

Voodoo art Manual.

Or how to quickly boost your game.

Summary.

4 to 14 Graphic tips

15 to 19 Optimization tips

20 to 23 Scene tips

24 to 28 UI tips

Be prepared to make your game punchy.

Find in this little manual many artistic tips to quickly catch players by offering a game with an impactful look.

The technical art tips can also save your game performances.

Add a great look to your materials.

1 to 5 min / material

Avoid using the Unity « Standard » material and prioritize a “cartoon style” shader (There are a lot of them on Unity Store). A cartoony shader is simplified and optimized for quick and efficient use.

Furthermore standard shaders sometimes need to generate light maps in order to work properly. If they’re missing or corrupted the game will end up being very dark.

✗ Standard

Albedo

Metallic / Smoothness

Normal map

Height Map

Occlusion

Detail Mask

Emission

Secondary Maps (+6 layers)

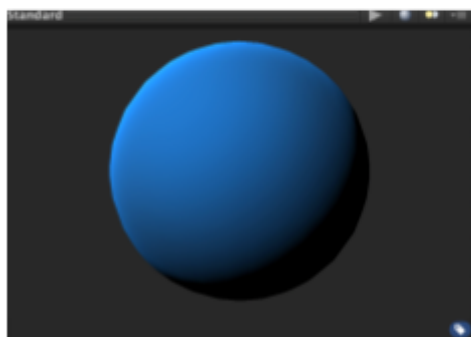
✓ Cartoony

Color

Highlight Color

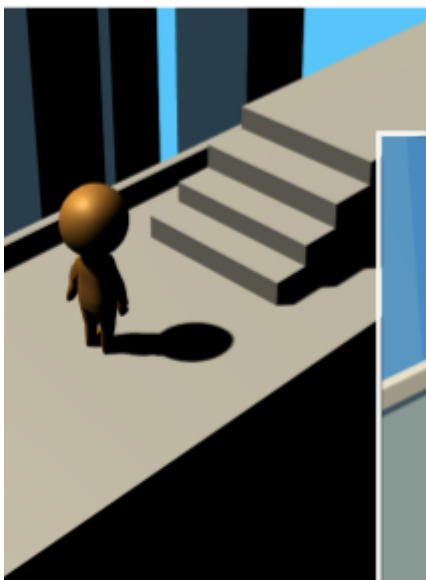
Main Texture

Shadow values

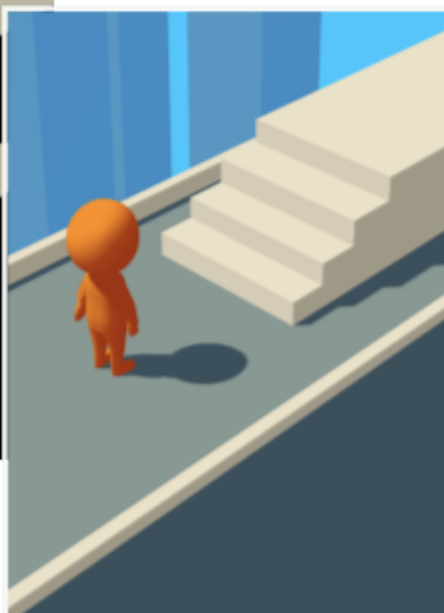


A cartoon shader is optimized to quickly obtain a good colorimetry.

✗ Standard



✓ Cartoony



By using these types of shaders, you will obtain better contrasts and better readability.

✗ Standard



✓ Cartoony



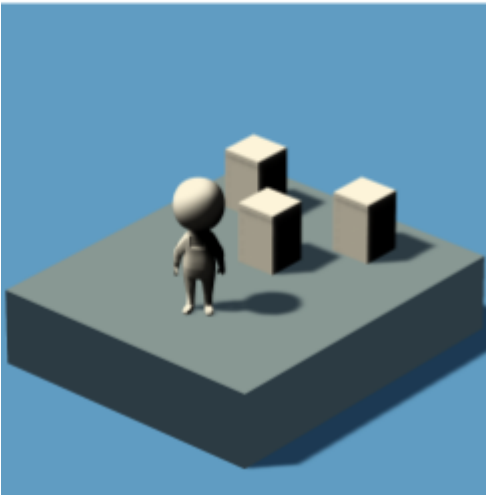
1 to 5 min / material



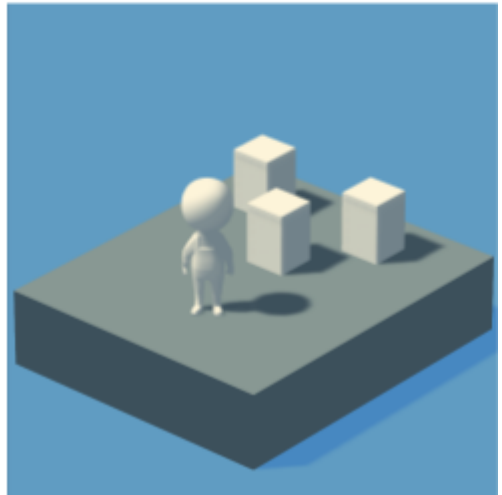
Avoid black shadows.

>1 min / material

✗ 27313A



✓ 758CA2



Avoid aggressive colors for your assets.

Each of the colors you choose is a message to your players, so it's very important to make them feel comfortable.

✗ eg of bad color mix



✓ eg of recommended mix



Creative templates examples.

Beach



ffb62
ff584a
447ff3
e2d0d7

Candy



ffa4da
ff7400
fff9d9
6cd9e9

Garden



ef8b36
7c9598
6bd721
ffd200

The prohibited colors.



Light purple, white and black are highly not recommended. In Unity **light purple** represents missing materials and can create confusion in production, **white** goes over fx (glow, particles, stars, etc.) and **black** absorbs the light and the contrasts.

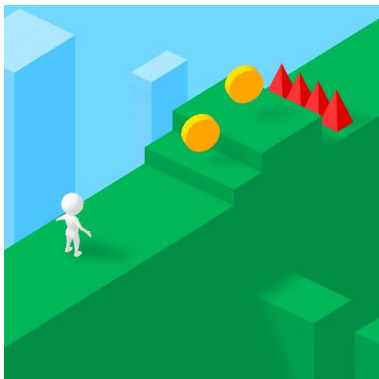
Check your contrasts.

Contrasts can be applied to a lot of different ways. You must seek for every of them to maximize the impact of your visuals on the audience.



Use black & white filter to help you identify your contrast issues. **Protect the colors for gameplay elements from environment colors.**

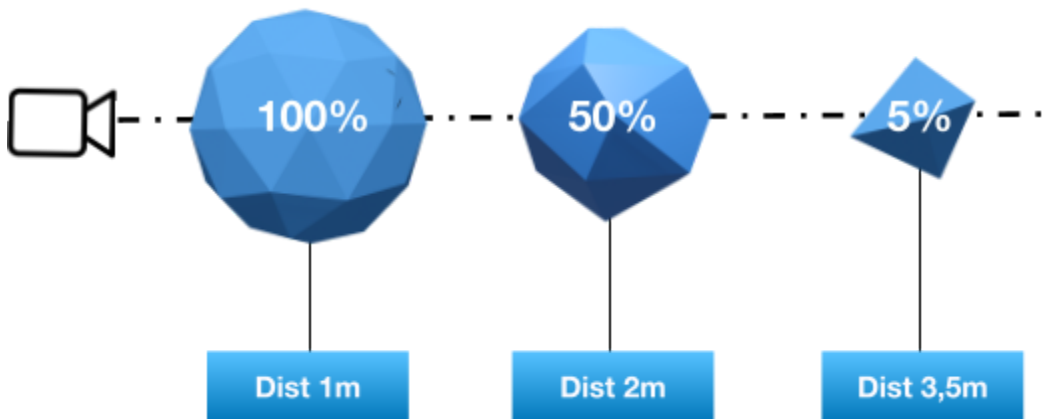
Shape your contrasts.



Give a unique shape language to each gameplay element (roundish = positive, Spiky = negative/danger). And avoid having the same saturation level everywhere. Contrast can also come in scales too!

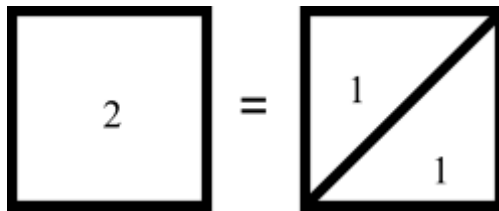
Check your level of Details.

Ensure that your elements will always be higher in details if the player can move close to it and put less details on areas that are for background purpose only. You can even use 2D for objects that are close to the horizon.



The Unity triangle system.

Unity creates a triangle by dividing the square faces. Often, external packages get very heavy when integrated into Unity.



Find here some recommendations for numerous props :

Small props (eg: plants, boxes) : \leq 50 tris

Medium props (eg: trees, \leq 300 tris

Big props (eg: mountains, houses) \leq 600 tris

Display the number of triangles.

When you select a mesh you can display the number of triangles in Unity.



Avoid triangles to reach performances.

If you have an asset that has been duplicated several times, pay attention to its number of triangles. (Triangles only appear when the props is in Unity)

✓ 12 Tris



✗ 192 Tris



« 2 » is the best friend of your images.

If you want to add images in your project (Icons, textures, etc...) pay attention to their ratio: it must be in a power of 2. If not a single image will be much heavier and can damage your performances.

Example :

small images : 128 x 128, 128 x 256, 256 x 256

medium images : 512 x 512, 1024 x 1024 (only if really necessary)

You should think of the resolution of your images relative to the surface they cover on screen. A full screen image can be 1024px sized but an object that only covers 25% of the screen will be 256px wide instead.

You can also use the atlas feature if you feel comfortable with it.

Shadows or not shadows, that's the question (Light).

The shadows created by your light are very important to bring depth to your game.

You can manage the shadows created by your light in the project quality settings. You can choose to use soft (heavier) or hard (lighter) shadows.

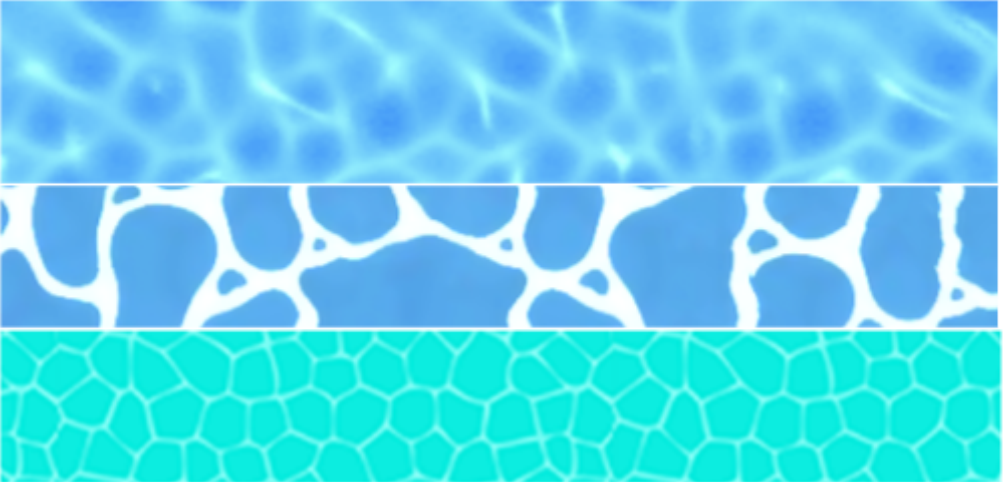
The shadows created by your light can change the look of your game, but Unity has to render twice to draw the shadows so you should turn some of them off if you have a lot of props, very detailed props or special requirements.

Add water on your scene.

5-10 min / integration

Water works very well in mobile games (Usually +20% uplift) so you definitely should add it in your game.

Avoid low poly style water, dark colors, static textures and water shaders. Use animated textures instead.



Reward your players.



It is very important to reward your players when they win but **also when they lose!**

The positivity of your game goes through your choice of colors but also through the visual rewards that you add. Obviously, be careful not to add too many effects but be sure to add some on **collectibles** and end **screens**.

Confettis particles are the most popular but you can also use star shower, glitter, etc...

Take care of your sky.

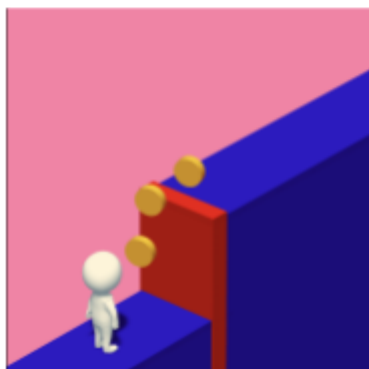
5-10 min / integration

It is very important to pay attention to your sky. The sky takes a big part of the screen in most games, and ugly skies can damage your KPIs.

A joyful color brings a feeling of well-being, but dark or discordant colors hurt the eyes.

Adding primitive shapes or clouds to your background improves the progression feeling.

✗ BAD SKY MIX



✓ GOOD SKY MIX

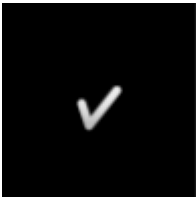


More about UI.

<5 min / button

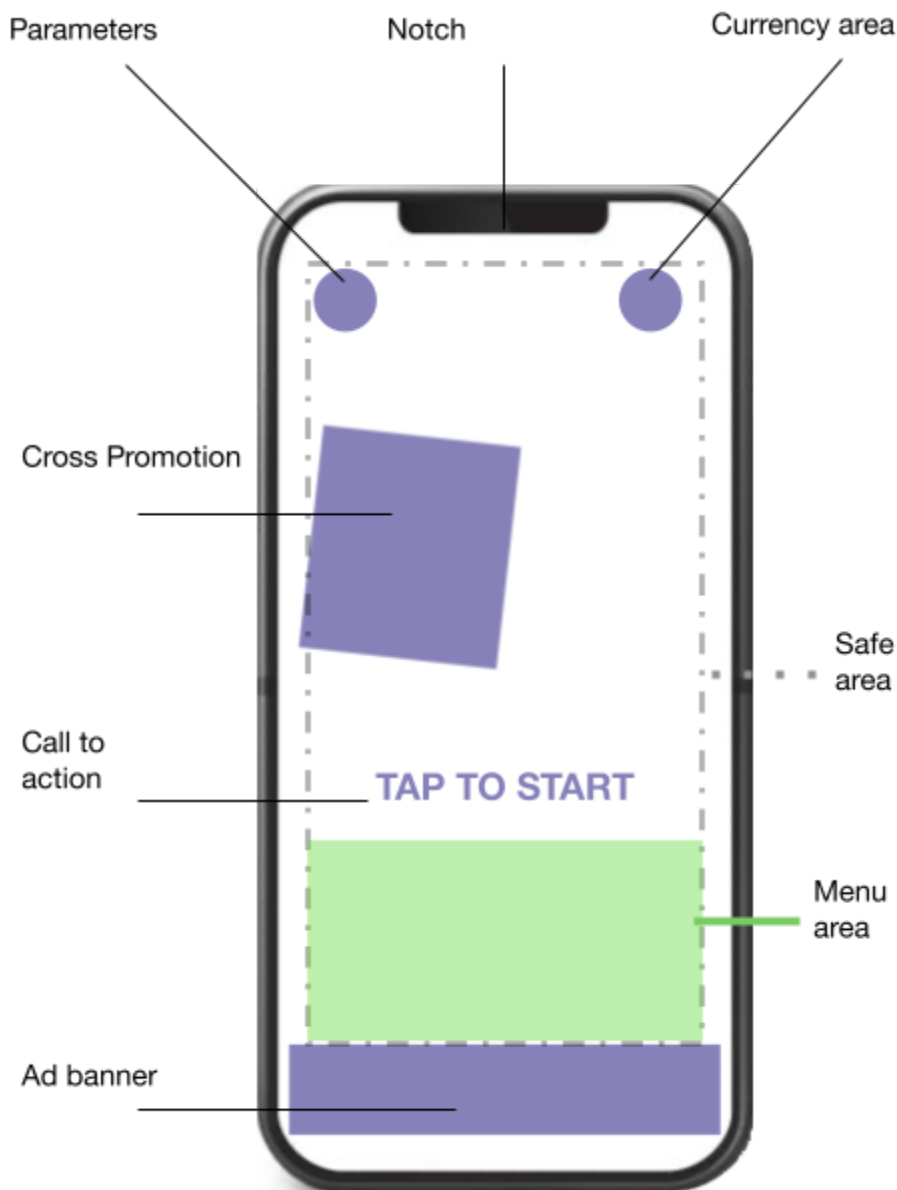
Usually the UI does not improve the KPIs, **but an unreadable user interface could damage them.**

Your buttons should look clickable. Avoid exotic shapes or bubbles for main menus.

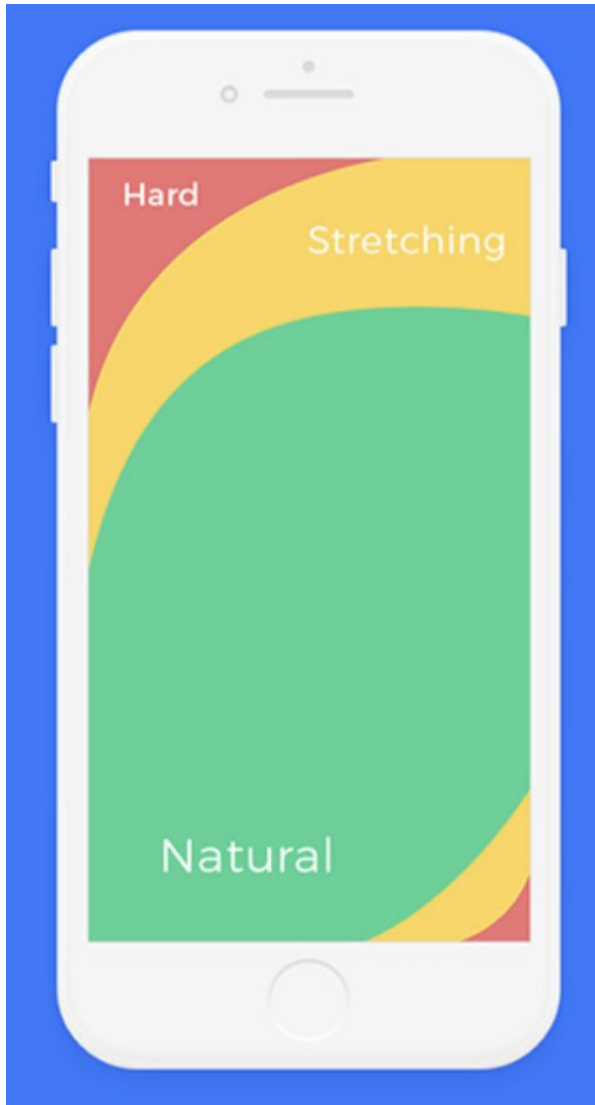


The bottom area is the easiest for players to click. **We can estimate that the buttons at the bottom right have a 50% chance of being clicked, a 40% chance for the buttons at the bottom left and only 10% for the buttons at the top.**

The Voodoo UI template.



Heat Map.



Split your canvas in multiple prefabs.

Split your canvas in different prefabs for each view of your UI :

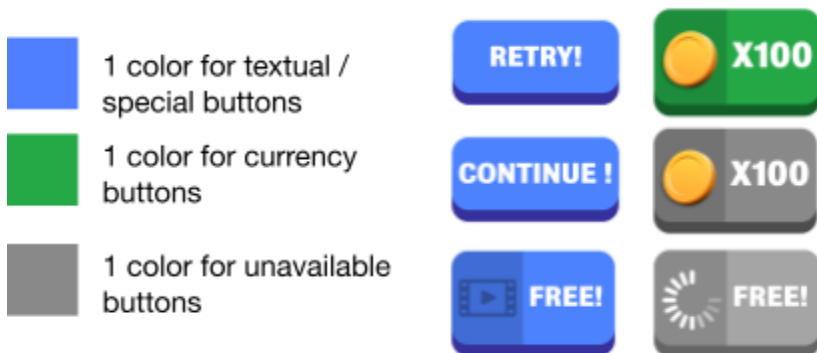
- ✓ 1 prefab for the main menu
- ✓ 1 prefab for the Win screen
- ✓ 1 prefab for the lose screen

Etc...

By doing this you'll be able to update part of your UI without pushing everything.

A good UX structure brings a good experience.

Avoid multi-colored buttons, each color you use is an information. Find a good example below:



Make sure all of your buttons are the same size and follow the same guidelines on each part of the user interface.

Avoid using a « PLAY » button and prioritize a simple outlined text like « TAP TO START ».

Questions?

If you need any additional information about our recommendations please reach your PM and he/she/they will put you in touch with the GameOps Art team.

Resources.

Find some resources you need [here](#).

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