# Link Dots Pro

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## How to install

Make sure the inspector panel include tags and layers which default project not have. Which means you have set up the project properly.

To test the game, search startscene by project panel of unity editor to found the scene file named startscene.

You can also found the scene files under

#### Assets/link dot/gamelevel

Double click on it to active the scene. Then you can run the game correctly. Other scene files can running independently but you may not get correct level data for test without a correct initialization sequence.

#### Important!!!

As unity disallow uploading package including other package on store(even free).

If you want to upload your game to Apple appstore,

You should delete the minimal dotween dll and upload the full dotween package from official site manually.

Be easy. It is free. Just follow the steps

1.find .../scripts/tools/tweentool

there are 3 .dll files in it.

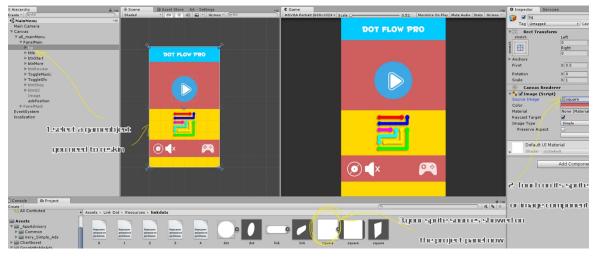
- 2.Delete this folder
- 3.download dotween from the official site or search dotween in asset store
- 4.Import dotween asset package
- 5.unity menu:"tools-dotween utility panel"
- 6 click setup dotween.

# **How to play**

This was a classic game which you may already played in many places. The game rule were very clear even without a tutorial. Just touch and hold on a dot then move and drag without release your finger or mouse button. You may draw a line of the dot's color. Try to connect all the dots with the same color but avoid crossing linkages. While you have successfully connected all the lines. The win panel would pop up automatically.

# Reskin

The only thing you need to know about reskin is the unity sprite or the unity ui image. Find the referring picture sources by just click on the image/spirte component on each gameobject from editor window.



(zoom the picture by holding ctrl+mouse wheel)

All other resources were under

**Assets/Link Dot/Resources** 

## **Basic Game Settings**

## Setup your own bundle ID

Each game must have a different Bundle id. So you must made the id to fit the id you request from apple or gp.

File->build setting, open the build setting panel. Find and click player setting button.

On right inspector panel, touch other settings panels. Change buddle id in bundle identifier section.

### Other game information

Type const.cs to search on project panel.

Pay attention for LEADER\_BOARD\_ID,appid.

These 2 relative your gamecenter id and your game app id.

Search and found

Application.OpenURL ("http://itunes.apple.com/WebObjects/MZSearch.woa/wa/search?submit=seeAllLockups&media=software&entity=software&term=

Change the url you need to be a more games link.

## **Advanced Scripts**

Under Assets->link Dot->scripts folder. There are all scripts of the game. The major files' detail were listed as below.

Const.cs: some parameters not for game but for your publish services like user id etc.

GameData.cs: Store the temporary variables of the game like score, level, time cost, etc. Can be called by Game.getInstance().xxx in any place of the game.

GameManager.cs: The most important file for initialize and process game controller service like music, advertisement, iap etc. Can be called by GameManager.getInstance().xxx in any place of the game.

LevelMenu: The level menu UI file. Attached on the UI root element of the levelmenu scene.

MainScript.cs: the game logical class. Attached on the gameobject of the game level scene. Process the game start , retry, or the win or fail.

PanelMain.cs: Attached on the UI element of MainMenu (game title) Scene. Just deal with the things for game start, rate etc.

StartSplash.cs: File attached on the gameObject of startScene, The start scene of the game. It initialize some forever exist object.

TipPanel.cs: process the UI events of the tip panel.Not used for this game yet.

Winpanel.cs:process the UI events of the game win panel.

# **Important API and functions**

Now all the functions and variables were commented in the script files and you can open each script to see. There is not much to say as most of them only describes the UI which all can be understand easily for a glance.

To play a music: Use GameManager.getInstance().playMusic(xxx);

To play a sound effect: Use

GameManager.getInstance().playSfx(xxx)

Remember to put your music and sound effect file into assets/link dot/Resources/sound source folder. And for a background music you must start its name with text bg ,Like bg1,bg2,bgmusic.

### **About Level Data**

Levels were described as Json files.

See under Asserts/Resources/linkdots

There are 0.txt – 4.txt 5 txt files.

These are levels datas refer from easy to expert

Now open 0.txt as an example. We see the first line

```
  \{ \text{r:5, c:5, 1:} [\{ \text{v:} [\{ \text{x:1, y:1} \}, \{ \text{x:2, y:1} \}, \{ \text{x:3, y:1} \}, \{ \text{x:3, y:2} \}, \{ \text{x:3, y:3} \}, \{ \text{x:2, y:3} \}] \}, \{ \text{v:} [\{ \text{x:1, y:3} \}, \{ \text{x:1, y:4} \}, \{ \text{x:2, y:4} \}, \{ \text{x:3, y:4} \}] \}, \{ \text{v:} [\{ \text{y:1} \}, \{ \}, \{ \text{x:1} \}, \{ \text{x:2} \}, \{ \text{x:3} \}, \{ \text{x:4} \}] \}, \{ \text{v:} [\{ \text{y:4} \}, \{ \text{y:3} \}, \{ \text{y:2} \}, \{ \text{x:1, y:2} \}, \{ \text{x:2, y:2} \}] \}, \{ \text{v:} [\{ \text{x:4, y:4} \}, \{ \text{x:4, y:3} \}, \{ \text{x:4, y:2} \}, \{ \text{x:4, y:1} \}] \} ] \}
```

This looks very complex but actually very easy to understand. The Json file is like an array with grouped tags and which can be used to describes more attributes than pure arrays. But this example we only record coordinates and grid numbers' information.

For this game, each line refers to one level. So the first line of 0.txt is the level1 data of the easy levels.

First we see the part described as  $\{r:5,c:5\}$ 

This means this level got 5 row and 5 columns.

Then we see very long data after the a I: tag

These would describe the level information of dots and lines.

In this part, we could find some v: tags separated it into several parts. We got 5 v tags which means this level includes 5 lines.

Yes, If you have tried to play the game. Now you should know, each line describes the coordinates of one color.

But we only requires the dots information right? We make a level by add all the dots and then let the player to work with the linkage.

So the first and the last coordinates in each v: tag were exactly the places where a pair of color dot should be. Dots were in pairs with same color because the game purpose is to link all the dots with uncrossing lines.

```
For example ,the first line [\{x:1,y:1\}, \{x:2,y:1\}, \{x:3,y:1\}, \{x:3,y:2\}, \{x:3,y:3\}, \{x:2,y:3\}]
```

The (1,1) and (2,3) should be a pair of dots which showed on a level starts.

Why we not only gives the dots position but give the line paths. Because this information can be used for tips. You can use them yourself.

Another important things may mention is that sometimes you would find a coordinate just blank like {}

This means a the position of (0,0)

## **Define colors**

Find GameData.cs

```
colors = new Color[] { Color.clear, Color.red, Color.blue, Color.magenta, Color.cyan,
Color.green, Color.yellow, Color.gray, Color.white, Color.black, new Color(252f / 255f,
157f / 255f, 154f / 255f), new Color(249f / 255f, 205f / 255f, 173f / 255f), new
Color(200f / 255f, 200f / 255f, 169f / 255f) };
```

This level data not include a detailed color, so you assign the color of each dot freely by yourself.

Remember you must leave the first color to color.clear as it was system used for the game.

And you must add colors to make sure that was enough for each level.

The Dots and lines resources were all included inside

#### Assets/Link Dot/Resources/linkdots

You could overwrite the picture and need not take care of the size. But the origin color must be white as it will be colorfied by the game.

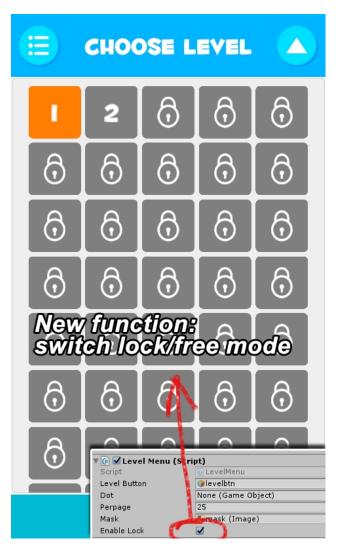
## **Scores**

The game count the totalscore at starts.

Refresh scores when finish each level. Temporary, each level you finishes ,you will get 1 score. Score is not used for this game yet, to get the score information, call the API at any places you want.

GameData.instance.bestScore

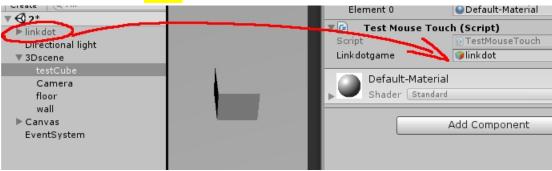
# **Switch game Mode**



Active LevelMenu scene file. Select Canvas gameobject, on its inspector, the levelmenu script component, there is an enable lock checkbox. You can switch game mode by check on/off it for whether you want player to unlock the level one by one.

# Use as in-game puzzle

Find the level file named 3dTest



This is a simple test of how to play the game in a 3d scene. You see we assigned the linkdoor instance to be attached on the component of the cube. We click the cube ,Then we can play the game now.

Open TestMouseTouch.cs ,We see,

GameData. difficulty = 0;//0-4

GameData.getInstance().cLevel = 0;//0-49;

These 2 defines the level difficulty and which level you want to play.

The init() function should start the game then.

And the <a href="linkDotWin(">linkDotWin()</a> function would process what to do when you win a level.

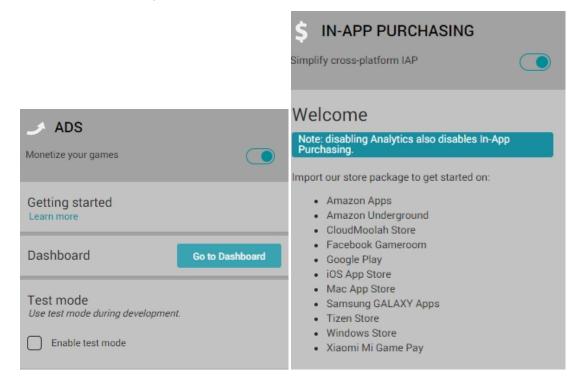
The game prefab used for the minigame is under

Assets/linkdot/src/prefab

## In app purchase

First make sure the service were updated to the lastest and being turned on. The services were all unity native function so they maybe update some files for different version. Just let unity do the job automatically and no worry about it.

Make sure the following services were on



The in-app purchasing sometimes require a reimport, if the import button on service tab not works, find unitychannel and unitypurchasing these 2 package files under asset/plugin folder and double click them to import the packages manually.

```
Find Gamemanager.cs
```

Find

```
public const string CONSUMABLE0 = "20Coin";
public const string CONSUMABLE1 = "50Coins";
public const string CONSUMABLE2 = "100Coins";
```

Set these 3 id to your own product id, If you don't know what is product id, please read apple or google development guide for in app purchase section.

I would not talk detail about this because this is not unity or game template issues.

The iap setting can be very very difficulty so make sure you are very familiar the process and have done all the job correctly yourself.

Here are 2 quick recommended tutorial

Learn basic about iap setting for IOS development

# Learn basic about iap setting for googleplay

Remember, sometimes the iap service not work on test device before them active online because some development console requires test id or sandbox environment. You can not run the game just with normal users account.

By default, the game always returns true for any buy action. You must turn off this before you publish to a real store.

In Gamemanager.cs find

public bool test = true;//set it to false when you publish to test for real.

Set it to false.

lap attached on a gameobject on music.cs

This music only start from startscene. So there maybe error if you start on other scene with test mode shut down.

## Localization

### Ready your localization file

Find src/localization folder. Duplicate English.txt and rename it a new name like French.

Open the file, see like

#### btnBack = back

This means the btnBack key refers to the value of translation "back"

After your localization file were all ready, set the size of localization attribution to 2 or more and assign your language files.(see right picture)

## Add new language to system

In GameData.cs, we see the function GetSystemLanguage().

This function get system language by switch branches.

You should add the language cases only when your localization file(txt) is ready. Otherwise if the system can not find the right

translation file or the file does not include current translation phases, it would throw errors and break the game.

```
For default testing, it is
public int GetSystemLaguage(){
        int returnValue = 0;
        switch (Application.systemLanguage) {
        case SystemLanguage.Chinese:
             returnValue = 1;
             break;
        case SystemLanguage.ChineseSimplified:
             returnValue = 1;
             break;
        case SystemLanguage.ChineseTraditional:
             returnValue = 1;
             break:
        default:
             returnValue = 0;
             break;
```



```
}
    returnValue = 0;//test
    return returnValue;
}
see returnValue = 0;//test
```

This line is uncommented. The language will always be English .If you may not have time to deal with your own native translation or you did not want a localization function for your game, just leave it uncommented. Otherwise, you should comment this line and make the system to decide which localization to choose.

The returnValue must be refer to the element order of localization Gameobject as I said upon. Use localization in game

Just call like:

xxx.text = Localization.Instance.GetString("phasename");

## **Publish to appstore**

### **Ready Dotween**

As unity disallow uploading package including other package on store(even free). You should delete the minimal dotween dll and upload the full dotween package from official site manually. Be easy, it is easy. Just follow the steps

1.find .../scripts/tools/tweentool

there are 3 dll files in it.

2.Delete this folder

3.download dotween from the url or search dotween in asset store

#### http://dotween.demigiant.com/ download.php

4.Import dotween asset package

5.unity menu:"tools-dotween utility panel"

6 click setup dotween.

## If you are using plugin such as Ads.

Before reading this page. You required at least very familiar of how to publishing to appstore. Otherwise please read related tutorials by apple first.

When you compile the xcode project exported by unity. You should make sure the following frameworks were included in your project.

And here is the list, please require these following frameworks manually.

Select targets first, on Build phases-link binary with libraraies

Libsqlite3.tbd

Security.framework

Libz.1.2.5.tbd

Messengui.framework

Mobilecoreservices.framework

Glkit.framework

Adsupport.framework

Mediatoolbox.framework

All these can be find directly in xcode.

If you need admob download Admob framework and add GoogleMobileAds.framework frame into project file first.

You can download here

The other thing is the bitcode. You need to turn it off before your achieve. In build settings , search Enable Bitcode , Set it to NO.

Admob Ads are not included in this asset. For simple job, you can download assets like "very simple ads" from asset store.

# Basic knowleage must know

build and submit a game on app store with unity.

https://www.youtube.com/watch?v=C3izqF6h\_aY

## build and apk on android platform

https://www.youtube.com/watch?v=0eK3vPbYNqk

create iap on goolgeplay

https://www.youtube.com/watch?v=KBcOjMI6WVo

create iap on apple console(please ignore code part)

https://www.youtube.com/watch?v=YHGlij\_stpk

# How to get support

Contact to us E-mail

Remember attach your invoice otherwise there would not be my reply.

Invoice ID
2006

support@unity3d.com

The invoice you can get from your paypal account records.

If you do not have a invoice. Grab some screenshot to confirm your buy successful flow is also ok.

If you want support our work or feel interested in other assets, take a look at More Games