

Assignment 04

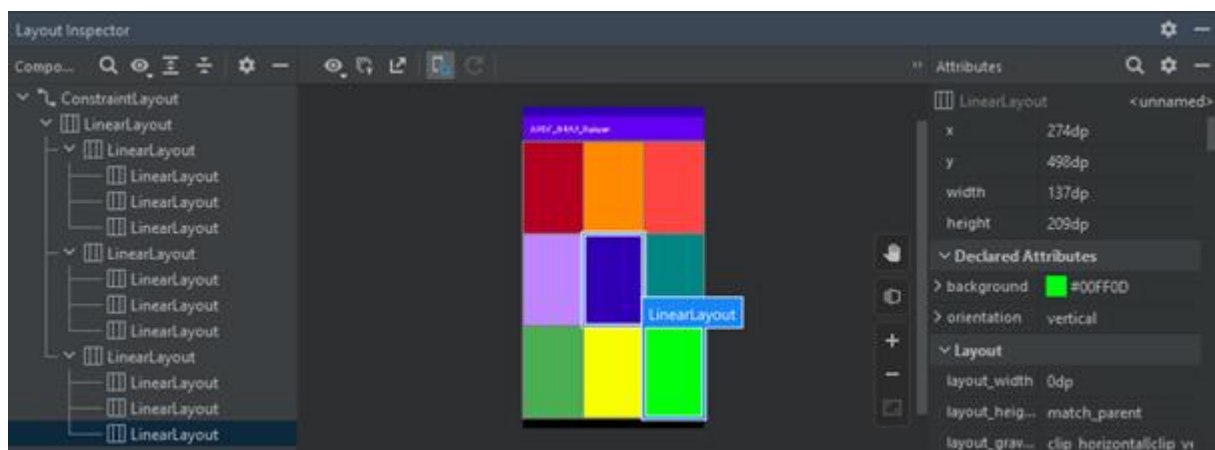
1 Gestures

Explore which single touch events are supported by Android.

- ACTION_DOWN - This event is fired when the user touches the screen.
- ACTION_MOVE - This event is fired when the user moves their finger on the screen.
- ACTION_UP - This event is fired when the user lifts their finger from the screen.
- ACTION_CANCEL - This event is fired when the touch event is cancelled.
- ACTION_OUTSIDE - This event is fired when the user's touch moves outside the view.
- ACTION_POINTER_DOWN - This event is fired when a secondary pointer goes down.
- ACTION_POINTER_UP - This event is fired when a secondary pointer goes up.

2 Layout

Draw the hierarchy as tree for each implemented layout. Use Tools >Layout Inspector to get detailed information about your layout.



Inspect the time that is used for layout measurement, draw duration and animation duration. Take a closer look at <https://developer.android.com/studio/profile/cpu-profiler> to find out how Android Studio can be used to perform such tasks.

You can use the CPU Profiler:

Event timeline – shows transition through different states and user interaction (device rotation, touch events, etc.)

CPU timeline – shows real-time CPU usage of the app and the total number of threads the app is using.

Thread activity timeline: displays the threads belonging to the app. Depending on the colour of the thread, it has a different meaning.

green: Thread is active or ready to use the CPU (running or runnable state)

Yellow: Thread is active, but is waiting for an on/off operation, before completing its work.

Gray: Thread is sleeping and not consuming CPU time.

The CPU Profiler also shows CPU usage of threads.