Spline Tools V 1.4

for Unity 5.3 and above

thanks for using this tool :D

if you have any problem please contact me at : Raed.Dev@gmail.com
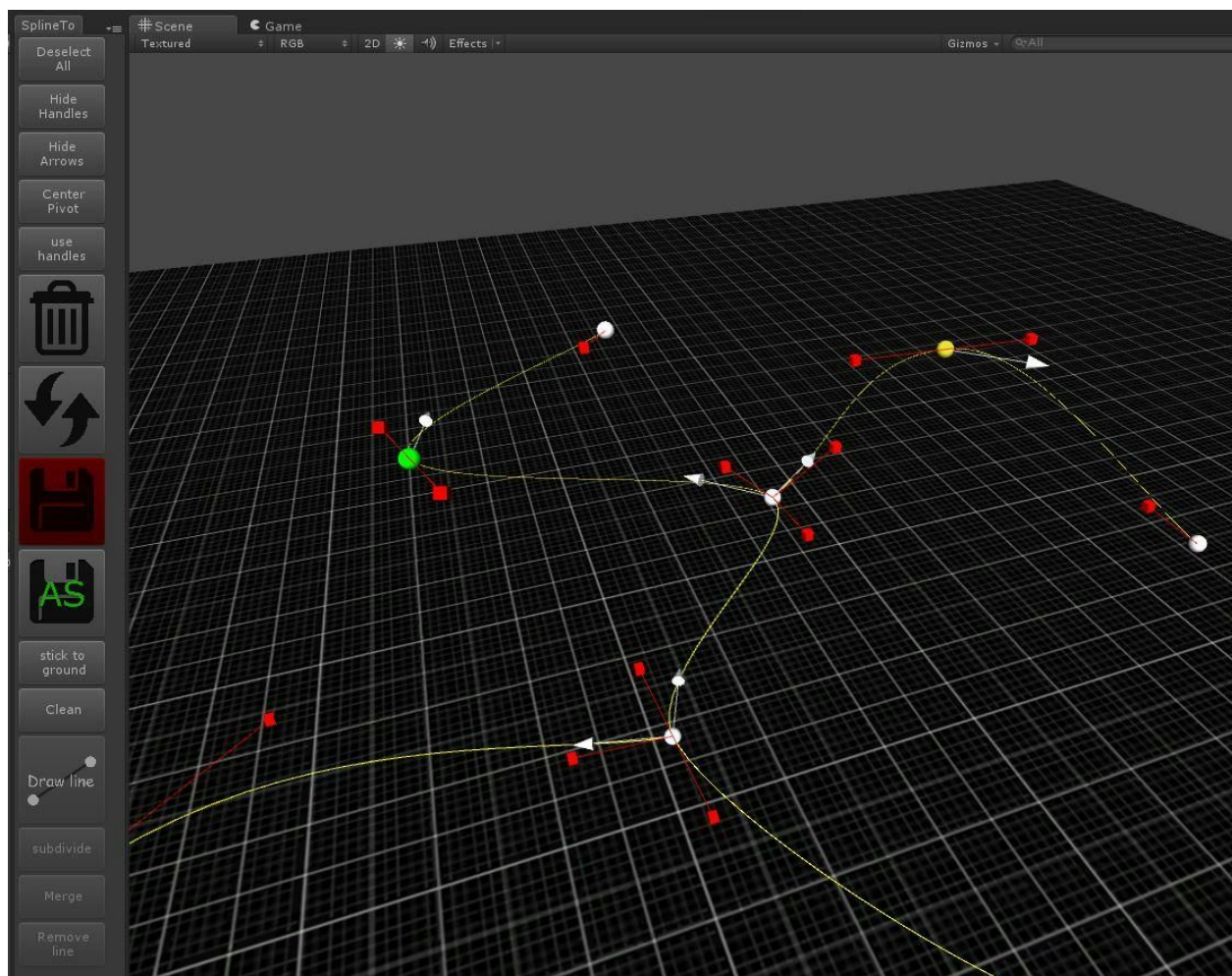
and for more info you can visit the forum thread :

http://forum.unity3d.com/threads/released-ultimate-spline-solution.260646/

and for video tutorials visit my youtube channel :D

https://www.youtube.com/channel/UCK9hkOsYW4hSWYWpr5y6bGw

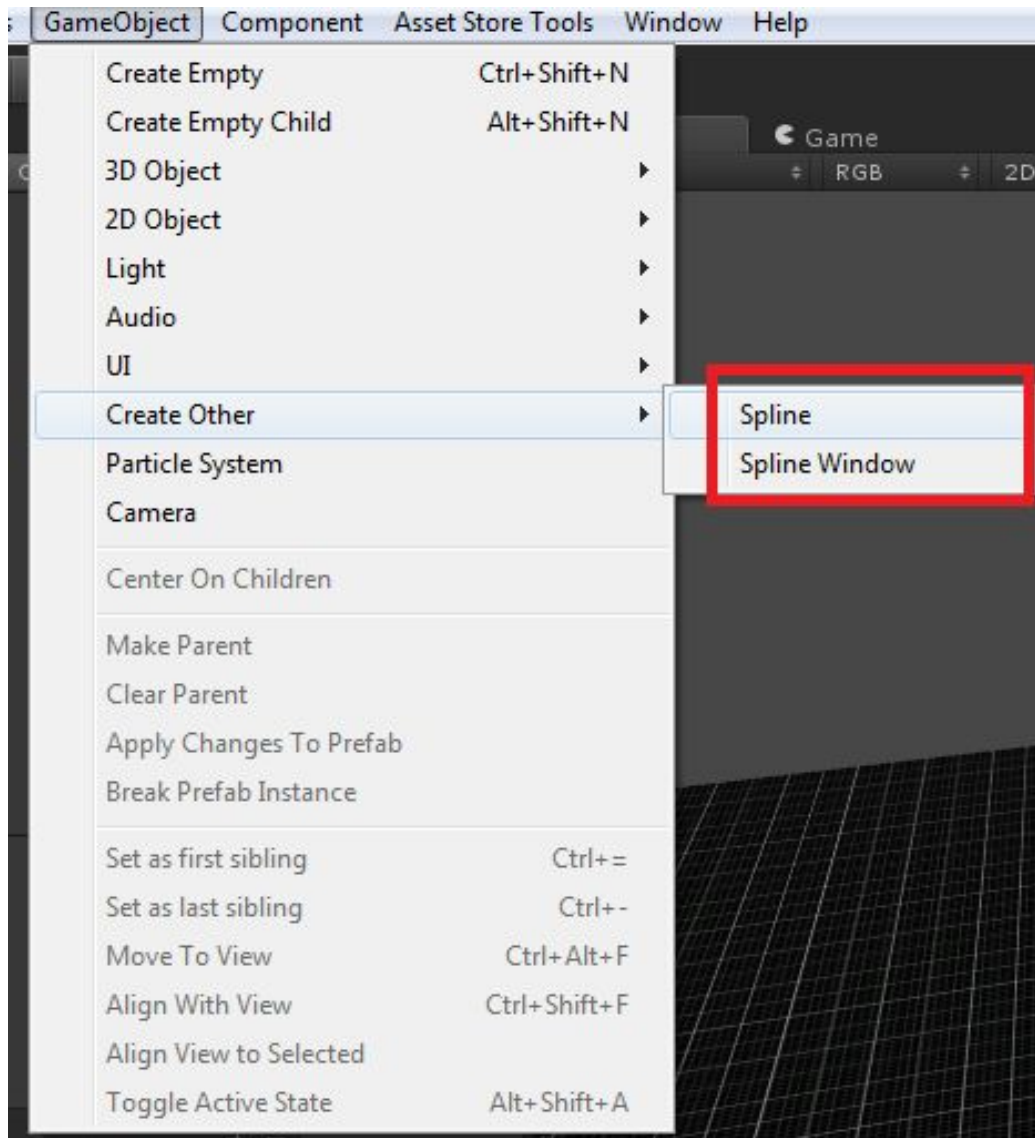simply create any path that any object can follow in less than second

sorry for my bad English

How to :

How to create a spline

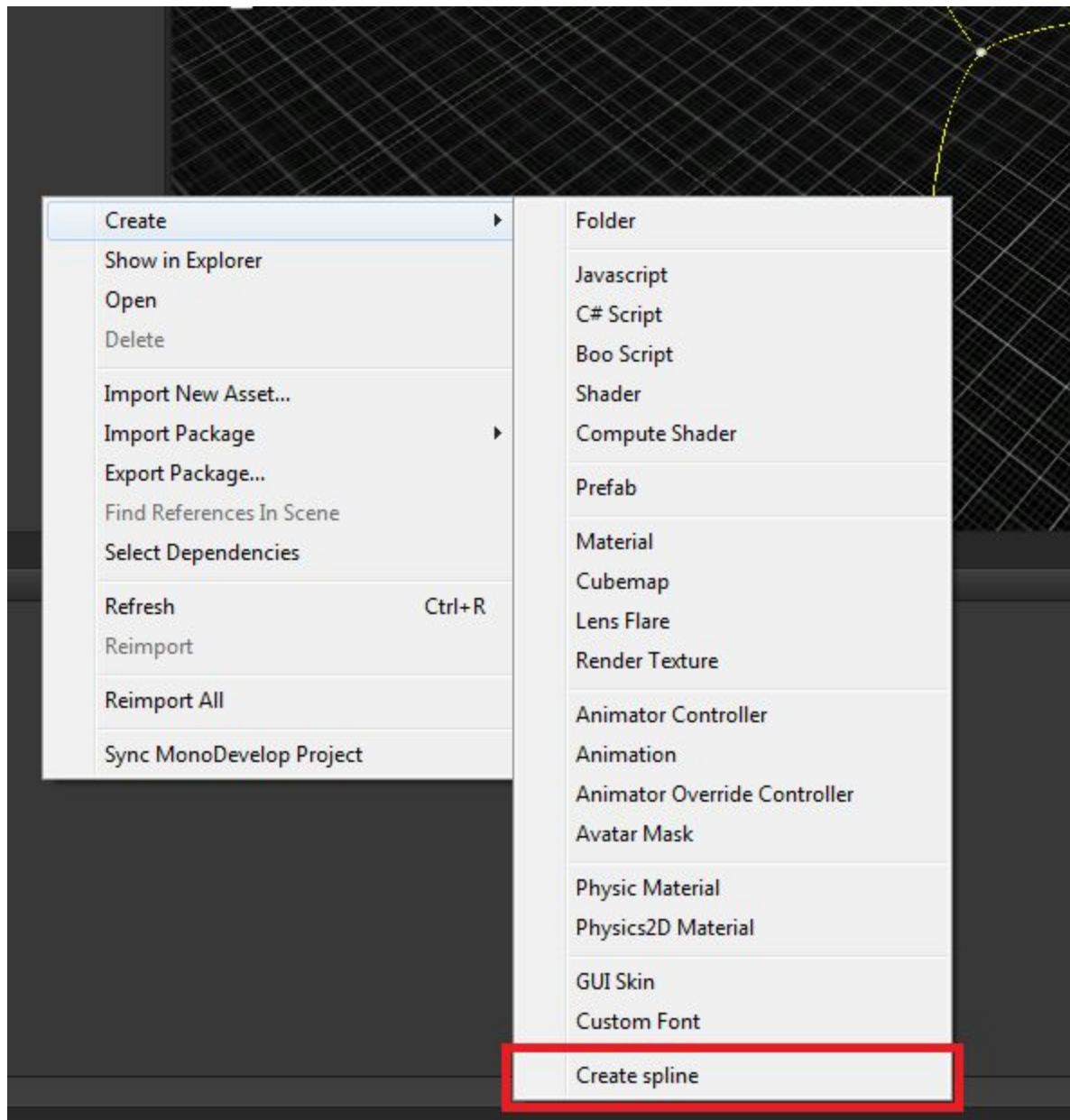go GameObject -> Create Other -> Spline

Spline : creates a spline game object and a spline asset
Spline Window : will only create an object in the scene but you will need a spline asset in order to make it work

go Asset -> Create -> Create Spline

to create spline asset

or right click in the project to create spline asset :

Editing your spline :

Open Spline tools window :
window -> Spline tools

Creating Spline:
when you click on your spline object in the Hierarchy or scene
you can start building your spline

1_Adding Points :
you need to have a surface in your scene to draw your spline on (ex : terrain)

while the spine object is selected
press Ctrl + left click
too easy right ?

2_Removing points :
select the point you want to remove
the press "**X**" on the keyboard

3_Moving points:
just drag the point

4_shift and click to add points to selection

NEW : press "G" to stick the point to ground
the points will move based on the screen
so if you are in top view you will be able to move them in X,Z axis only
and when you are in the from view you will move them in X,Y axis only
and so on

if you want to move them like you move any object in the scene :
just turn off the drag mode and your lovely handles should show up on the selected point

SplineTo

Show/Hide **1**

Deselect All **2**

Center Pivot **3**

use handles **4**

5

6

7

AS **8**

stick to ground **9**

Clean **10**

Sharpen **11**

Draw line **12**

subdivide **13**

Merge **14**

Remove line **15**

Spline Tools window :

1_Show/Hide : shows and hides some stuff like handles or arrows if you don't want them to appear on the spline

2_Deselect all : deselects all points and shows the main handle (scale move rotate) tool

3_Center pivot : centers the pivot for the spline in the center position of all points

4_ use handles/drag : handles are the position tool that moves the object in unity
drag is a special type of movement you can drag the point to move it

5_Delete all points on the spline

6_reload the spline to the last saved one

7_save the spline

8_saves the spline in a new spline asset

9_ stick to ground : will make all points on the spline at the level of the ground

10_Clean : removes any extra handles and make sure there is no points with no connections

11_Sharpen : make selected point(s) sharper

12_Draw line :
select 2 points and will draw line between them
hotkey : L

13_Subdivide:
select 2 consecutive points
will add point between them

14_ merge :
merges any 2 points

15_Remove line :
select 2 consecutive points
will remove line between them

Inspector settings :

you can create simple any spline without looking at the inspector
Method is a method you can call when you reach that point
the method must be in the moving object but can be on any component
if you want to pass in arguments please check the events on FollowSpline component

Resolution : amount of details in the spline per unit
you can change the point details if you want to but you can create any spline without any
problems without even looking at the inspector

Moving objects on the spline:

you can move the object here in 2 built in ways
and you can build your own movement in no time

the first way is attaching MoveObject script
this will move the object ignoring gravity
second way is MoveObjectPhysically
well you guessed it , this will move the object in the realm of physics

you can create your custom movement just buy making a new script and put in it a Move
method
with a Vector3 parameter like so

public void Move(Vector3 pos)

```
{
}
```

if you take a look inside the MoveObject script you will see that there is no code there
less than 30 lines with heavy comments

this Move method will be called automatically but you should have FollowSpline script also
attached to the object so it can handle the heavy work for you

the pos variable will be equal to the next position (the target position)
you can check the position by entering one of the demo scenes and pause the game while its
running

then click on the "move object target" or "moving object target" from your hierarchy
and it's position is exactly the same position as the variable pos in your custom Move method

note that more than one Move method in the moving object will cause problems

all the variables are heavy commented and have tool tips

Follow spline :
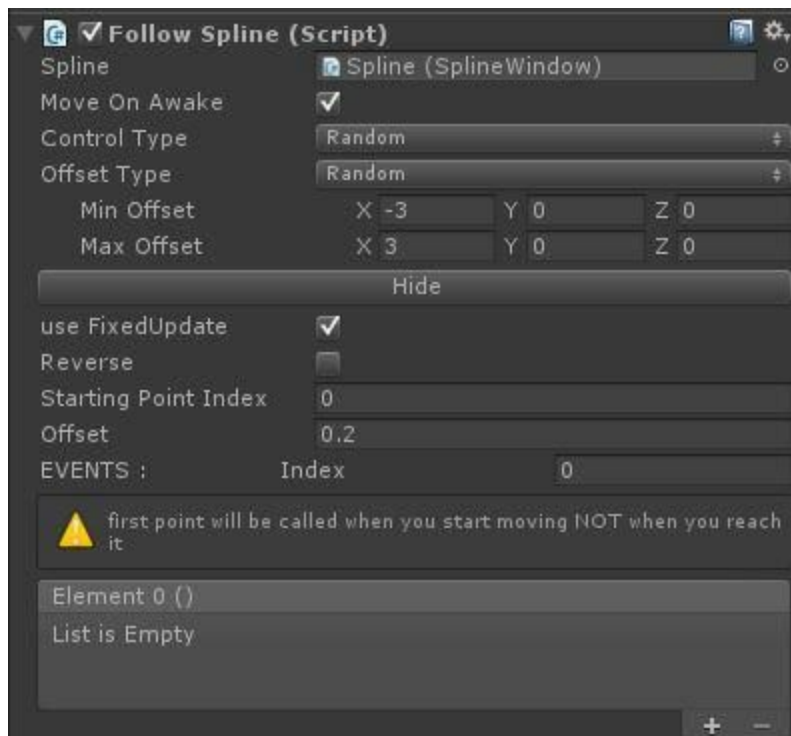
using this component you will be able to use the spline it with another script from you or using one of the built in move scripts

important things to note here :
offset in the advanced settings
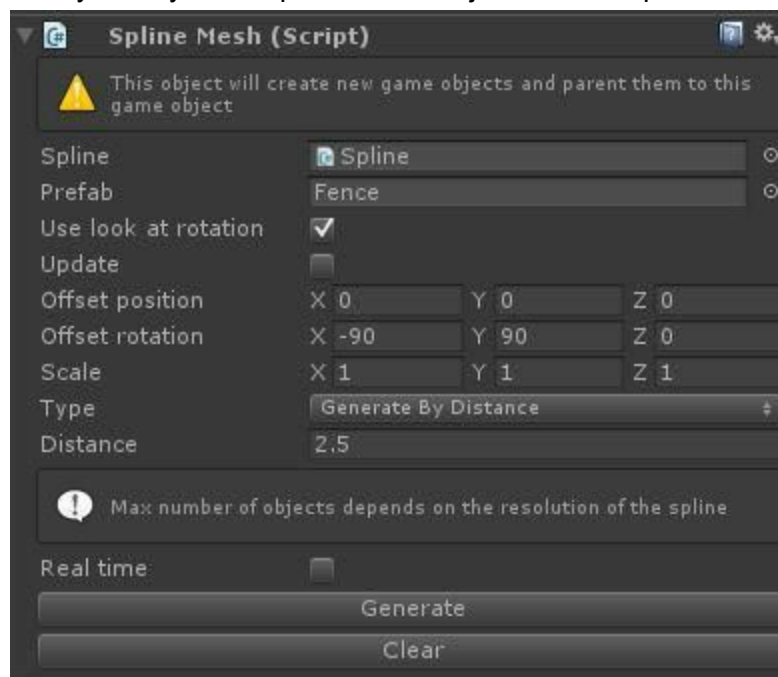when you rise this number the movement will be smoother
but in cost of the accuracy

Events :
you can call a function when you reach a specific point you can click the point in the scene view then add to the list functions that you want!

Spline mesh :

Finally, now you can place some objects on the spline automatically

choose your prefab then select a spline and click Generate and you should see some objects placed in the world!.
Use look at rotation rotate the objects towards the direction of the spline
Update if this is checked the spline will update his position and rotation (not in game)
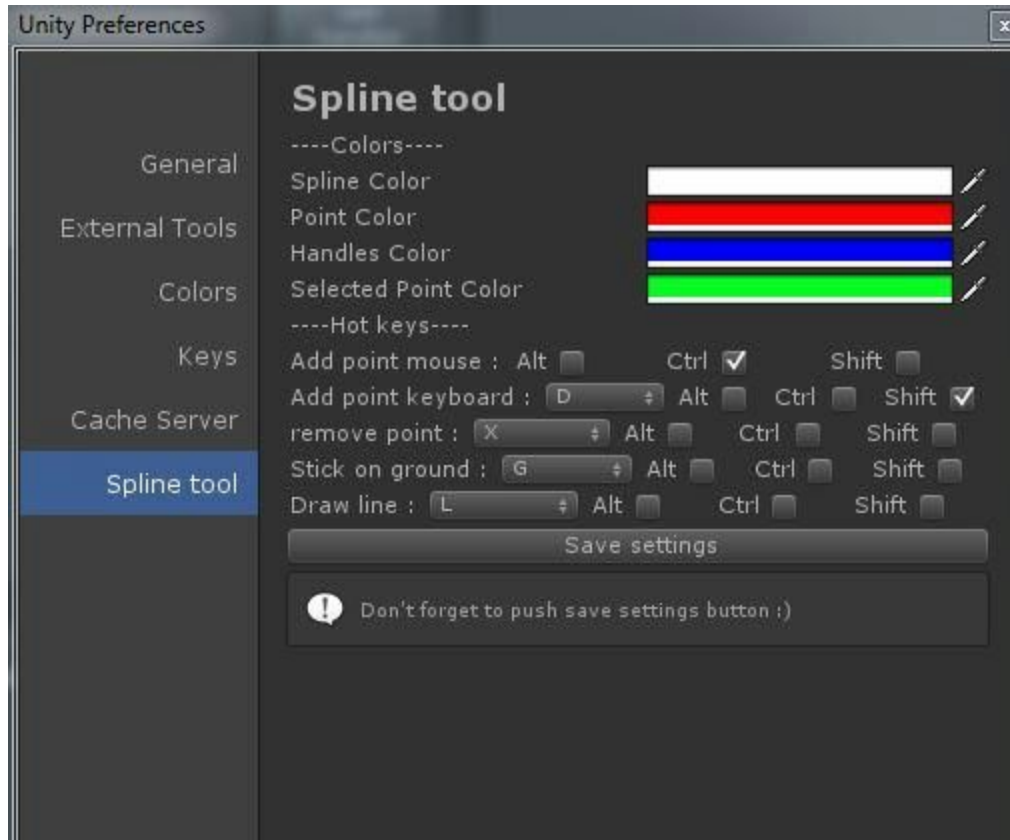**Type** : if you want the objects to spawn at points positions just choose Generate on point otherwize choose generate by distance

NOTE : if you want to make something real time in game you should call UpdatePosition method in the spline mesh script

Preferences :
this window let you customize how you use this tool
you can open Spline Tool preferences by going edit > preferences > Spline Tool
or Window > Spline > Spline preferences

Have fun doing awesome job !