

# Car Setup for PlayMaker

v1.4



Thank you for the purchase and download.  
ReadMe will guide you how this asset works.

## How to import

(Requires Unity 5 or higher + [PlayMaker](#))

#1 - create a new 3d project in Unity (empty without any packages)

#2 - open Asset store inside Unity (Window>Asset Store)

#3 - import this asset

#4 - import Playmaker, if install did not happen, in Project window go to Assets>PlayMaker>Editor>Install double click Playmaker package

**NOTE:**  
When importing in existing project **make a Backup** of your files!  
There will be New Project Settings needed to function.

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## Project Settings

### Tags & Layers

Inspector

Tags & Layers

▼ Tags

Tag 0	CarWaypointGroup
Tag 1	Car
Tag 2	Ped
Tag 3	PedWaypoint
Tag 4	Coin
Tag 5	Terrain

+

−

▼ Sorting Layers

Layer

Default

+

−

▼ 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	RoadArea
User Layer 9	CarTrafficBlock
User Layer 10	Vehicle
User Layer 11	
User Layer 12	
User Layer 13	
User Layer 14	
User Layer 15	IgnoreColl
User Layer 16	IgnoreRayAndColl
User Layer 17	
User Layer 18	
User Layer 19	
User Layer 20	
User Layer 21	
User Layer 22	
User Layer 23	
User Layer 24	
User Layer 25	
User Layer 26	
User Layer 27	
User Layer 28	
User Layer 29	
User Layer 30	
User Layer 31	

### Time Manager

Inspector

TimeManager

Fixed Timestep

0.002

Maximum Allowed Time

0.3333333

Time Scale

1

### Physics Manager

Inspector

PhysicsManager

Gravity

X 0Y −9.81

Default Material

None (Physic Material)

Bounce Threshold

2

Sleep Threshold

0.005

Default Contact Offset

0.01

Solver Iteration Count

6

Raycasts Hit Triggers

☒

Enable Adaptive Force

☐

▼ Layer Collision Matrix

	Default	TransparentFX	Ignore Raycast	Water	UI	RoadArea	CarTrafficBlock	Vehicle	IgnoreColl	IgnoreRayAndColl
Default	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TransparentFX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ignore Raycast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RoadArea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CarTrafficBlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IgnoreColl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IgnoreRayAndColl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Wheel Collider values

Wheel Collider

Mass

20

Radius

0.25

Wheel Damping Rate

0.25

Suspension Distance

0.3

Force App Point Distal

0

Center

X 0Y 0Z 0

Suspension Spring

Spring

35000

Damper

4500

Target Position

0.5

Forward Friction

Extremum Slip

0.8

Extremum Value

2

Asymptote Slip

1.6

Asymptote Value

1

Stiffness

2

Sideways Friction

Extremum Slip

0.4

Extremum Value

2

Asymptote Slip

1

Asymptote Value

1.5

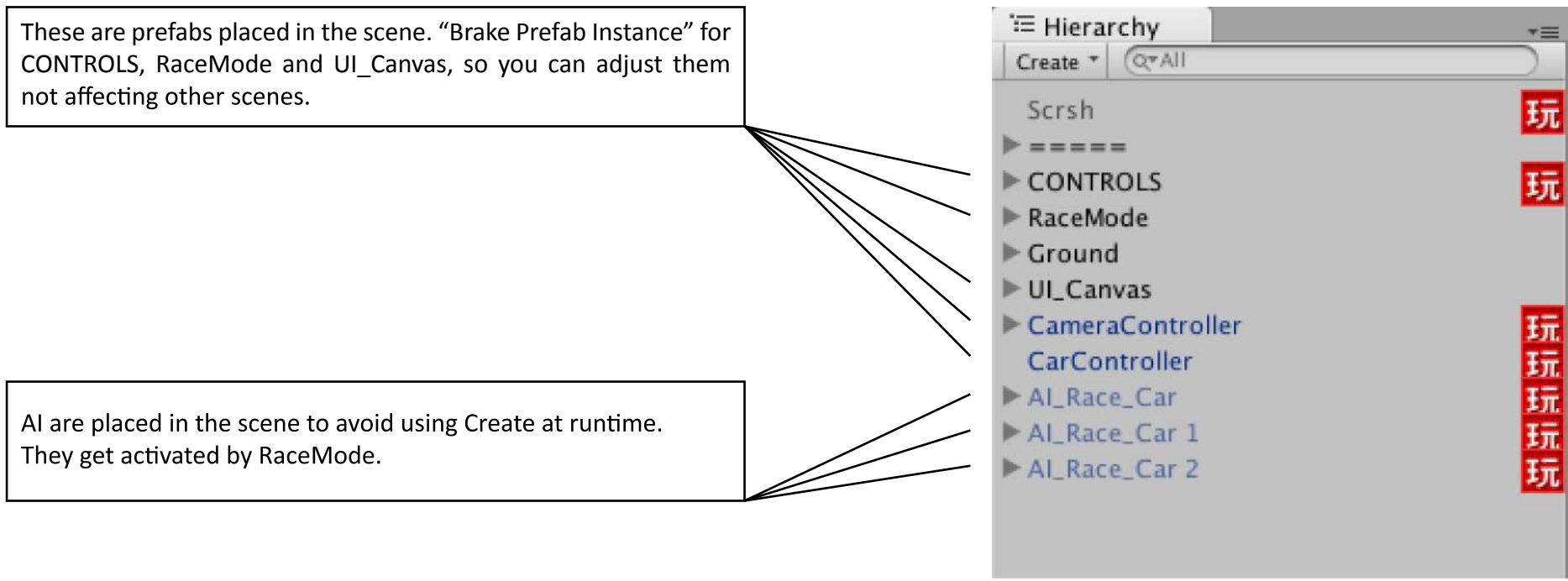
Stiffness

2

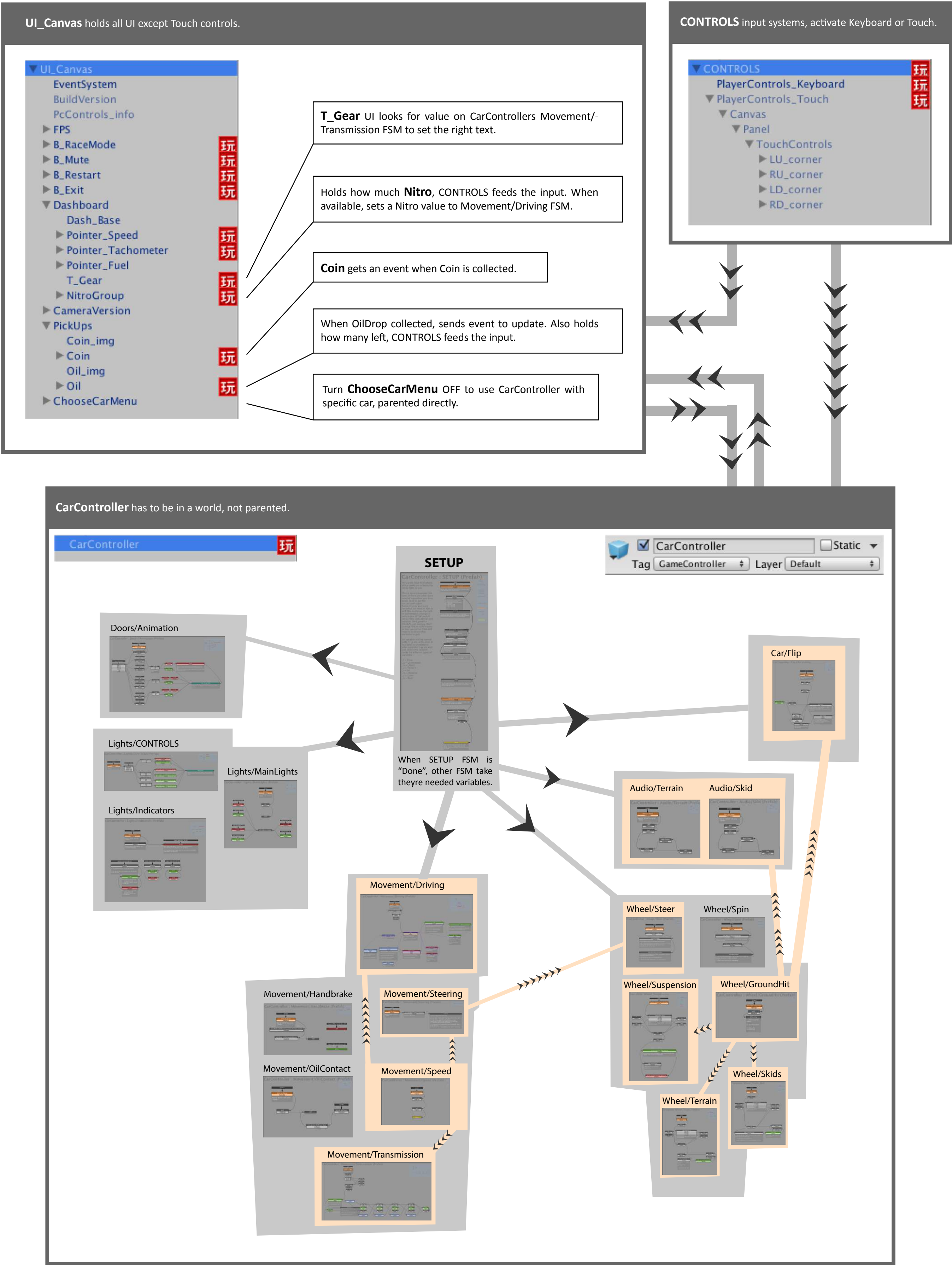
**Tags & Layers** are with asset’s “Modular Traffic” place holders.  
This is a preview what to add when combining these assets.  
**See FAQ** for import steps!



## Demo Scene



# FSM Map





**NavObst** game object for Agents (Pedestrians) to detect the car. Left it there for use with Modular Traffic asset.

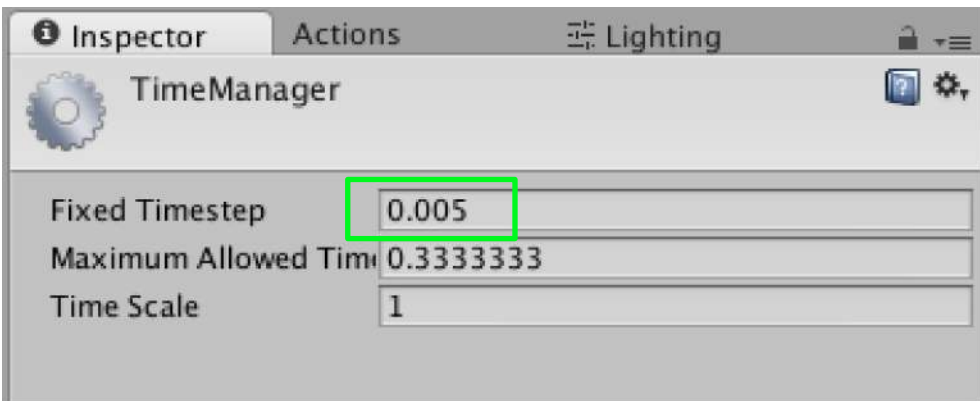
Video version on YouTube's channel: 600game ( <https://youtu.be/GeQLGmSpOpY> )

Check `AI_Racer` prefab  
for reference.



These settings are used in the preview build for this asset. May differ for your game requirements.

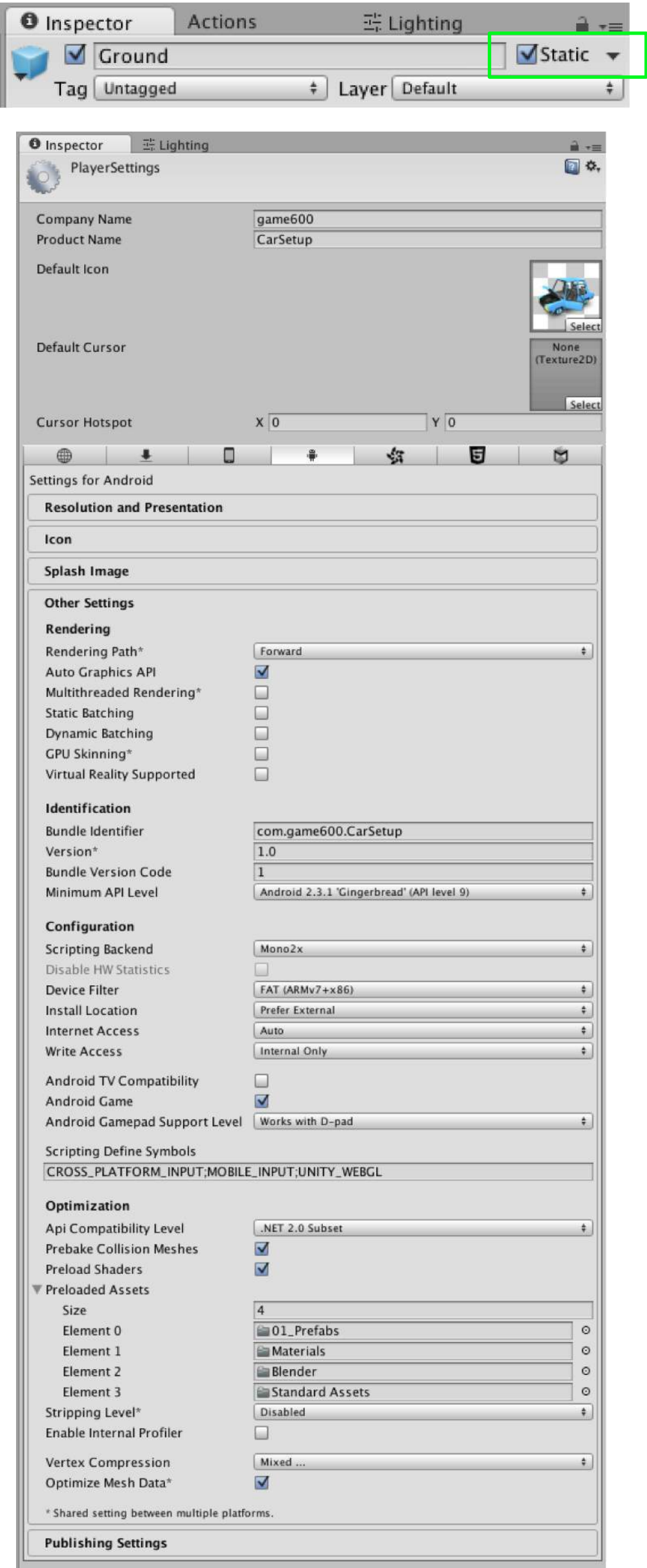
Time Manager



Lighting



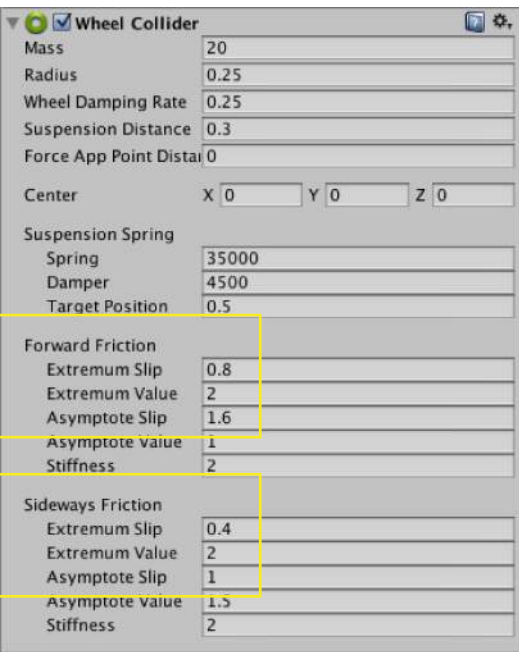
Ground objects check Static



FAQ

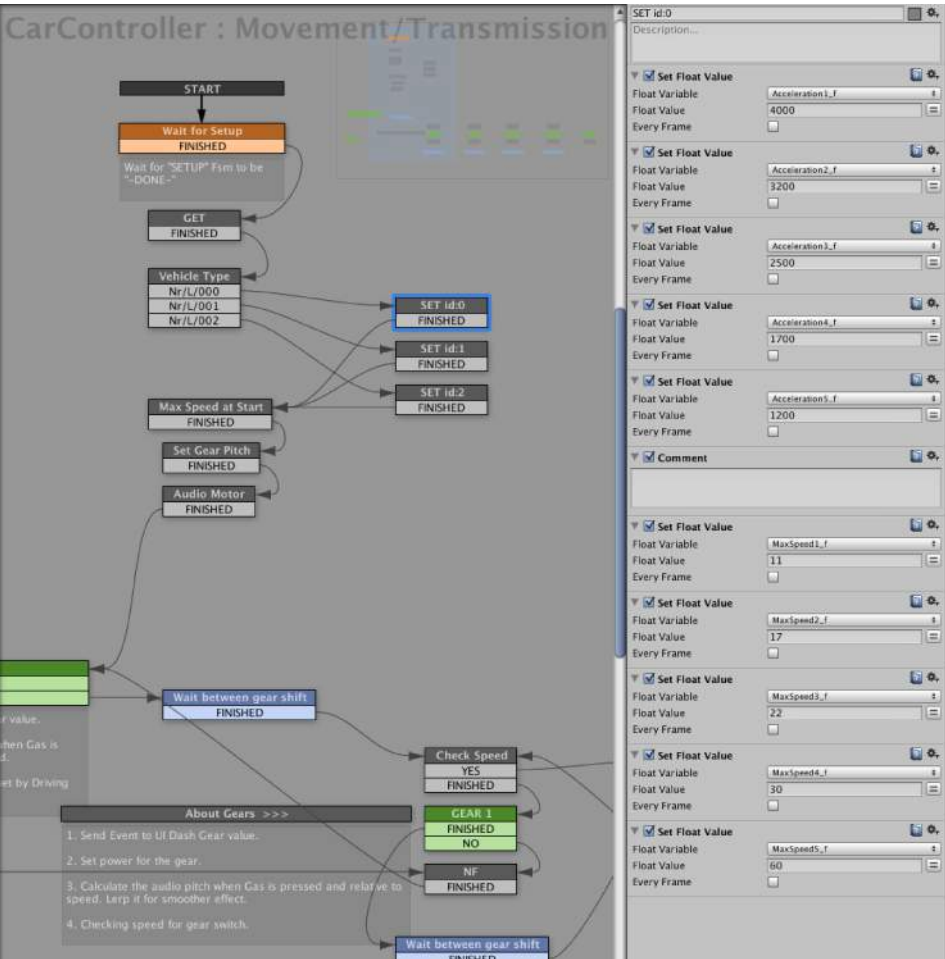
1. Drift

- For sharper turns in terms of speed check Movement/Steering “SteerAngle\_inSpeed” variable.
- Reduce wheel slip values.



2. Car power (Acceleration, MaxSpeed)

- Set Car Prefabs power by index in SETUP FSM - variable “VehicleType\_i”.
- Define these indexes in CarController FSM Movement/Transmission - states “SET id:0 - 2” by default.



3. AI chase player

- For tracks - with a custom edit for AI LookAt Fsm. AI would check player distance and if it is close, change target waypoint to player. When player escapes, AI would follow nearest waypoints again.
- For arena demolition type - same AI LookAt Fsm, Find player's car and set it as the target.

4. CarSetup + Modular Traffic

- To combine these packs on a new project:
- #1 - import PlayMaker and Modular Traffic.
- #2 - check if it runs with no errors.
- #3 - Go to Tags and Layers, type in missing tags/layers for CarSetup pack. **IMPORTANT** - must be the same index (slot).
- #4 - import CarSetup pack **without Project Settings** and uncheck duplicate scripts/actions in the list.
- #5 - Go to Physics Manager, check collisions as this pack (page 1)



# Setup a New Scene

1

Disable "Main Camera"

The Cube is a temporary ground object

Place Prefabs from \_MAIN\_ folder:

- CameraController

- CONTROLS

- UI\_Canvas

- CarController

2

GameObject

Component

PlayMaker

Create Empty

Create Empty Child

3D Object

2D Object

Light

Audio

UI

Particle System

Camera

Center On Children

Make Parent

Clear Parent

Apply Changes To Prefab

Break Prefab Instance

Set as first sibling

Set as last sibling

Move To View

Align With View

Align View to Selected

Toggle Active State

Break Prefab Instance for CONTROLS and UI\_Canvas

Disable Touch and Enable Keyboard controllers (CONTROLS child objects)

3

Disable "ChooseCarMenu" and "B\_RaceMode"

Inspector

Lighting

Actions

ChooseCarMenu

Tag

Untagged

Layer

UI

Static

Prefab

Select

Revert

Apply

Rect Transform

stretch

Left

0

Top

0

Pos Z

0

Right

Bottom

4

Parent a car from "Cars\_Player" folder and hit Play

Assets

01\_Prefabs

Cars\_Player

Bus01

Car03

Cargo01

Cargo02

CarLimo

Offroad01

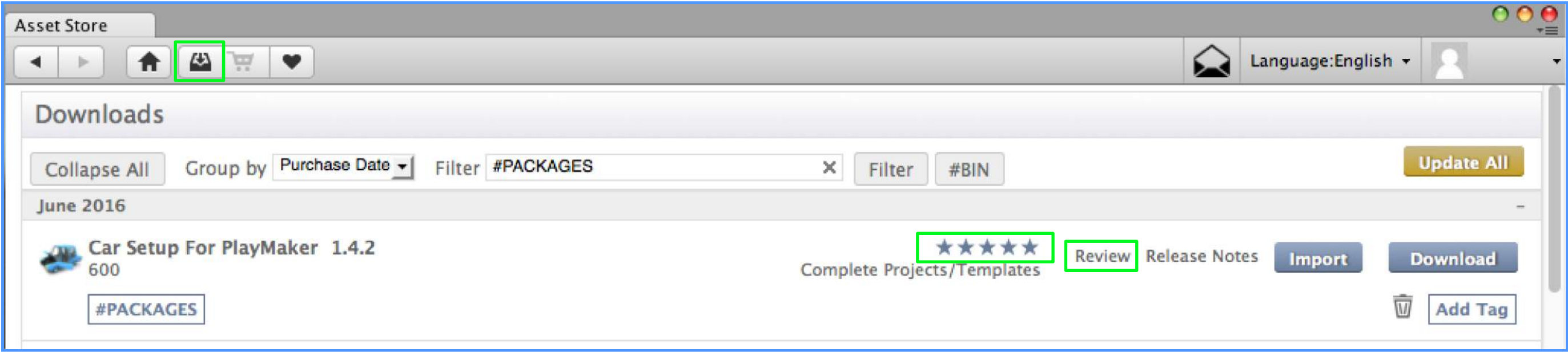
Sportscar3

Taxi

## SUPPORT

Any questions, contact me on [support@pamani.net](mailto:support@pamani.net)  
I will reply as soon as possible. My timezone GMT+3.

Consider to rate this asset, thanks!



Rate without or with a Review.