

Car Paint Shaders Asset documentation



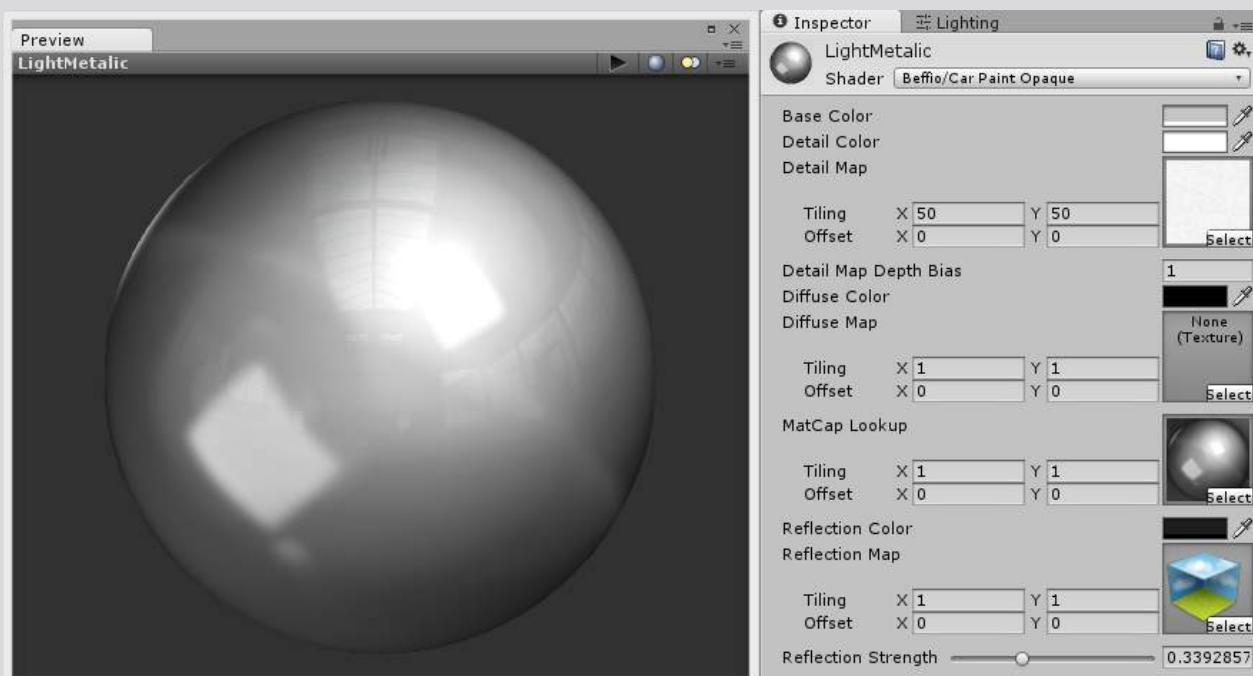
1. Introduction

Car Paint Shaders Assets is a package that contains photo realistic shaders, a lot of realistic effects and useful scripts for cars. We give you a lot of example scenes made from scratch to show you full potential of that shaders. We provide you with shaders for mobile and high end PC's Car visualisations.

2. Shaders

a) Advanced Car Shader - this shader is not affected by light but creates shadow if needed. Light is created using prerendered textures to give more realistic effect and better optimisation. Recomended for all platforms with fast & efficient realistic effects without FPS dropoff. It's using only **1 draw call per whole material shader**.

Recomendation: Games & Apps for Mobile & PC's



Base Color - Overall Color of body paint (in Car Paint Transparent Shader you can define opacity of object using Alpha Channel)



Flake Parameters

Detail Color - Change Color of the Flakes Layer

Detail Map - Flake Noise Detail Texture Map

----- Tiling - Size in XY of flakes if bigger then smaller flakes

Detail Map Depth Bias - distance - when you will start see any flakes if smaller then longer

Texture Map (Decals) Parameters

Diffuse Color - Control your texture - if alpha is set on 0 it's turned off. Also if you are using decal with alpha channel this color will start to control your whole material color on alpha channel.

Diffuse Map - Slot for your Map/Texture (works with alpha so it can be used for dirt and other stuff that use alpha channel). Also Tiling included.

MatCap Parameters

MatCap Lookup - Special MatCap Texture rendered in 3d software. We provide you with them.

CubeMap Reflection Parameters

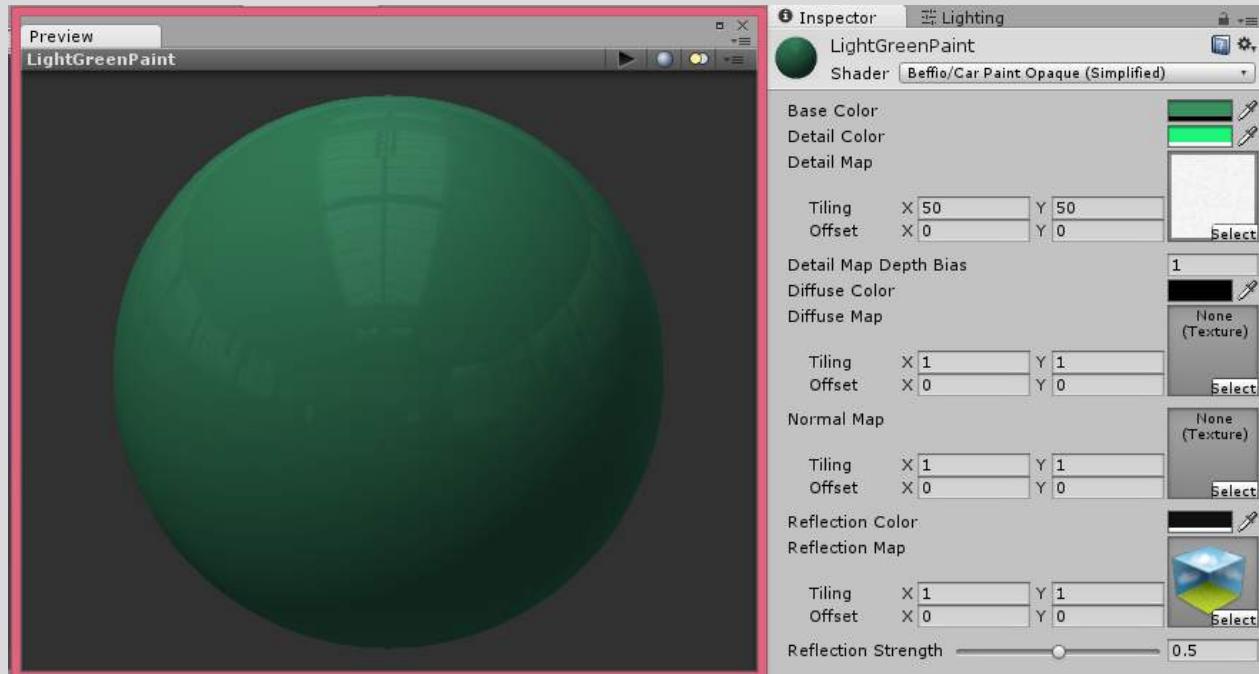
Reflection Color - Color of reflection and strength of it

Reflection Map - CubeMap Texture

Reflection Strength - Blending between two techniques of MatCap and CubeMap Reflection

b) Simplified Car Shader - alternative for Advanced Shaders with affection by light that also can produce shadows. Fully physical shader so it also have normal map slot.

Recomendation: Games & Apps for Mobile & PC's



Normal Map Slot - slot for "Normal Map" like textures for details on shapes.

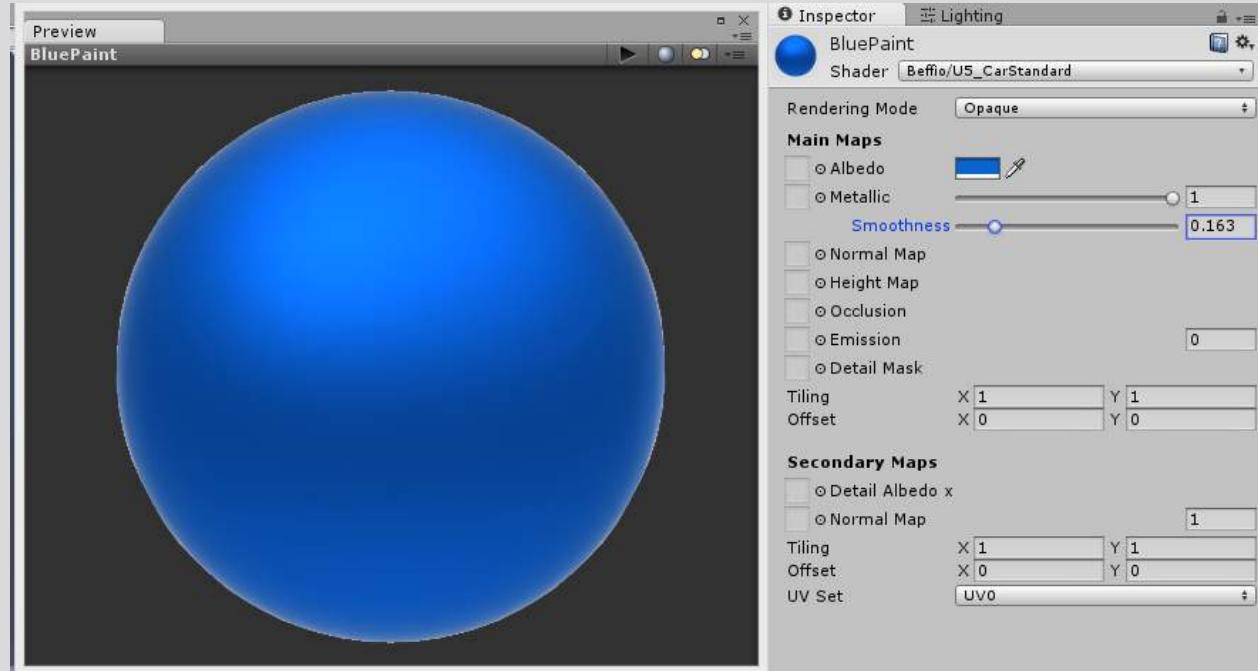
All other parameters are the same like in Advanced Shaders but there is not MatCap solution.

It's affected by light.



c) Physical Based Rendering Shading Materials - in latest update we made PBR shaders based on build-in Standard Shader. You can use fully potential of that shaders with all slots passes.

Recomendation: Games & Apps for Visualisations on High-End PC's



3. Unity5 Workflow HDR Lighting, Reflection Probes & Effects

With Update 2.0 we provide you with ready-made asset that using advanced techiques of PBR workflow.

If you are looking mind blowing solutions for Car Presentation in High End Machines this examples are for you.

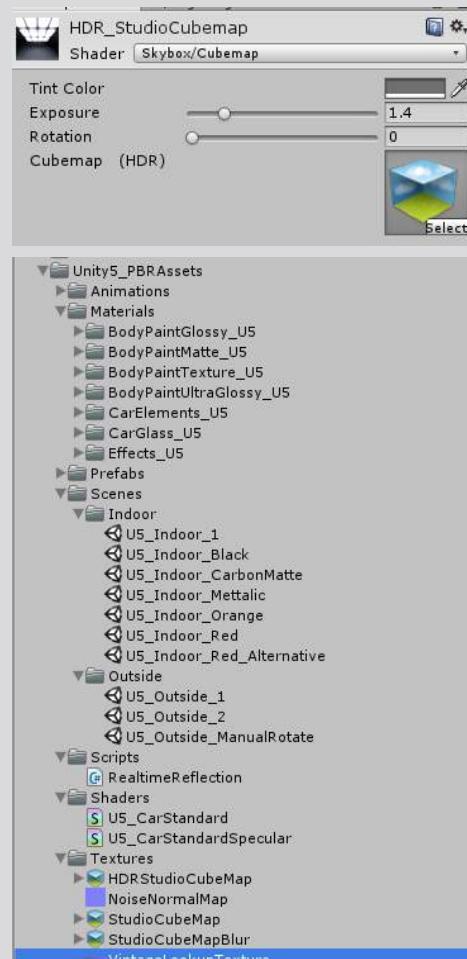
We cannot show all of techiques in this Documentation because - We put a lot of time in research of this area. We created 10 Scenes that show you full potential of Unity5 new Lighting, Reflection Probes & Effects. All are ready setup with Lighting settings, Camera Image Effects, Scripts and correct HDR lighting. If you like our Screens from Unity5 Scenes this how it's going to look in your Computer - all is pure made in Unity5.

HDR Studio Cubemap - We created in 3D software 32-bit HDR map for lighting your high end Car Scenes. This is integrated with Unity5 Lighting system.

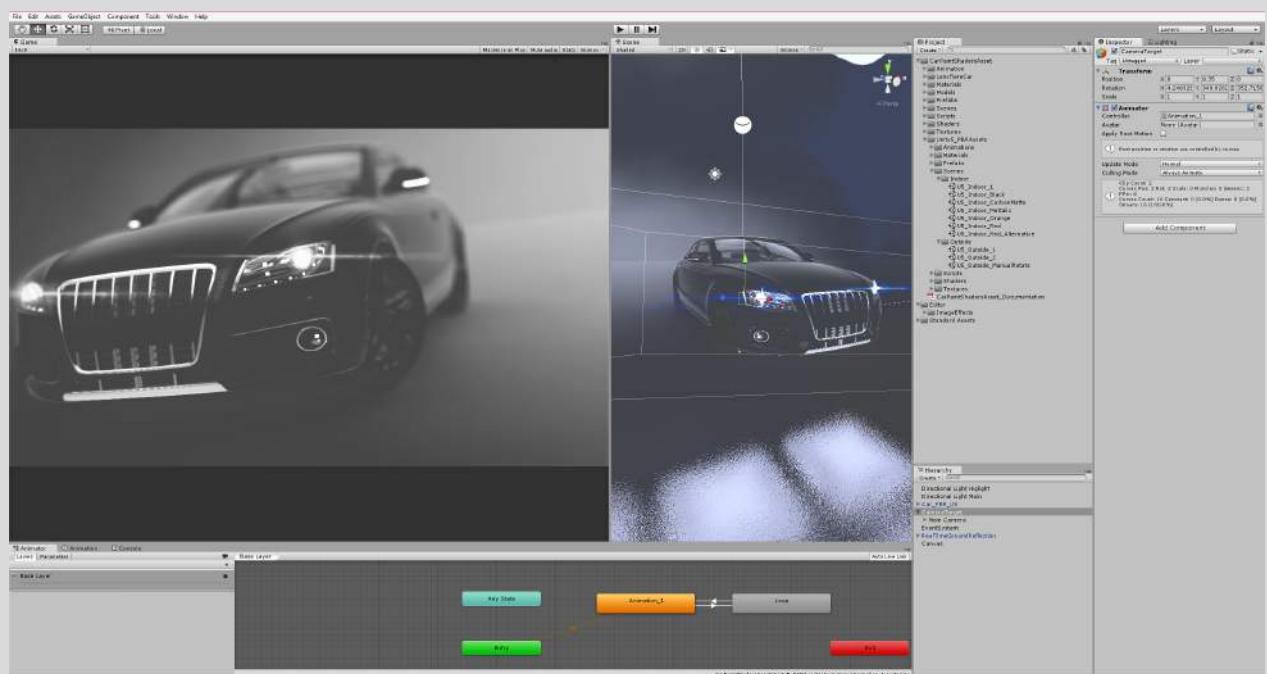
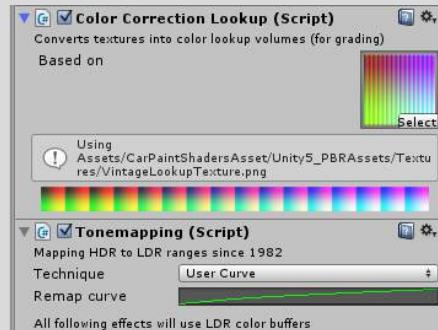
Ready-Made 50+ Car PBR Materials with ready-made Car prefabs.

Script for control RealTime ReflectionProbe by Camera

Ground Normal Map Texture for Reflection Probe



Tonemapping from Deffered Rendering and Custom Made Color Correction Lookup Maps.



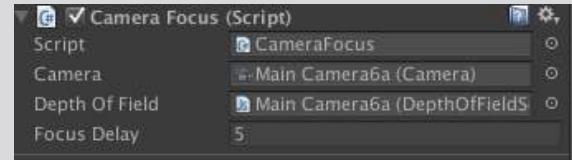
4. Scripts

a) Autofocus Script for build in Depth of Field Scatter (requires UnityPro) - technique focus like in traditional camera in center point of your screen in focus your target automatically

Camera - slot for your Main Camera

Depth Of Field - slot for DepthOfFieldScatter script

Focus Delay - autofocus time delay



b) Smooth Orbit Camera Zoom and Rotate Script - one script for smooth camera rotation like in finger gestures

Target Object - your target point

Target Offset - offset your target

Average Distance - distance between min and max

Max Distance - how long is your scroll

Min Distance - how near is your scroll

XSpeed - rotate speed in X

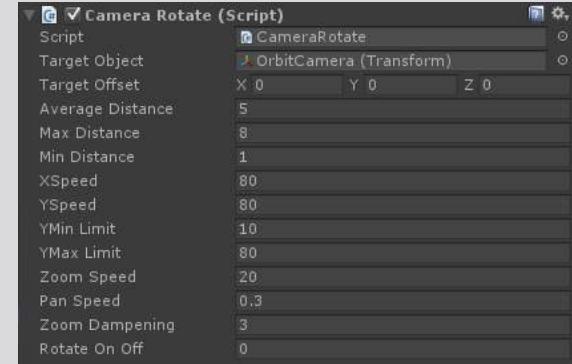
YSpeed - rotate speed in Y

YMin Limit - your target rotate lock

XMax Limit - your target rotate lock

Zoom Speed - scroll speed

Zoom Dampening - smoothness of zooming



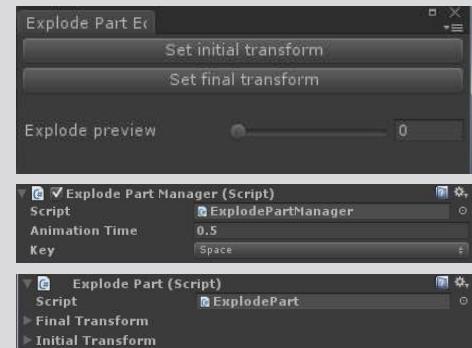
c) Explode GameObject Part Script - is a script to easily animate your object in scene and after begin playmode active them on keyboard key with smooth tween. It remembers position, rotation and scale.

Explode Part Editor - here you define your animation

Set initial transform - set your start object position, scale and rotation

Set final transform - set your final object position, scale and rotation

Explode preview - move scroll bar to see your animation in editor



Explode Part Manager Script / put this on parent object

Animation Time - speed of your animation

Key - your keyboard shortcut key

Explode Part Script / put this on child object that you want to animate

- your object data for position, rotation and scale

5. Effects

a) **Light Flares** - build in Lens Flares system with custom made textures and parameters

Flare - your flare slot

Color - flare color

Brightness - intensity of light

FadeSpeed - your flare colider speed fade out

Ignore Layers - which object to not affect



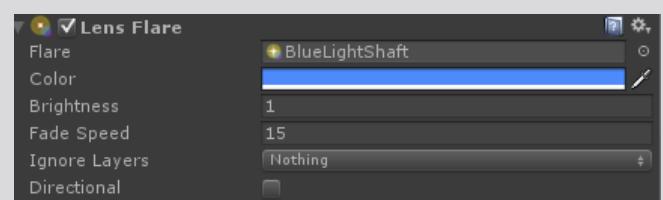
Prefabs Light Flares

Blue Light Shafts - like in screen with long shafts

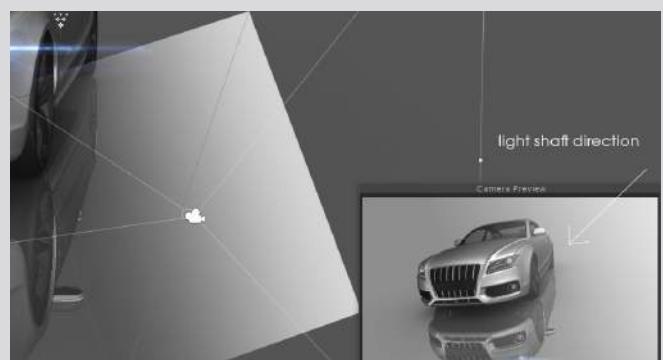
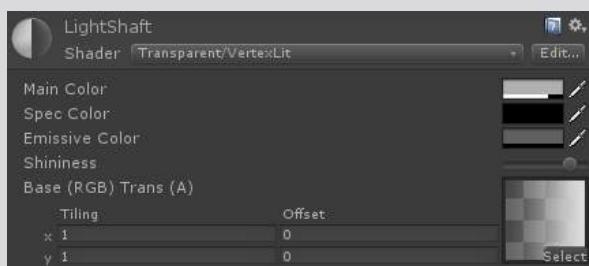
Red Light Shaft - like in screen with long shafts but red

Glow Blue Flare - glowing blue dots

Glow Red Flare - glowing red dots



b) **Camera Light Shaft (based on texture)** - creates nice direction gradient light shaft for better visuals. It uses simple quad with gradient texture material. Easy to define - control it using transparent.



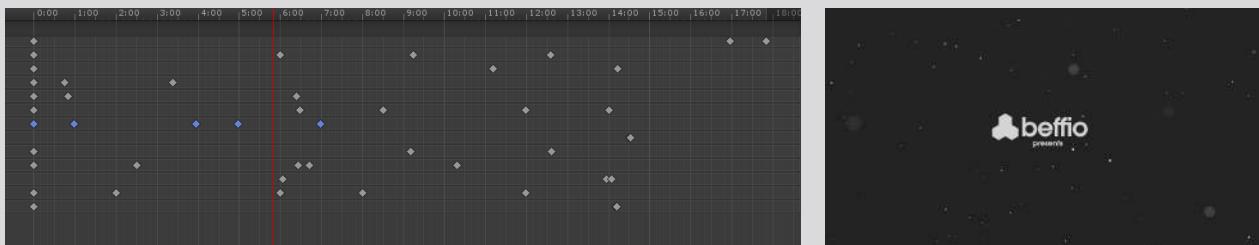
c) **Particles Effects** - 4 premade prefabs with bokeh particles, shiny dots and particles that give some depth to the scene



d) Image Effects - Ready-Set of 6+ Camera Image Effects with showup of Tonemaping and Custom Color Correction Lookup Effect.

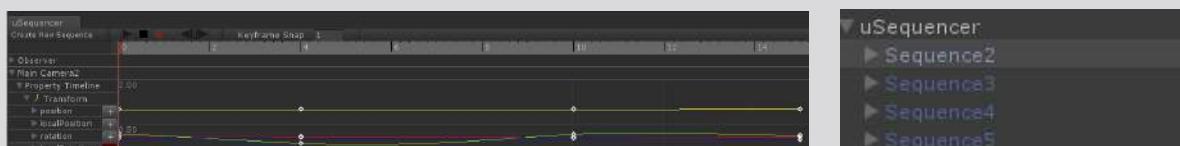
6. Animations

a) Intro Animation - is premade animation in UnityAnimation editor that contains adjustable First Gui Text, Second Gui Text, BG color and particles animations.



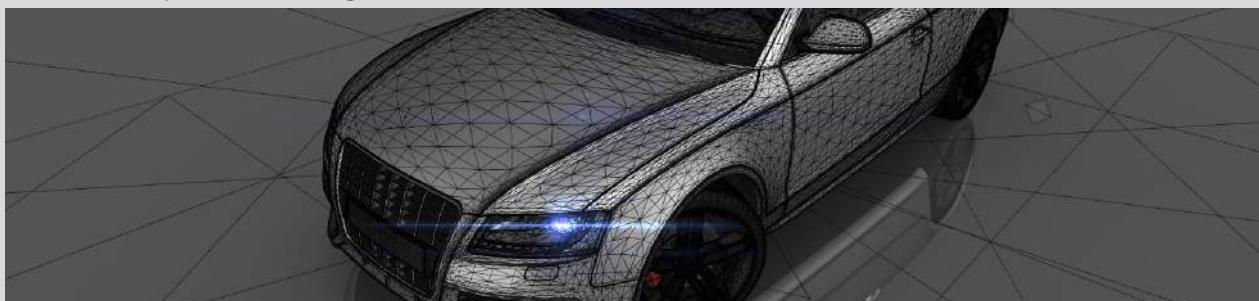
b) Build In Unity Animations - 4+ Custom Made Cinematic Camera Animations Showing your Car best angles with read-made animator states.

c) uSequencer cinematic animations - asset contains 15 premade cinematic animations made in uSequencer you can see them in video. If you want to see them you will need to buy uSequencer editor.



7. Model

a) Detailed car model - made from scratch, complete with the interior fully adjustable, all elements separated. Triangles rate around 400k~ and 350k verts.



8. Updates

a) Update 1.1 and 1.2

- Added new materials
- Fixed bugs and some script issues
- Added video movie.

b) Update 1.3

- New interior with detailed dashboard, new interior materials and design
- Fixed error with building player
- New interior screenshots and car paint screens
- new car paint material preview scene
- TUTORIAL VIDEO and showcase

c) Update 1.4

- Added Texture slots for all shaders with alpha channel. Now you can Add custom tilable texture into your Car or create dirt layer with alpha mask.
- Added two custom textures carbon fieber and dots pattern all tilable
- Created two custom Materials as an example of carbon paint material and dot paint material

d) Update 1.5

- Added Shaders Support for Unity 5

e) Update 2.0

- Unity5 Support
- Fixed Flickering Bug while Camera Rotating
- Fixed Bug with Fog & Depth Of Field

Advanced Shader:

- Added Decal with Alpha Channel Support
- Optimised whole Shader now it takes 1 draw call
- Fixed Issue with Shadows nowthey works correctly

Simple Shader:

- Addeed Detail Textures (Flakes support)
- Added Decal with Alpha Channel Support
- Added Normal Map Slot Support
- Fixed Issue with Shadows nowthey works correctly

Unity5 Physical Based Rendering New Assets

- 10 new Scenes showing full potential of PBR & Unity5 Rendering
- HDR 32-bit studio cubemap texture
- Normal Map Texture for Ground Distortion
- 50+ PBR Materials
- Two Custom PBR Car Shaders that base on Standard Build in Shader
- 3 new Car Animations
- Script for Controling Camera Realtime Reflection Probe
- Custom Made Lookup Texture for Vintage look
- Lighting, Camera Deffered HDR Rendering & DX11 Image Effects using Unity5 new features settings - Learn How To Achieve High End Visusals in Unity5 using latest features.

9. Support

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10. Custom Screen Shoots



Car Shaders | Useful Scripts

