

11.1 Location Sensor & Activity Starter

Important!!

Please disinfectize your hands before entering the classroom!

入室前にアルコールを使用して手指消毒を行ってください。

Please disinfectize your chair and table!

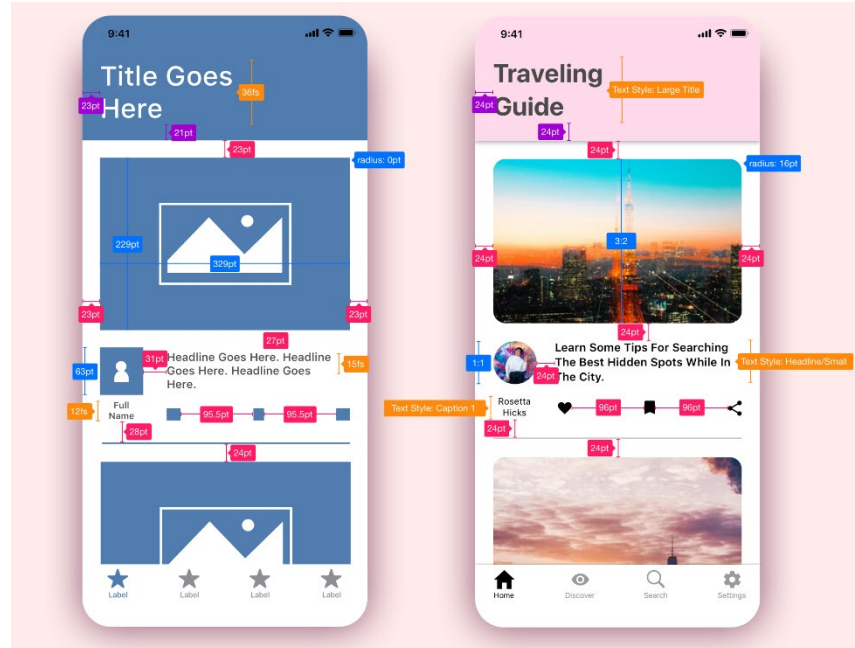
- ①ペーパーにアルコールを噴霧してください。
- ②アルコールが噴霧されたペーパーで、使用箇所（テーブル、椅子など）を拭き取ってください。
- ③使用済のペーパーは廊下のごみ箱に捨ててください。



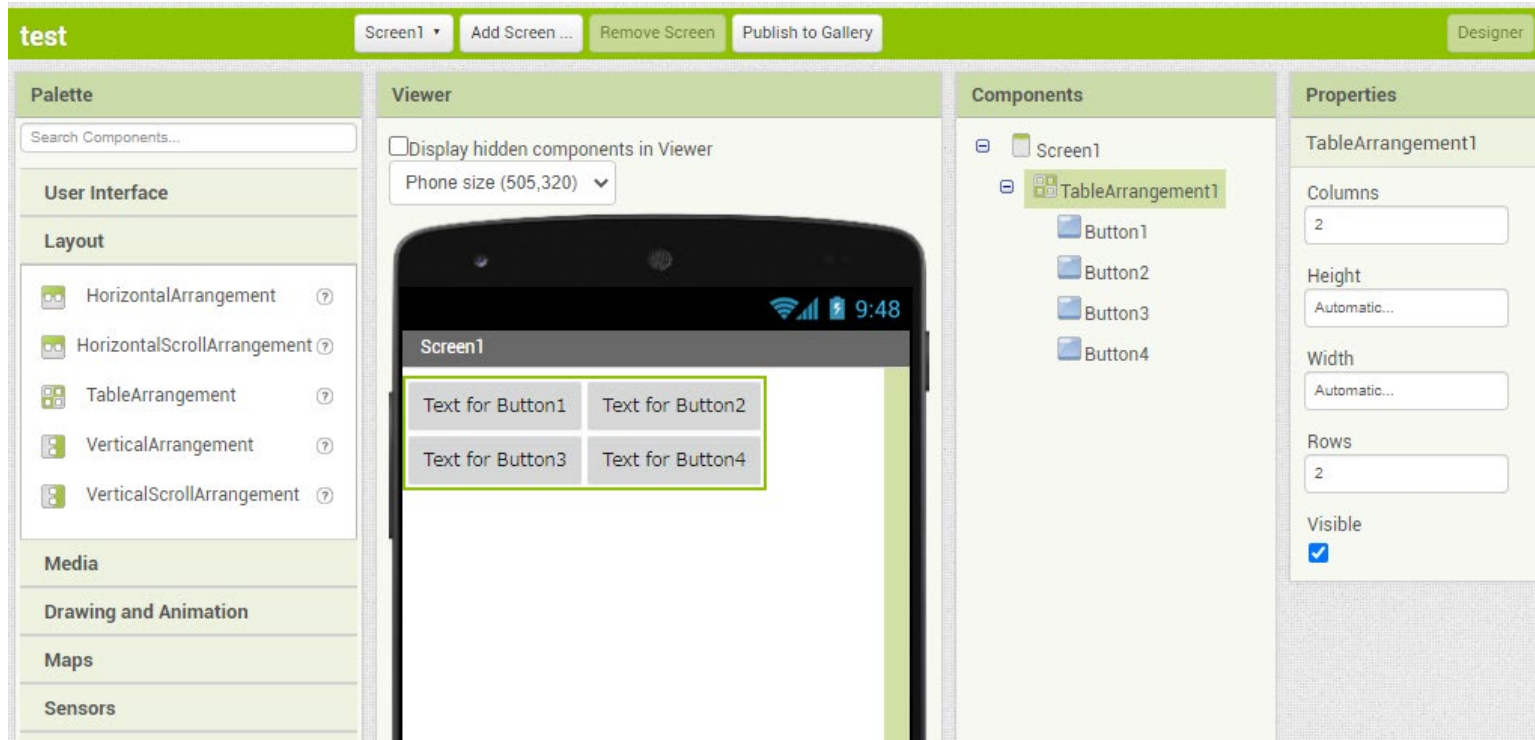
1. Recap of Week 10

Layout

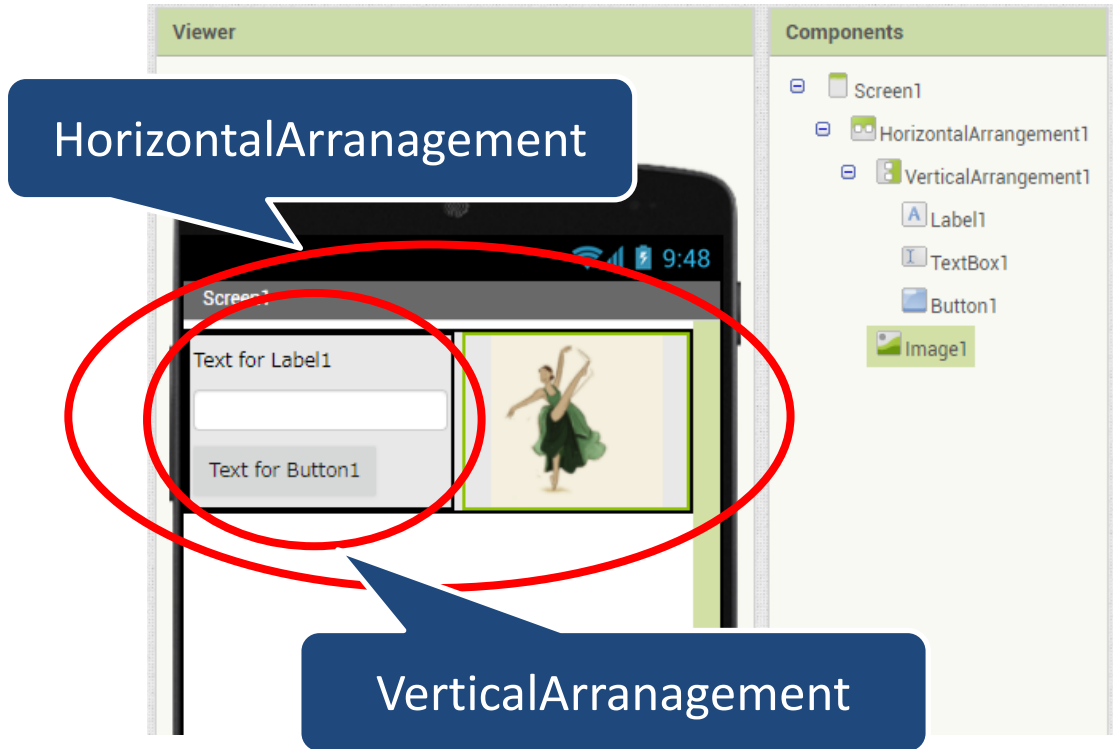
- Defines where and how to position the UI components on a screen.
- Structures the hierarchy of UI components.



Five Layout Components



Nested Layout



Colors have emotional effect

Red = excitement, danger

Orange = energy, confidence

Purple = romance, creativity

Blue = strength, future

Green = health, peace

...

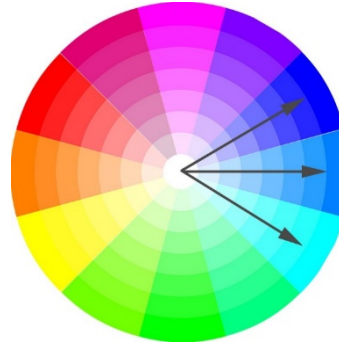
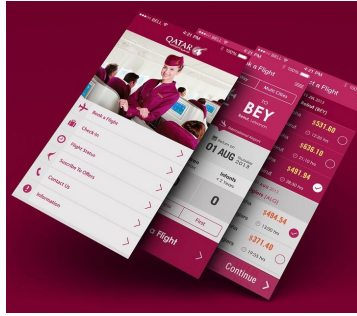
COLOR EMOTION GUIDE



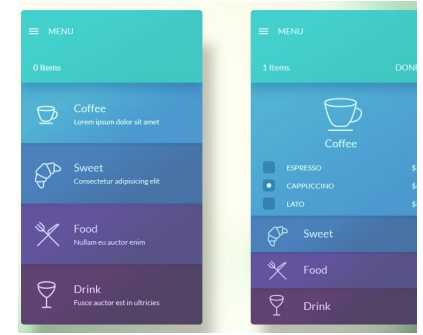
The Art of Color Selection



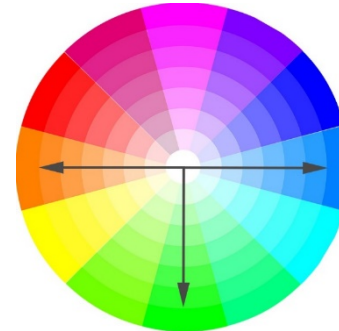
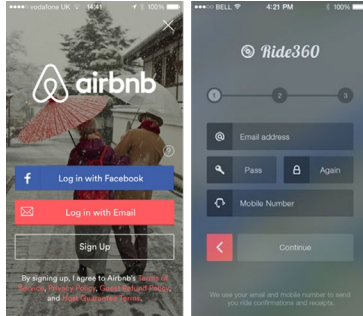
Monochromatic



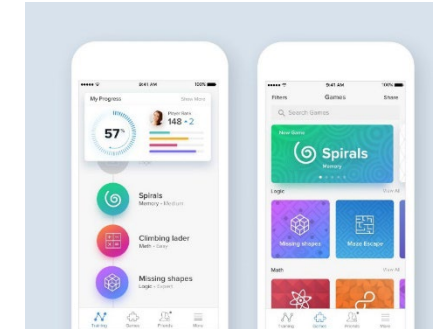
Analogous



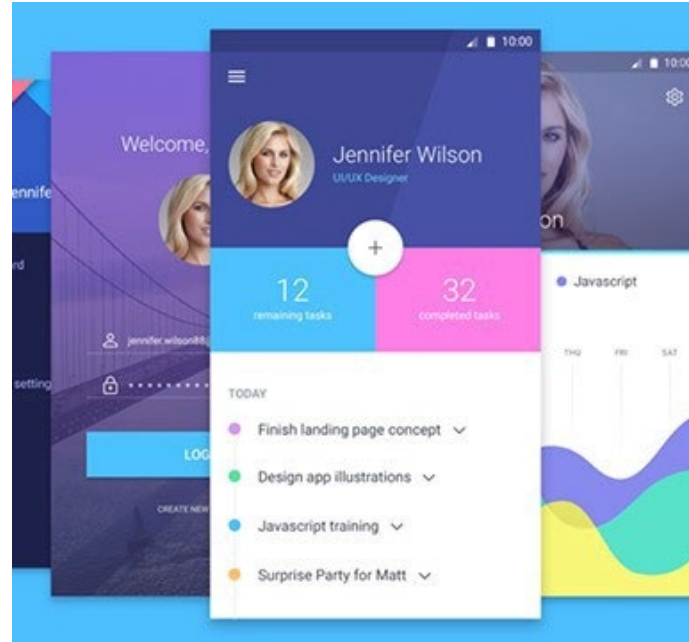
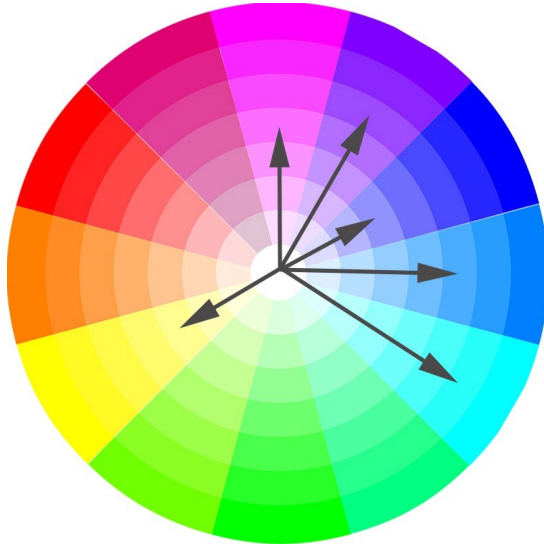
Complementary



Triadic



Compound



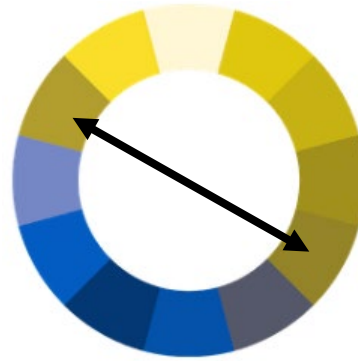
Designing for Color Blindness

Red and **green** colors are a common problematic combination

→ Use **red** and **blue** instead!



Normal Vision



Vision of red-green
color blindness

Low contrast, hard to read

Knowing is not enough, we must apply

Knowing is not enough, we must apply

High contrast, easy to read

Knowing is not enough, we must apply

Knowing is not enough, we must apply

Location Sensor

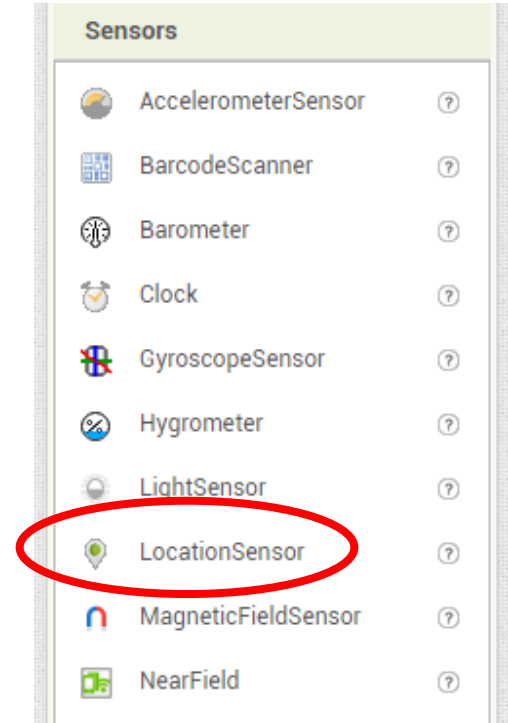
Location Sensor

- The **LocationSensor** is used to get location information. Location means the device's present latitude/longitude or street address.
- It can communicate with the global positioning satellite receiver (GPS) in your phone, or work with network/wifi location services.



Location Sensor

- Some phones are more sensitive to whether the device is in a building, under trees or is travelling in the mountains. Weak signals will reduce accuracy.
- A GPS receiver's accuracy can vary easily by plus or minus 50 meters or so over a very short period of time.
- It takes 20s to update the location of your phone.



GPS

You may refer to the Wikipedia page of GPS for more technical details

https://en.wikipedia.org/wiki/Global_Positioning_System

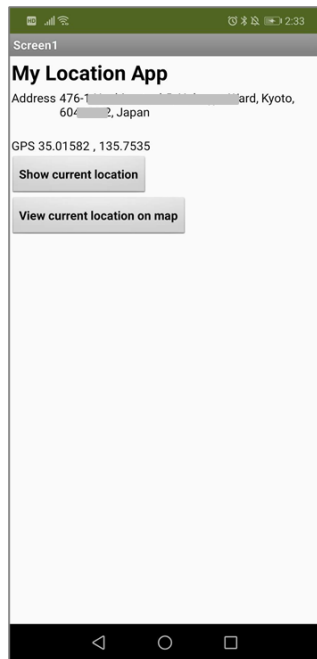
ActivityStarter

[http://appinventor2.wiki.fc2.com/
wiki/ActivityStarter%E4%BD%BF%E7%94%A8%E4%BE%8B](http://appinventor2.wiki.fc2.com/wiki/ActivityStarter%E4%BD%BF%E7%94%A8%E4%BE%8B)

Activity Starter

The activity starter component let you start another app inside your own app.

Your
app



Other apps on the phone

ActivityStarter



Search



YouTube



Maps



Gmail



Drive



Calendar

Start a browser to open a web page

Use these ActivityStarter with the VIEW action and a Data Uri to open the phone's browser to a designated web page, for example,

Action: **android.intent.action.VIEW**

DataUri: **<http://kuas.ac.jp>**



Launch a web search

To launch a Web search, use an `ActivityStarter` with the `WEB_SEARCH` action.

Action: **`android.intent.action.WEB_SEARCH`**



Show a map for a location

You can use the VIEW action to show a map of the area:

Action: **android.intent.action.VIEW**

DataUri: **geo: latitude, longitude**



Maps

For more information about the geoURI format, please refer to https://qiita.com/j_catfish/items/819046a03c7619504c58

Play a YouTube video

You'll need to know the URI of the YouTube video. Then set the Activity Starter action to VIEW, and set the Data URI to *vnd.youtube* followed by the YouTube URI of the video to be played, for example

Action: **android.intent.action.VIEW**

DataUri: **vnd.youtube:nAPk9ycCbfc**



YouTube

Any questions?

