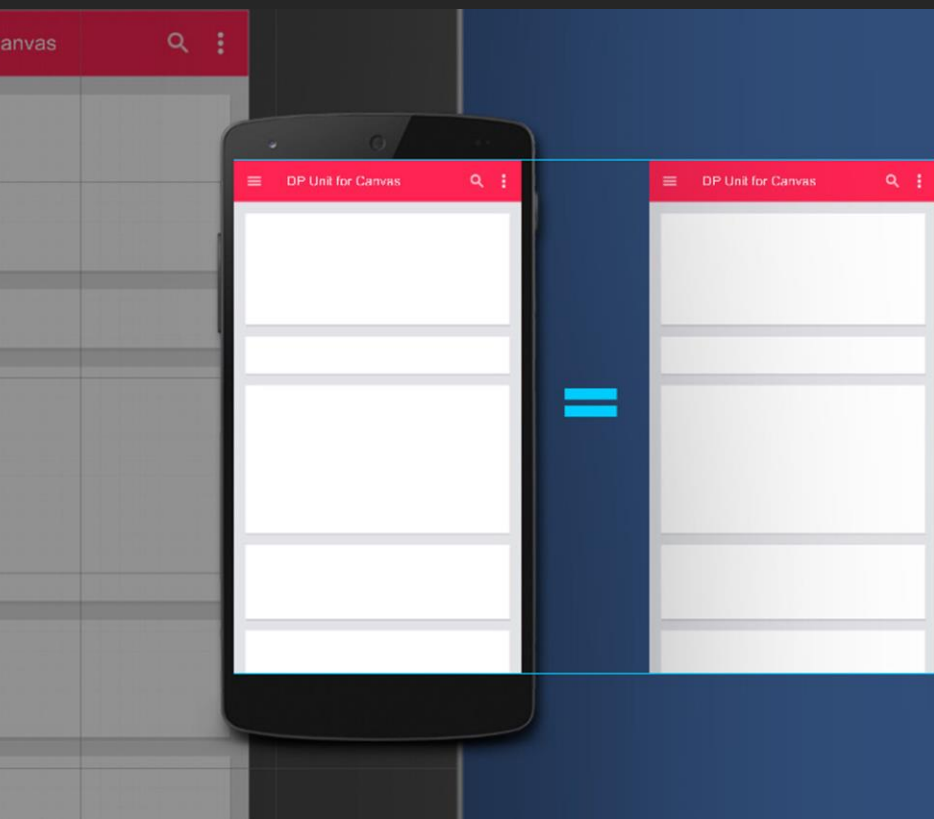


# DP Unit

For CANVAS



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# 1. About “DP Unit for Canvas”

‘DP Unit for Canvas’ is a Unity uGUI Extension for real-time edit at device’s physical size in dp unit or fit to game view.

## 1.1 Why “DP Unit for Canvas”?

I think somebody are making mobile “application” with Unity uGUI and have a scaling problem like me. This extension can help you solved!!

## 1.2 Why “dp” unit?

Mobile devices are typically using dp unit instead px. Because it’s has different screen size and resolution. If you want to learn more about the dp unit please see link below.

[https://en.wikipedia.org/wiki/Device\\_independent\\_pixel](https://en.wikipedia.org/wiki/Device_independent_pixel)

<http://www.google.com/design/articles/design-from-ios-to-android>

[http://developer.android.com/guide/practices/screens\\_support.html](http://developer.android.com/guide/practices/screens_support.html)

<http://sebastien-gabriel.com/designers-guide-to-dpi/>

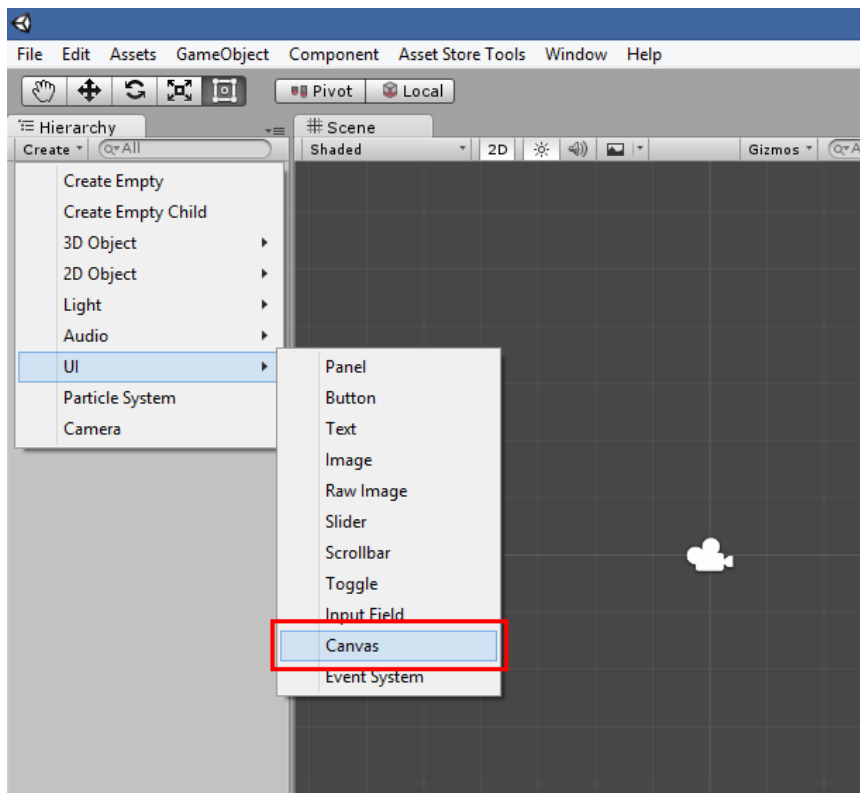
## 1.3 Requirement

- Unity 4.6 or newer
- Canvas render modes are supports “Screen Space – Overlay” and “Screen Space – Camera”

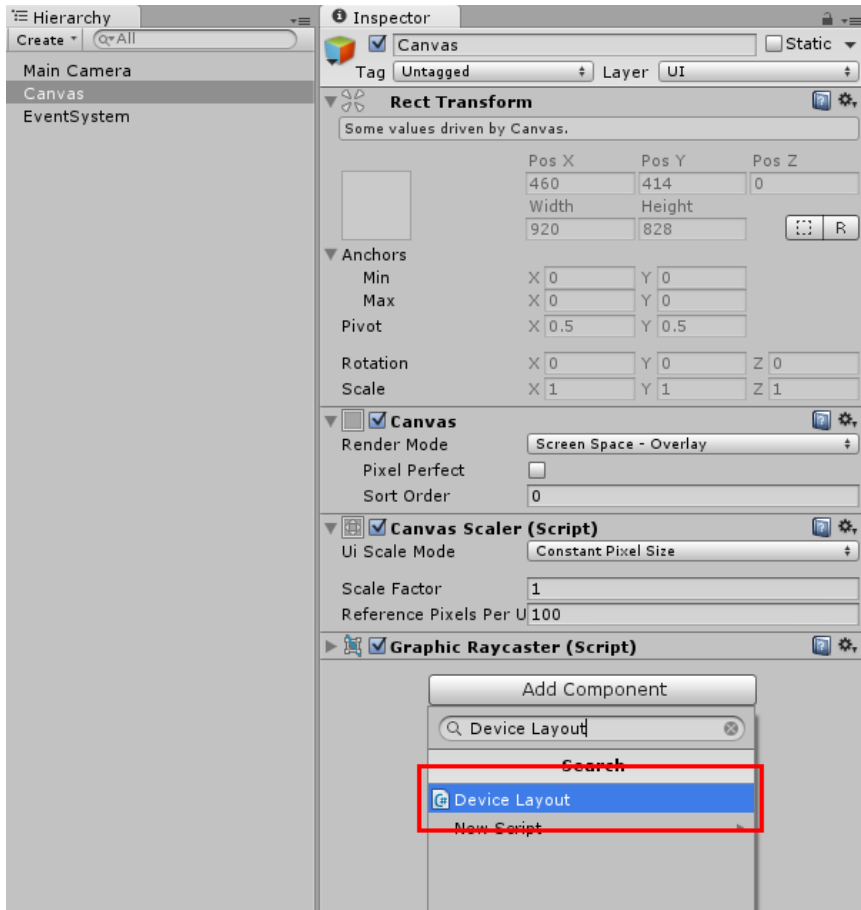
## 2. How to use (<https://www.youtube.com/watch?v=f3dF8bE9Nv8>)

### 2.1 Canvas Setup

#### 2.1.1 Create new Canvas



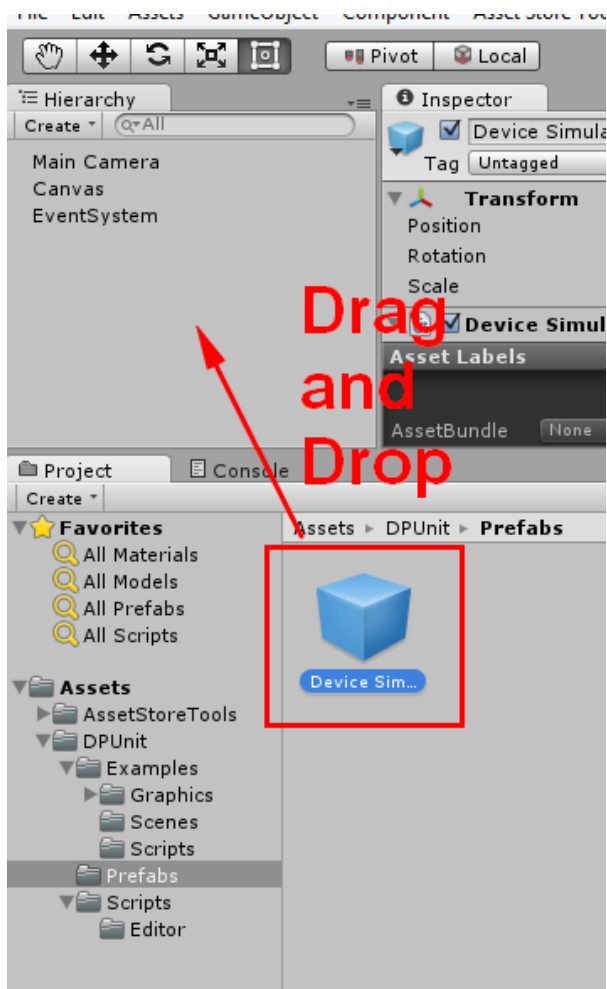
## 2.1.2 Add “Device Layout” Component



- Device Layout used for scaling canvas by screen dpi

## 2.2 Device Simulation

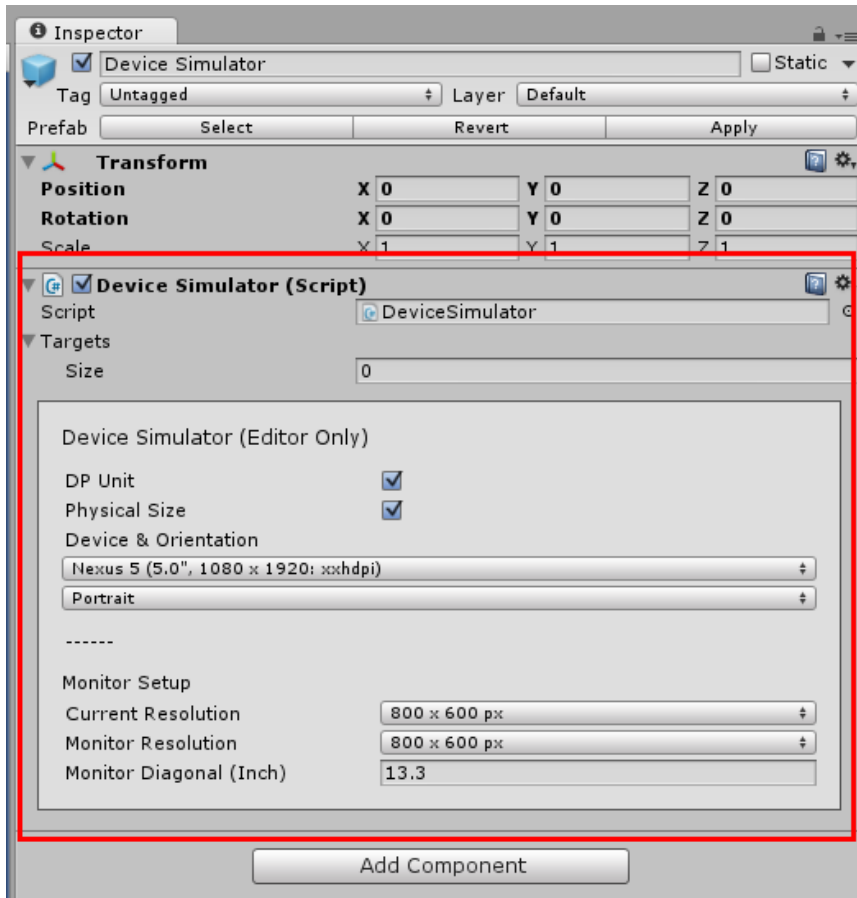
### 2.2.1 Add Device Simulator Prefab





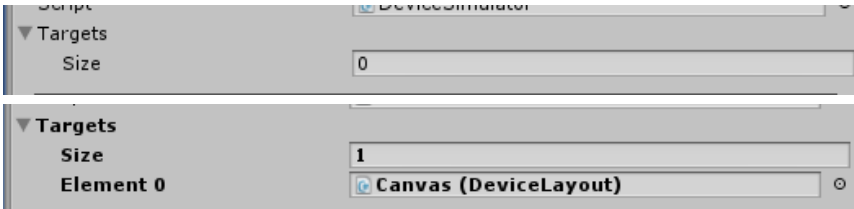
## 2.2.2 Device Selector

After Add Device Simulator Prefab then select a game object in hierarchy and see on inspector. I'll explain all properties.



### 1) Targets

It's a list of canvases (required DeviceLayout in Canvas). You can add any canvas in hierarchy to list to simulate device.



### 2) DP Unit

If checked = use dp unit, uncheck = use px unit

### 3) Physical Size

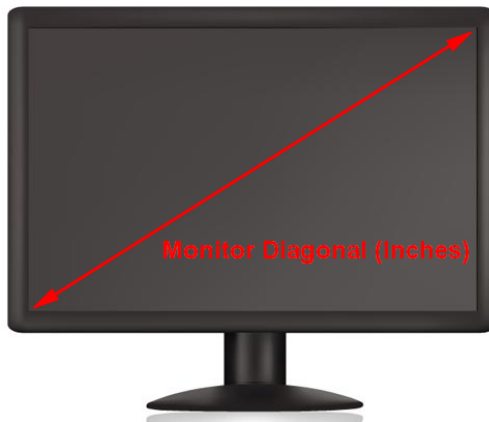
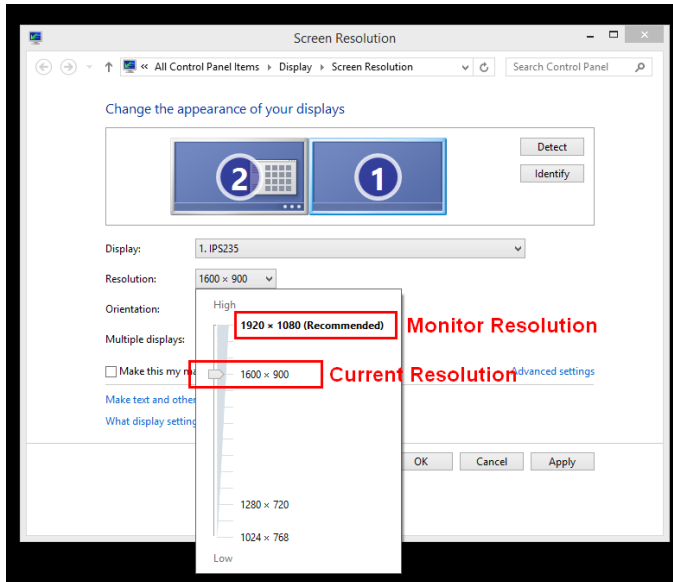
If checked = simulate real device screen size, uncheck = fit to game view and keep device aspect ratio

### 4) Device & Orientation

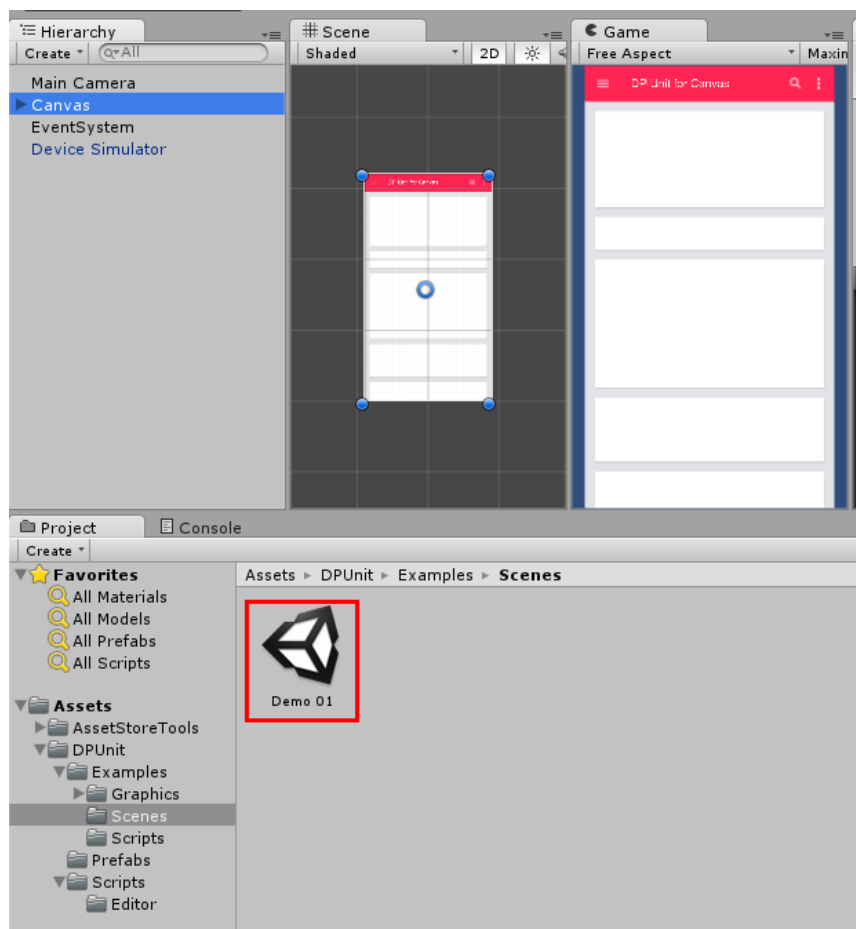
Select a device and orientation from dropdown list to simulate.

### 2.2.3 Monitor Setup

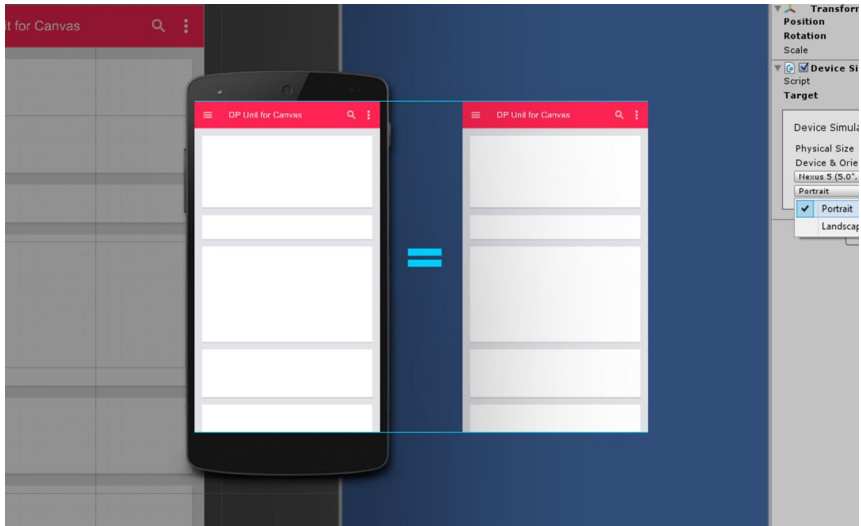
It's important part. A setting affects to a device simulation process.



## 2.3 Example Scenes



## 2.4 Build on Nexus 5



### 3. Contacts

Please feel free to contact me at

<http://www.devdayo.com> or <https://www.facebook.com/devdayo>

PS. My timezone is UTC+7 Bangkok. Maybe we have different day and night time.

### 4. References

[https://en.wikipedia.org/wiki/Device\\_independent\\_pixel](https://en.wikipedia.org/wiki/Device_independent_pixel)

<http://www.google.com/design/articles/design-from-ios-to-android>

[http://developer.android.com/guide/practices/screens\\_support.html](http://developer.android.com/guide/practices/screens_support.html)

<http://sebastien-gabriel.com/designers-guide-to-dpi/>

<http://dpi.lv/>

<http://pxcalc.com/>

<https://www.google.com/design/spec/layout/units-measurements.html>

<http://pixplicity.com/dp-px-converter/>

<http://petrnohejl.github.io/Android-Cheatsheet-For-Graphic-Designers>

<http://www.google.com/design/spec/layout/structure.html>