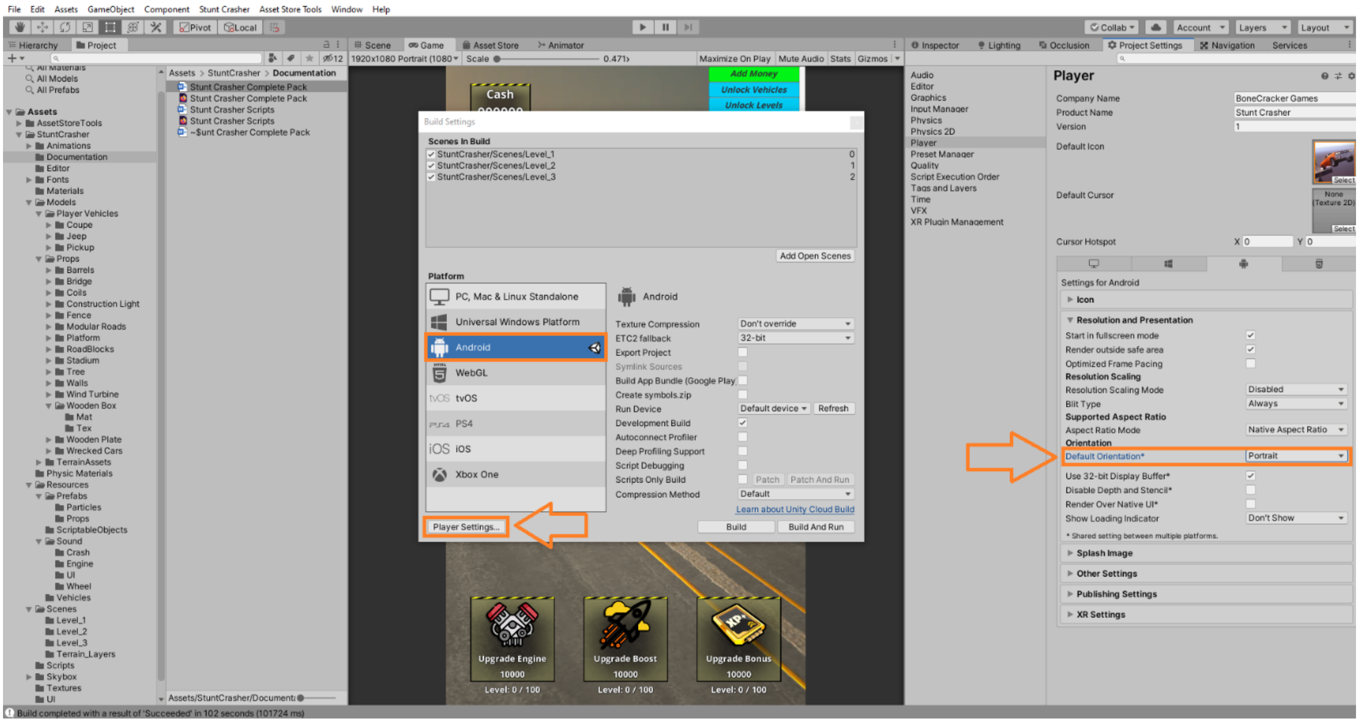
This game is using **Portrait** display mode. Therefore, you must set your display mode to any portrait mode in your editor.



1920x1080 Portrait (1080x1920)

File Edit Assets GameObject Component Stunt Crasher Asset Store Tools Window Help
Pivot
Local
Hierarchy
Project
Scene
Game
Asset Store
Animator
Scale
0.471x
Maximize On Play
Mute Audio
Stats
Gizmos
Assets > StuntCrasher > Documentation
Stunt Crasher Complete Pack
Stunt Crasher Complete Pack
Stunt Crasher Scripts
Stunt Crasher Scripts
~$unt Crasher Complete Pack
Low Resolution Aspect Ratios
VSync (Game view only)
Free Aspect
800x480 Portrait (480x800)
800x480 Landscape (800x480)
1280x720 Portrait (720x1280)
1280x720 Landscape (1280x720)
1920x1080 Portrait (1080x1920)
1920x1080 Landscape (1920x1080)
2160x1080 Portrait (1080x2160)
2160x1080 Landscape (2160x1080)
2560x1440 Portrait (1440x2560)
2560x1440 Landscape (2560x1440)
2960x1440 Portrait (1440x2960)
2960x1440 Landscape (2960x1440)
16:9 Portrait (9:16)
16:9 Landscape (16:9)
18:9 Portrait (9:18)
18:9 Landscape (18:9)
Remote (Not Connected) (10x10)
Add Money
Unlock Vehicles
Unlock Levels
Reset
ker Games
Select Vehicle
Select Stage
TAP TO PLAY!
Upgrade Engine
10000
Level: 0 / 100
Upgrade Boost
10000
Level: 0 / 100
Upgrade Bonus
10000
Level: 0 / 100
Assets/StuntCrasher/Docume

UI canvas supports all aspect ratios, but actually designed for portrait modes. Just be sure your default orientation is same with your display mode.



Android

Default Orientation* Portrait

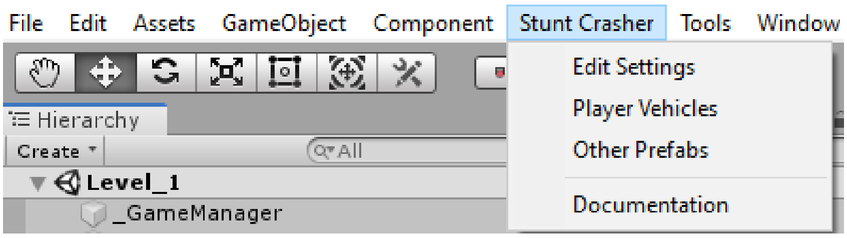
Build completed with a result of 'Succeeded' in 102 seconds (101724 ms)

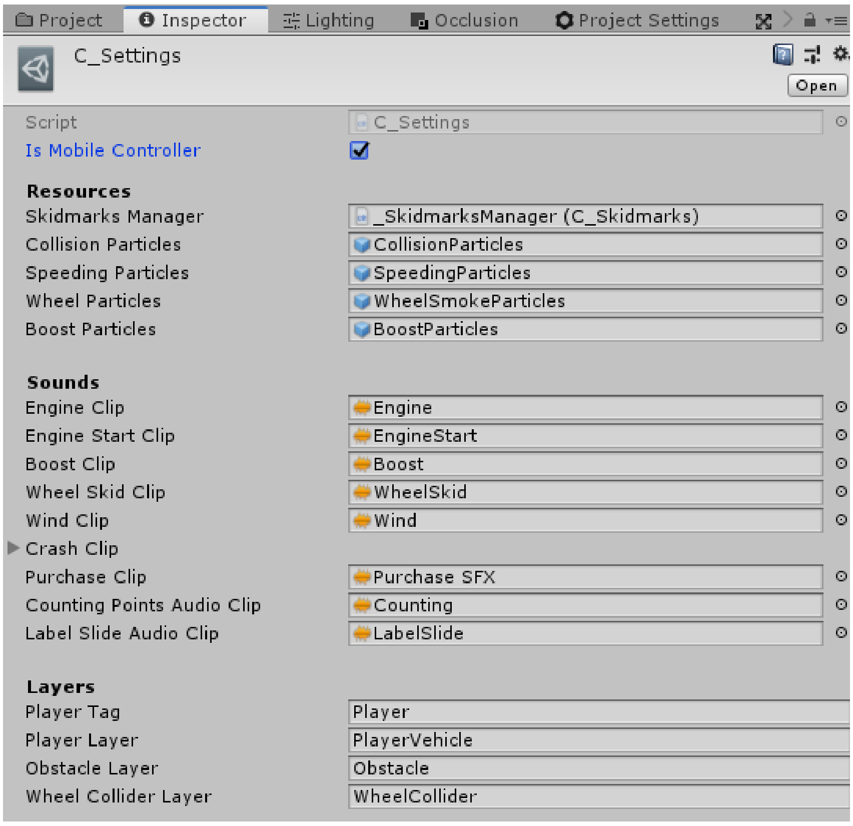
Importing Project Settings Manually

(If your Project Settings are imported successfully, you can skip this step)

After importing the package, close your Unity Editor and open ProjectSettings compressed rar file inside Assets . You will find ProjectSettings folder at root of your project. Extract all folders into this folder. Replace any existing file. This folder contains all necessary tag & layers and all kind of necessary project settings for your editor. You may get an error about layout when you fired up Unity. Just click Load Default Layout in this case.

You can find all shared settings in Stunt Crasher →Edit Settings.





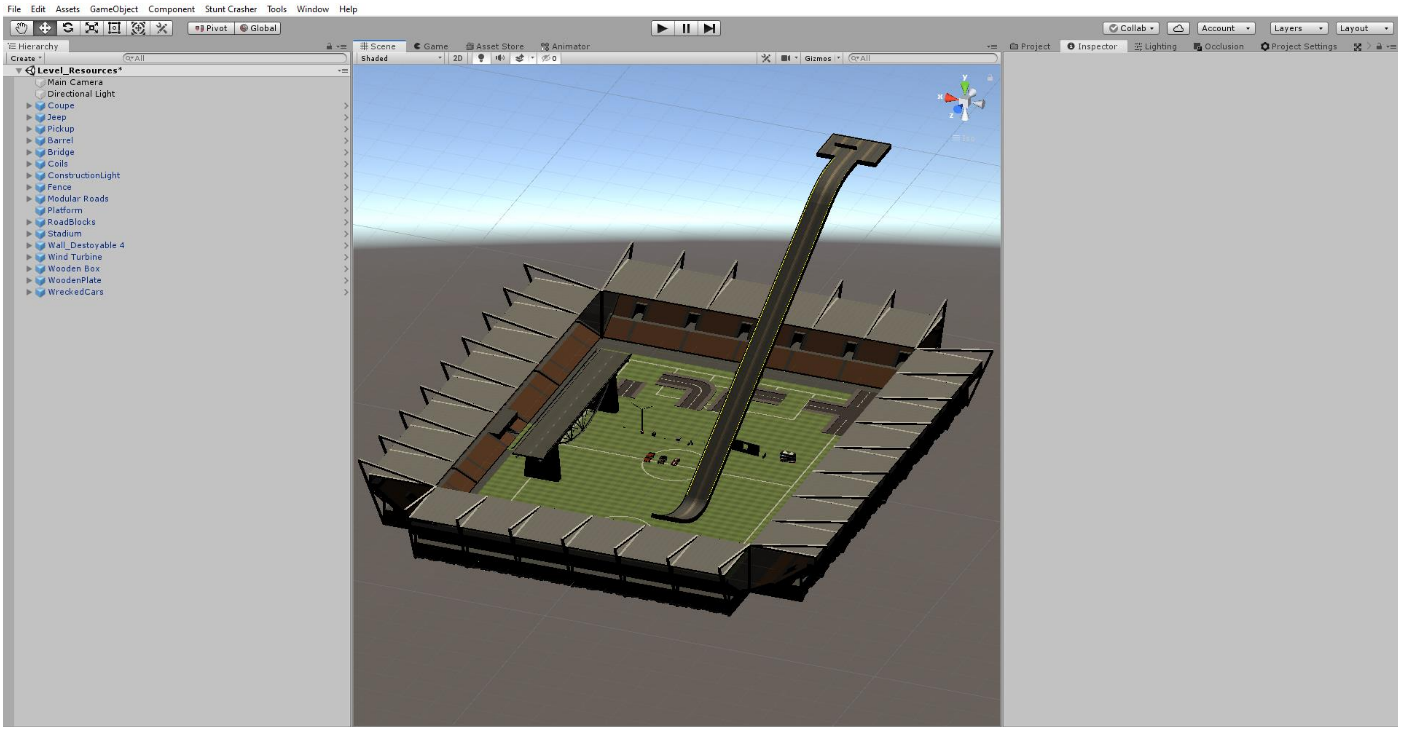
C_Settings

Script	C_Settings
Is Mobile Controller	☑
Resources	
Skidmarks Manager	_SkidmarksManager (C_Skidmarks)
Collision Particles	CollisionParticles
Speeding Particles	SpeedingParticles
Wheel Particles	WheelSmokeParticles
Boost Particles	BoostParticles
Sounds	
Engine Clip	Engine
Engine Start Clip	EngineStart
Boost Clip	Boost
Wheel Skid Clip	WheelSkid
Wind Clip	Wind
▶ Crash Clip	
Purchase Clip	Purchase SFX
Counting Points Audio Clip	Counting
Label Slide Audio Clip	LabelSlide
Layers	
Player Tag	Player
Player Layer	PlayerVehicle
Obstacle Layer	Obstacle
Wheel Collider Layer	WheelCollider

You can edit all shared global settings here.

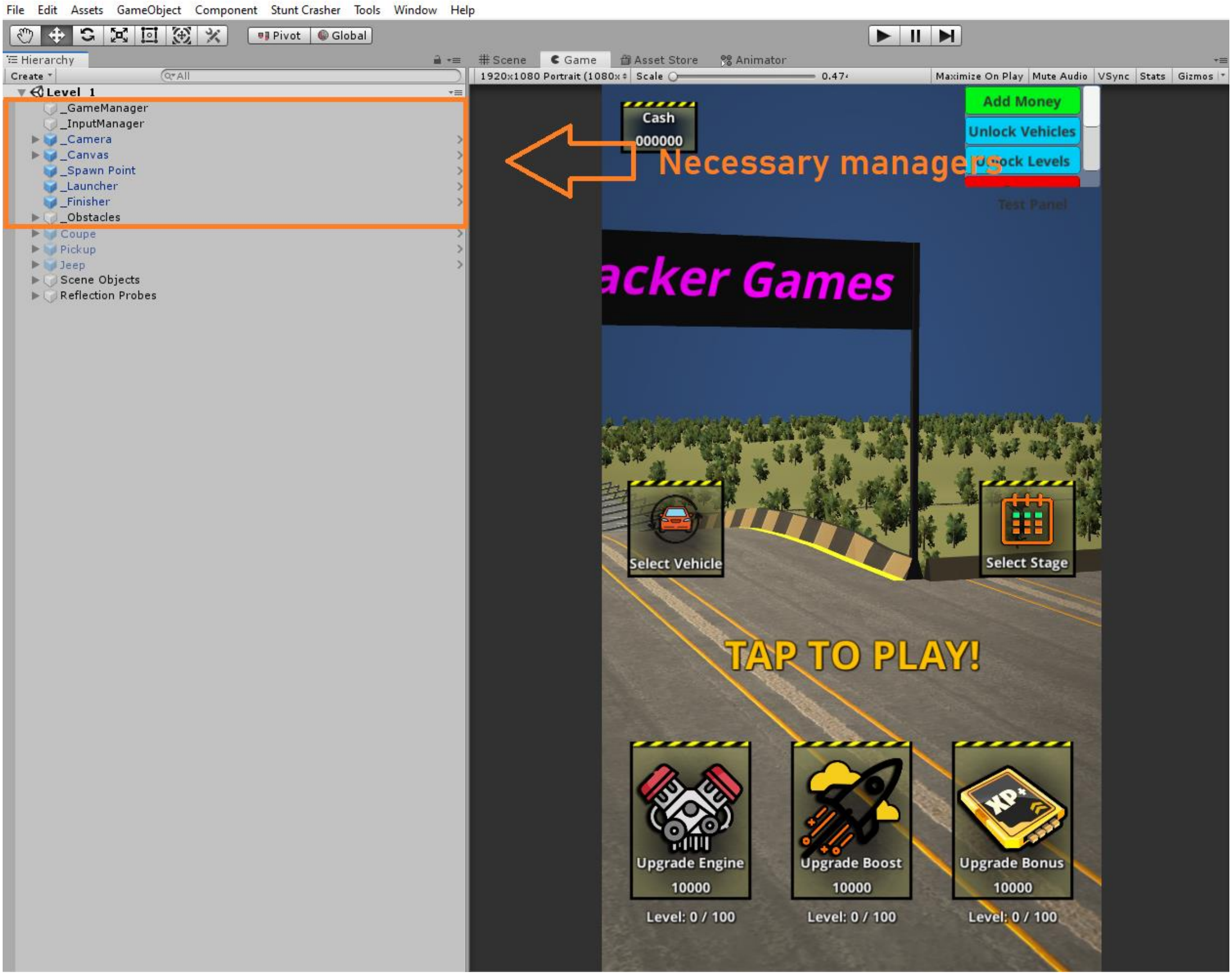
All Resources

All player vehicles, all weapons, all enemies, all props, and all other resources are located in a scene named Level_Resources . Before reskining the game or editing things, I would recommend you to take a look at this scene and check out vehicles, props, and all other resources. This would be very useful information that you gonna use in future.



How To Add New Levels

Shortest way to create your own scene, is duplicate one scene and edit the scene whatever you like. For ex, if you want to create a new level, duplicate current scene as reference, then customize your scene. And add your new scene to your Build Settings. But it s ok if you want to start from scratch. Be sure your own scene has necessary manager scripts, UI, Camera, and other equipments. Each scene must have these manager gameobjects;

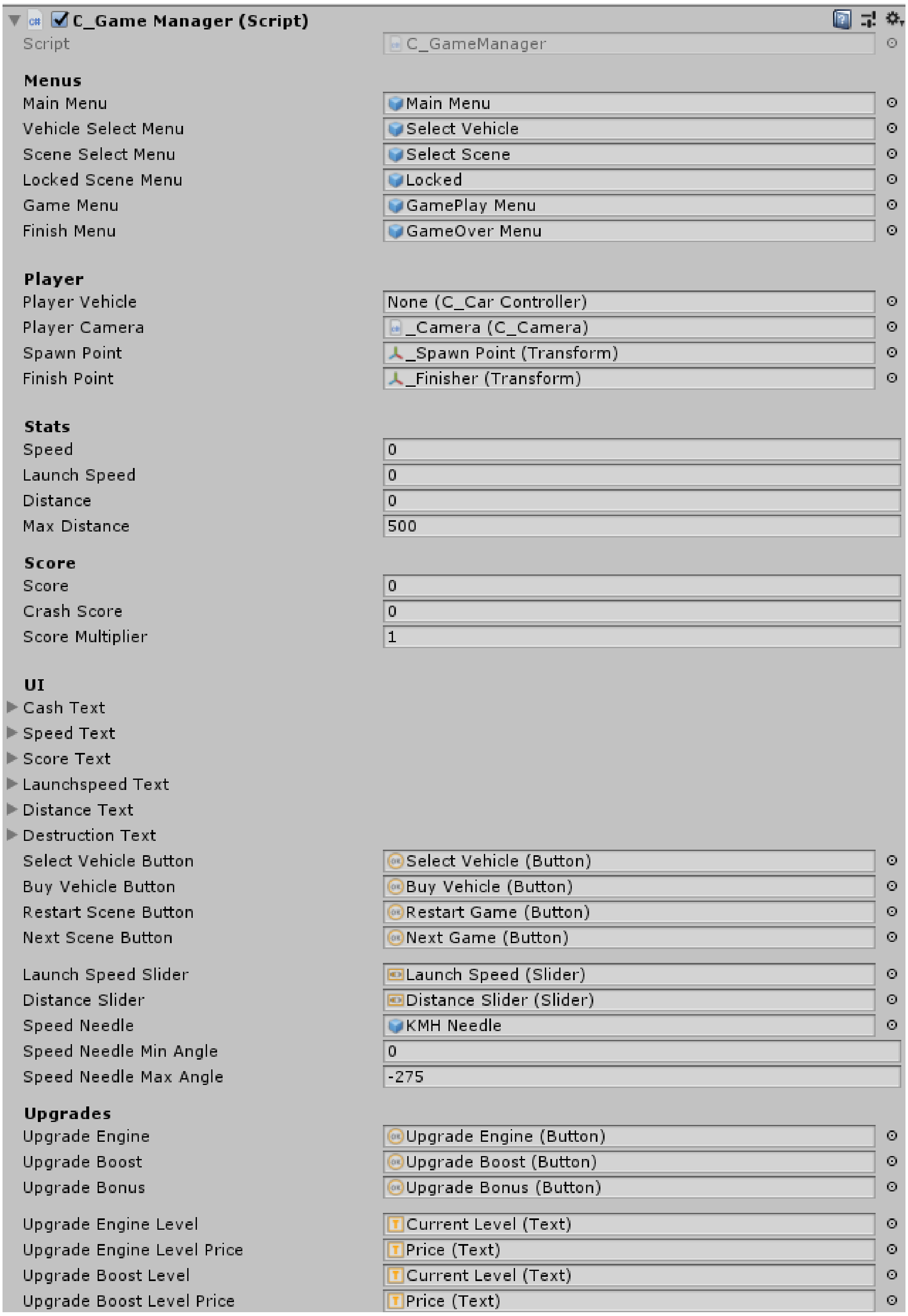


Go to your Build Settings , and add your new level to the list. All scenes must be added in Build Settings.

Manager Scripts

_GameManager

Controls overall behavior of the scene. Spawns player vehicles, controls UI, calculates score, starts and finishes the level, purchases new vehicles, upgrade them, etc... Each method in C_GameManager.cs is well and fully documented. Hardcode free and very easy to edit.



C_Game Manager (Script)

Script	C_GameManager
Menus	
Main Menu	Main Menu
Vehicle Select Menu	Select Vehicle
Scene Select Menu	Select Scene
Locked Scene Menu	Locked
Game Menu	GamePlay Menu
Finish Menu	GameOver Menu
Player	
Player Vehicle	None (C_Car Controller)
Player Camera	_Camera (C_Camera)
Spawn Point	_Spawn Point (Transform)
Finish Point	_Finisher (Transform)
Stats	
Speed	0
Launch Speed	0
Distance	0
Max Distance	500
Score	
Score	0
Crash Score	0
Score Multiplier	1
UI	
▶ Cash Text	
▶ Speed Text	
▶ Score Text	
▶ Launchspeed Text	
▶ Distance Text	
▶ Destruction Text	
Select Vehicle Button	Select Vehicle (Button)
Buy Vehicle Button	Buy Vehicle (Button)
Restart Scene Button	Restart Game (Button)
Next Scene Button	Next Game (Button)
Launch Speed Slider	Launch Speed (Slider)
Distance Slider	Distance Slider (Slider)
Speed Needle	KMH Needle
Speed Needle Min Angle	0
Speed Needle Max Angle	-275
Upgrades	
Upgrade Engine	Upgrade Engine (Button)
Upgrade Boost	Upgrade Boost (Button)
Upgrade Bonus	Upgrade Bonus (Button)
Upgrade Engine Level	Current Level (Text)
Upgrade Engine Level Price	Price (Text)
Upgrade Boost Level	Current Level (Text)
Upgrade Boost Level Price	Price (Text)

_InputManager

Gets input from axis or UI button. C_CarController is using "motorInput" variable in this script. If mobile controller is enabled, takes input from UI. If disabled, takes input from Input.GetAxis().

_Camera

Player camera that follows player vehicle with desired settings. Distance, height, field of view angles, rotation or position offsets can be changed.

_Launcher

Launch position. Create a trigger collider and attach this script. Calls "Launch()" method in C_GameManager script when player triggers with it. It′s simply a box trigger.

_Finisher

Finish position. Create a trigger collider and attach this script. Enables “**gameCompleted**” bool in C_GameManager script when player triggers with it. It′s simply a box trigger.

_Obstacle

Obstacle with score, name, etc... If player vehicle collides with an object including this script, it will add score. Score and name of the obstacle can be changed.

How To Add New Vehicles

All of your vehicles must have C_CarController script for operating the car. Also handles player score, upgrades, and stats too. Just one script per vehicle handles everything.

1 – Drag and drop your vehicle model to your scene.

2 – Be sure your vehicle model has correct X Y Z axes and directions. Z must be facing forward. X is right, and Y is up. This is the golden rule of 3D modeling.

3 – Select your vehicle and click Stunt Crasher → Add → Car Controller.

4 – This will add Rigidbody and C_CarController component to your vehicle with default settings and resources.

5 – Select all wheels of your vehicle and click Create WheelColliders button. This will create wheelcolliders with proper dimensions and radius.

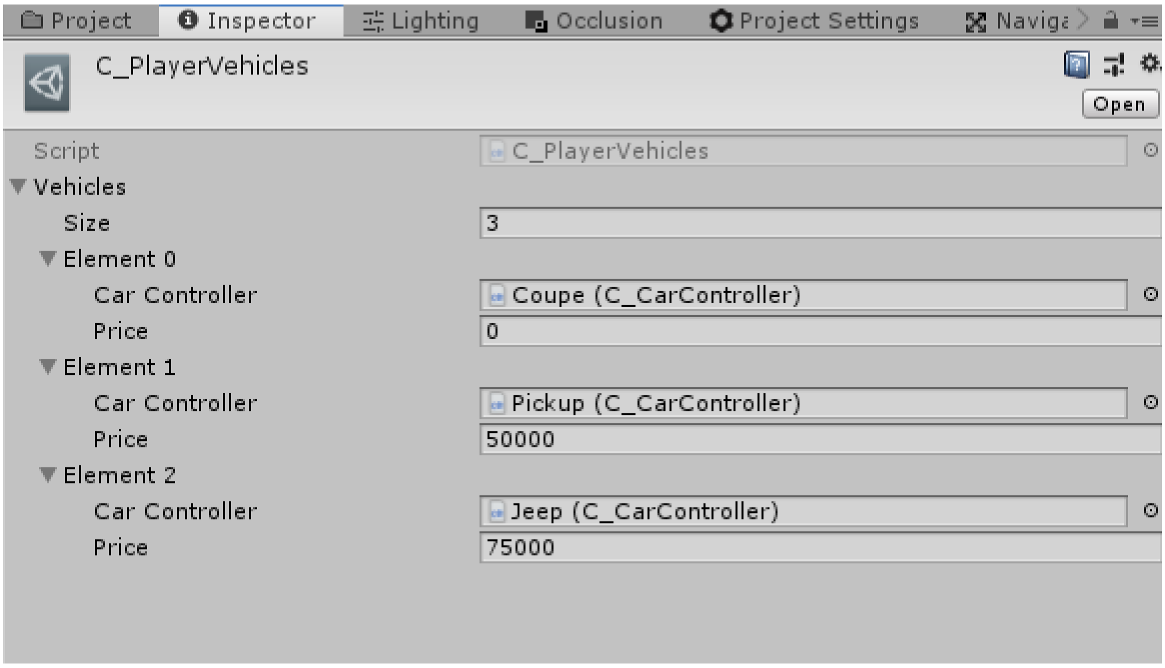
6 – Be sure your vehicle has body collider. If your vehicle has no any type of collider, it will fall down through the ground and behave glitchy.

7 – Technically, your new vehicle is ready to use in the game. Click Add it to Vehicles List button to creating a new prefab and adding it to player vehicles list as playable vehicle. This will create a new prefab in Assets\Stunt Crasher\Resources\Vehicles folder. As you can see, all vehicle prefabs are in this folder.

8 – If your vehicle has individual physical parts like hood, bumpers, doors, fenders, trunk, you must add Configurable Joints or Fixed Joints to them. Be sure you are using correct setup per each parts. Also you can set strength of the parts too. Depending on collision force, part will be broken.

9 – Go to Stunt Crasher → Player Vehicles and check all vehicles. You can set their price and sort by new order. Typing price as 0 will make this vehicle will be unlocked as default.

Now, you have created a new vehicle and stored it as prefab in your project. All you need to do is add the prefab to your selectable player vehicles list. Open up Player Vehicles window from Stunt Crasher → Player Vehicles.



C_PlayerVehicles

Script: C_PlayerVehicles

Vehicles

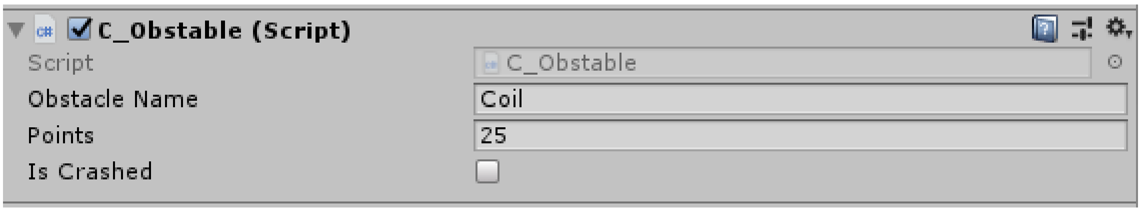
- Size: 3
- Element 0
  - Car Controller: Coupe (C_CarController)
  - Price: 0
- Element 1
  - Car Controller: Pickup (C_CarController)
  - Price: 50000
- Element 2
  - Car Controller: Jeep (C_CarController)
  - Price: 75000

Also you can set its price, unlocked or not, etc...

After doing this, check out your car selection menu on Main Menu. Your new vehicle must be visible and selectable now. There are no needed additional things for creating new vehicles. If you are not satisfied with your vehicle setup, you can edit and apply prefab changes at the end.

How To Add Obstacles / Props

Each obstacle is a prefab. All obstacles in game are located in **Resources → Prefab → Props** folder. Each obstacle must have **Obstacle** component attached to it. You can change their names and score as you wish. If player vehicle collides with an object with **Obstacle** component, player will earn score.



☑ C_Obstable (Script)

Script: C_Obstable

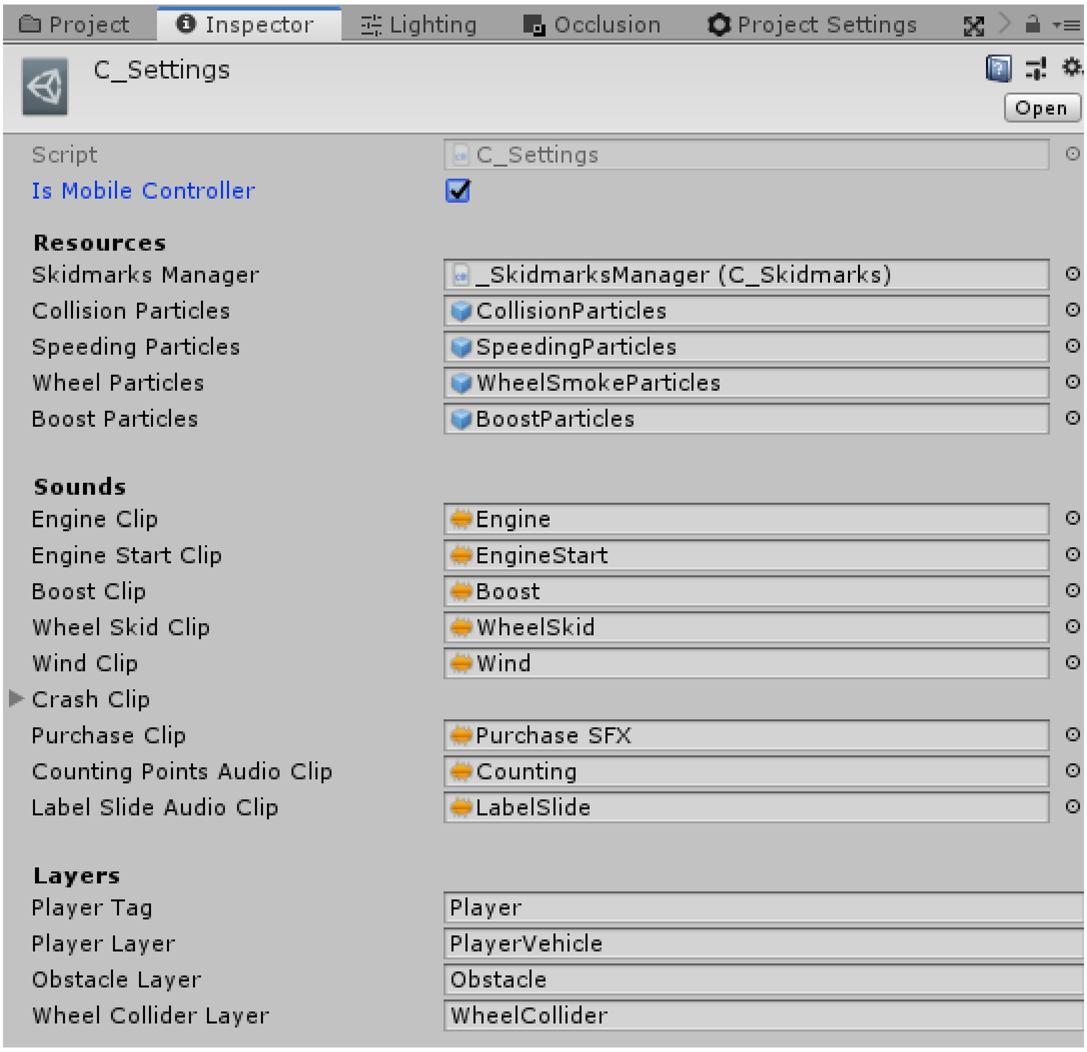
Obstacle Name: Coil

Points: 25

Is Crashed: □

How To Change Controller Type

You can change controller type from Stunt Crasher → Edit Settings → Controller.



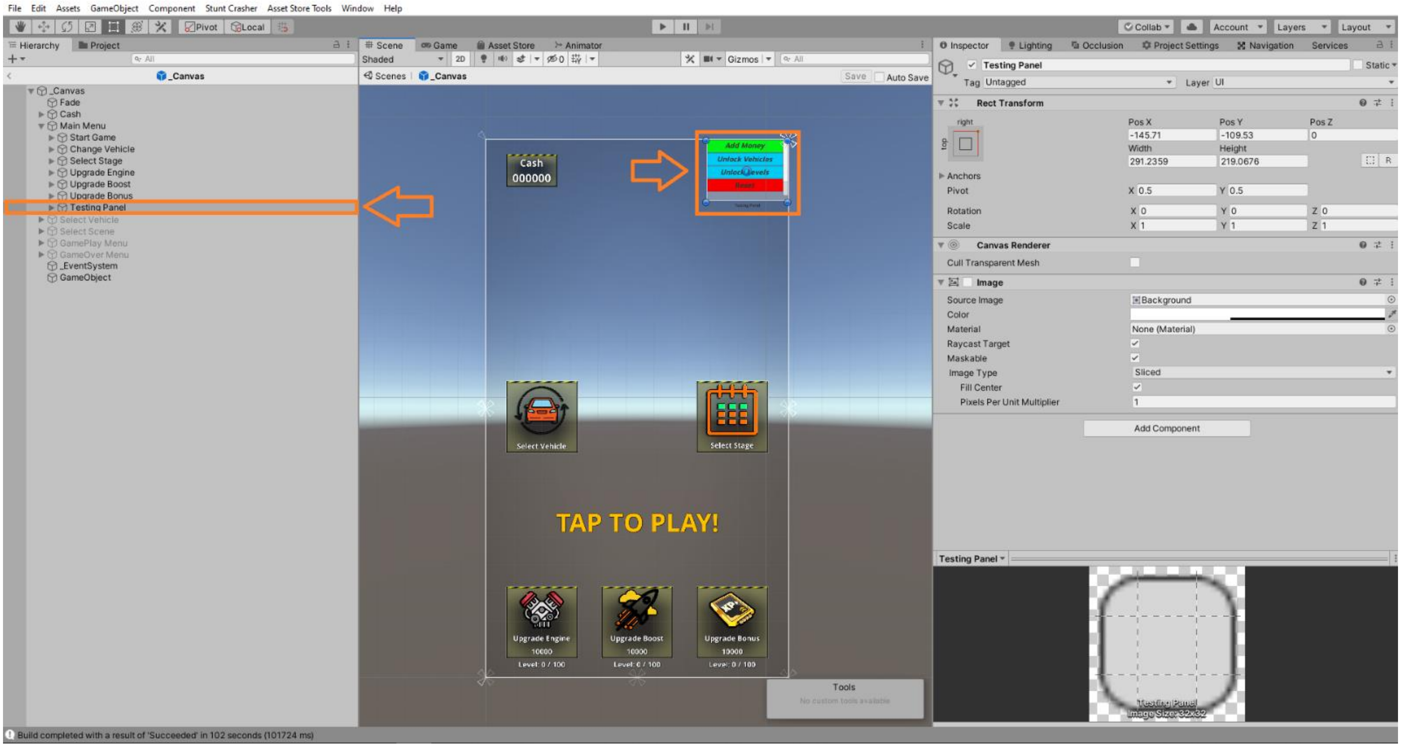
C_Settings

Script	C_Settings
Is Mobile Controller	☑
Resources	
Skidmarks Manager	_SkidmarksManager (C_Skidmarks)
Collision Particles	CollisionParticles
Speeding Particles	SpeedingParticles
Wheel Particles	WheelSmokeParticles
Boost Particles	BoostParticles
Sounds	
Engine Clip	Engine
Engine Start Clip	EngineStart
Boost Clip	Boost
Wheel Skid Clip	WheelSkid
Wind Clip	Wind
▶ Crash Clip	
Purchase Clip	Purchase SFX
Counting Points Audio Clip	Counting
Label Slide Audio Clip	LabelSlide
Layers	
Player Tag	Player
Player Layer	PlayerVehicle
Obstacle Layer	Obstacle
Wheel Collider Layer	WheelCollider

All mobile UI controllers will be visible if you choose Mobile . They are not visible and functional if your controller type is not mobile controller.

Testing Panel

Testing panel is disabled by default. But you can enable and use it by editing UI canvas prefab. In order to do this, you will need to open the prefab named Canvas in Resources / Prefabs folder. Open the prefab and enable Testing Panel parented to the canvas. Save after editing. All of your scenes will have testing panel enabled and functional.



- _Canvas
  - Fade
  - Cash
  - Main Menu
    - Start Game
    - Change Vehicle
    - Select Stage
    - Upgrade Engine
    - Upgrade Boost
    - Upgrade Bonus
    - Testing Panel
  - Select Vehicle
  - Select Scene
  - GamePlay Menu
  - GameOver Menu
  - _EventSystem
  - GameObject

☑ Testing Panel □ Static
Tag Untagged Layer UI

Rect Transform

	Pos X	Pos Y	Pos Z
right / top	-145.71	-109.53	0
	Width	Height	
	291.2359	219.0676	
Anchors			
Pivot	X 0.5	Y 0.5	
Rotation	X 0	Y 0	Z 0
Scale	X 1	Y 1	Z 1

Canvas Renderer

Cull Transparent Mesh □

Image

Source Image: Background
Color
Material: None (Material)
Raycast Target ☑
Maskable ☑
Image Type: Sliced
Fill Center ☑
Pixels Per Unit Multiplier: 1

Build completed with a result of 'Succeeded' in 102 seconds (101724 ms)

PostProcessing Image Effects and URP

PC and WebGL demos have **Post Processing image effects**. Most mobile devices can t handle it. Post Processing is defaultly disabled. But you can import latest version from Unity Asset Store. Also project doesn t use any custom shaders. So, you can use URP in this project without any issue.

I tried to keep the project clean, smooth, and understandable. If you have any questions, or requests, please contact me on;

BoneCrackerGames@gmail.com