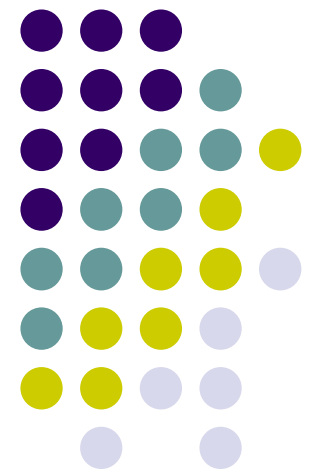


**CS 525M Mobile and Ubiquitous  
Computing**  
**Tutorials 5: Tour of Android Studio UI**  
**by Bucky Roberts (thenewboston)**

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**Emmanuel Agu**

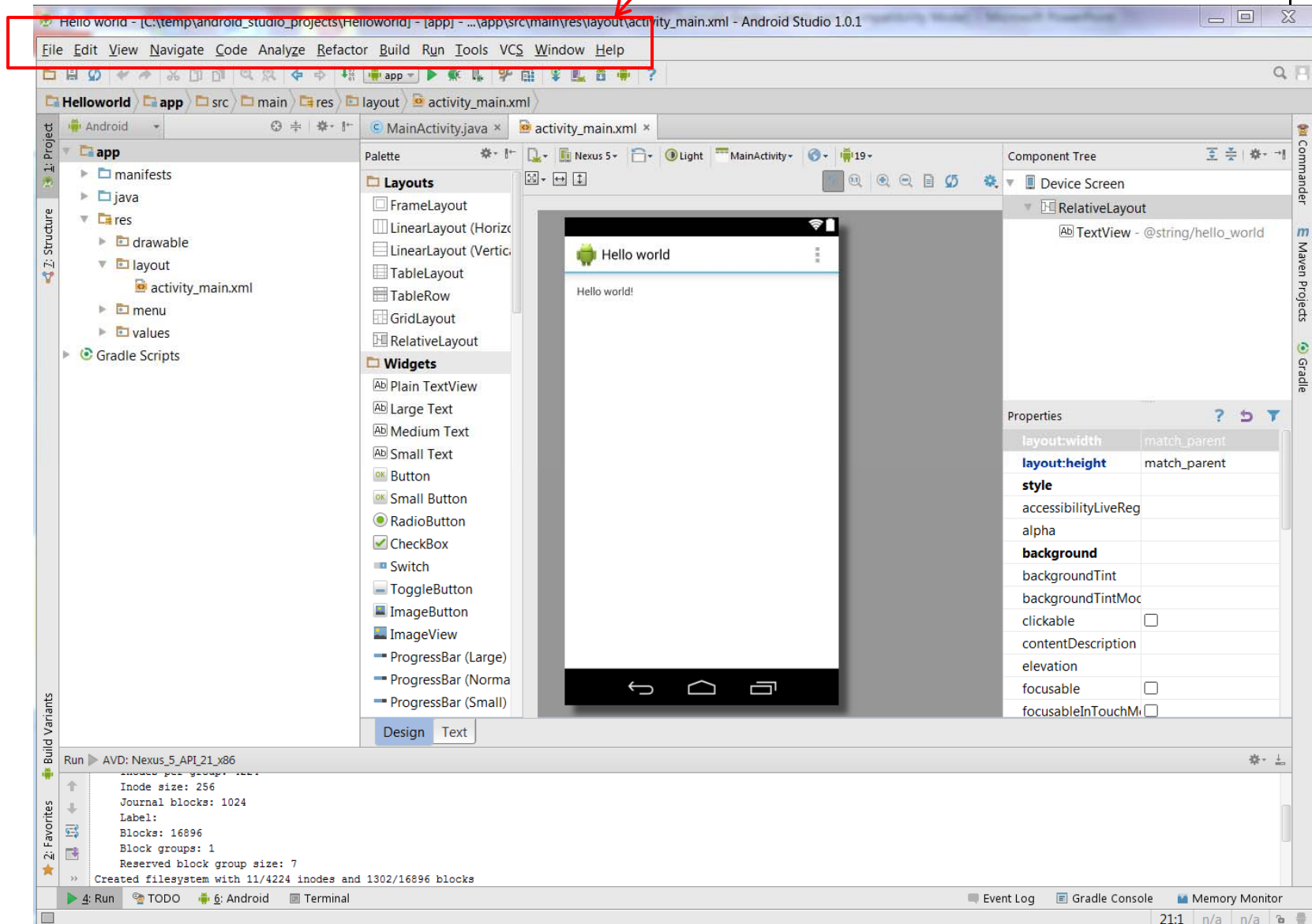


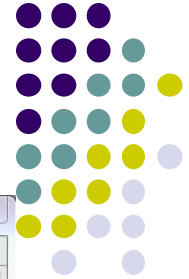
# Tutorial 5: Tour of Android Studio Interface



- Tutorial 5: Tour of Android Studio Interface [6:01 mins]
  - <https://www.youtube.com/watch?v=-pdTqBq2TFQ>
- Quick overview of main sections of Android Studio
  - Windows menu bar
  - Android tool bar
  - Project window
  - Editor Window
  - Palette for Drag-and-Drop Design of Android buttons
- More detailed coverage of specific UI aspects later

## Typical Windows Menu Bar (File, edit, etc)





## Tool Bar: Shortcuts to Frequently used Android-specific Functions (E.g. One-click access to SDK manager)

The screenshot displays the Android Studio 1.0.1 interface. A red box highlights the tool bar at the top, which contains various icons for navigation, editing, and development. A red arrow points from the title text to the 'Refactor' icon in the tool bar. The interface shows a project named 'Hello world' with a 'MainActivity.java' file open. The central design view shows a mobile screen with 'Hello world' text. The left sidebar shows the project structure, and the right sidebar shows the component tree and properties for the selected TextView widget.

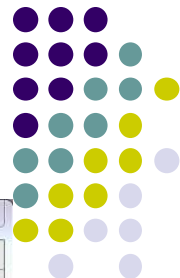
Property	Value
layout:width	match_parent
layout:height	match_parent
style	
accessibilityLiveReg	
alpha	
background	
backgroundTint	
backgroundTintMoc	
clickable	<input type="checkbox"/>
contentDescription	
elevation	
focusable	<input type="checkbox"/>
focusableInTouchM	<input type="checkbox"/>



## Path to Current File in IDE Window (Clickable)

The screenshot shows the Android Studio IDE interface. A red box highlights the breadcrumb path at the top of the editor window: `Helloworld > app > src > main > res > layout > activity_main.xml`. A red arrow points from the text above to this path. The IDE also displays the Project view on the left, the Palette of layouts and widgets, a preview of the app's design, and the Properties panel for the selected `TextView` widget.

Properties	
<code>layout:width</code>	<code>match_parent</code>
<code>layout:height</code>	<code>match_parent</code>
<b>style</b>	
<code>accessibilityLiveReg</code>	
<code>alpha</code>	
<b>background</b>	
<code>backgroundTint</code>	
<code>backgroundTintMoc</code>	
<code>clickable</code>	<input type="checkbox"/>
<code>contentDescription</code>	
<code>elevation</code>	
<code>focusable</code>	<input type="checkbox"/>
<code>focusableInTouchM</code>	<input type="checkbox"/>

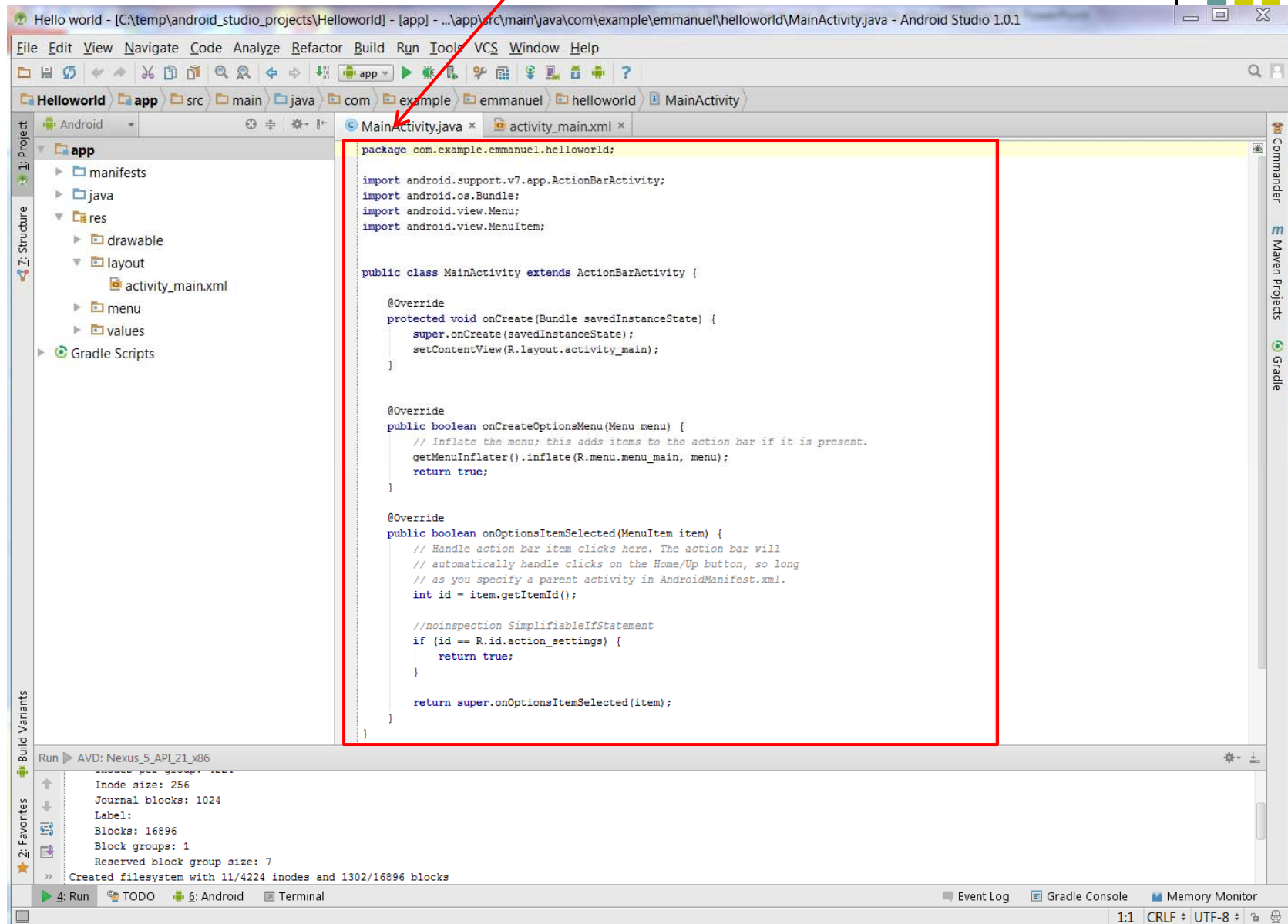


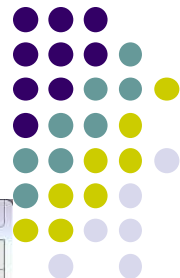
## Editor Window (Allows editing of current file we are working on)

The screenshot displays the Android Studio IDE interface. The central Editor Window is highlighted with a red border and a red arrow pointing to it from the text above. The Editor Window shows a preview of an Android application with the text "Hello world!" on a white background. The interface includes a Project view on the left, a Palette of layouts and widgets in the center, a Component Tree on the right, and a Properties panel at the bottom right. The bottom status bar shows the current device (AVD: Nexus\_5\_API\_21\_x86) and various tool icons.

Property	Value
layout:width	match_parent
layout:height	match_parent
style	
accessibilityLiveReg	
alpha	
background	
backgroundTint	
backgroundTintMoc	
clickable	<input type="checkbox"/>
contentDescription	
elevation	
focusable	<input type="checkbox"/>
focusableInTouchM	<input type="checkbox"/>

# Clicking on Editor Window Tabs switches between Java code and Visual Interface





## Project Window (Allows between project files, packages, etc)

The screenshot displays the Android Studio IDE with the following components:

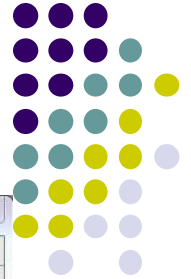
- Project Window (left):** A tree view showing the project structure for 'Hello world'. The 'app' folder is expanded, showing subfolders like 'manifests', 'java', 'res' (with 'drawable', 'layout', 'menu', 'values'), and 'Gradle Scripts'. A red box highlights this window, with a red arrow pointing to the 'layout' folder.
- Palette (middle-left):** A list of UI components categorized into 'Layouts' (FrameLayout, LinearLayout, etc.) and 'Widgets' (TextView, Button, etc.).
- Design View (center):** A visual representation of the app's main screen, showing a white background with the text 'Hello world!' and an Android logo.
- Component Tree (middle-right):** A hierarchical view of the UI components, showing a 'RelativeLayout' containing a 'TextView' with the text '@string/hello\_world'.
- Properties Panel (bottom-right):** A table of properties for the selected 'TextView' component.

Property	Value
layout:width	match_parent
layout:height	match_parent
style	
accessibilityLiveReg	
alpha	
background	
backgroundTint	
backgroundTintMoc	
clickable	<input type="checkbox"/>
contentDescription	
elevation	
focusable	<input type="checkbox"/>
focusableInTouchM	<input type="checkbox"/>

At the bottom, the 'Run' console shows system logs for the AVD: Nexus\_5\_API\_21\_x86, including details about inode size, journal blocks, and filesystem creation.



# Palette of Drag-and-Drop Elements for Designing Interface (Layout, widgets, etc)

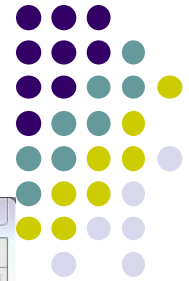


The screenshot displays the Android Studio IDE interface for an Android application. The main window shows the design view of the app, with a preview of a Nexus 5 device displaying "Hello world!". The Palette on the left is highlighted with a red box and contains the following elements:

- Layouts**
  - FrameLayout
  - LinearLayout (Horizontal)
  - LinearLayout (Vertical)
  - TableLayout
  - TableRow
  - GridLayout
  - RelativeLayout
- Widgets**
  - Plain TextView
  - Large Text
  - Medium Text
  - Small Text
  - Button
  - Small Button
  - RadioButton
  - CheckBox
  - Switch
  - ToggleButton
  - ImageButton
  - ImageView
  - ProgressBar (Large)
  - ProgressBar (Normal)
  - ProgressBar (Small)

The Component Tree on the right shows a RelativeLayout containing a TextView with the text "@string/hello\_world". The Properties panel below it lists various attributes for the TextView, such as layout:width, layout:height, style, accessibilityLiveReg, alpha, background, backgroundTint, backgroundTintMode, clickable, contentDescription, elevation, focusable, and focusableInTouchMode.

# Parameters of Drag-and-Drop Elements for Designing Interface (e.g. colors, dimensions of widgets, etc)



The screenshot shows the Android Studio IDE with the design interface for an activity. The main window displays a preview of the activity on a Nexus 5 device, showing the text "Hello world!". The Properties panel on the right is highlighted with a red box and contains the following parameters:

Parameter	Value
layout:width	match_parent
layout:height	match_parent
style	
accessibilityLiveReg	
alpha	
background	
backgroundTint	
backgroundTintMoc	
clickable	<input type="checkbox"/>
contentDescription	
elevation	
focusable	<input type="checkbox"/>
focusableInTouchM	<input type="checkbox"/>



# References

- Bucky Roberts, Android App Development for Beginners - 5 - Tour of the Interface [6:01 mins]
  - <https://www.youtube.com/watch?v=-pdTqBq2TFQ>