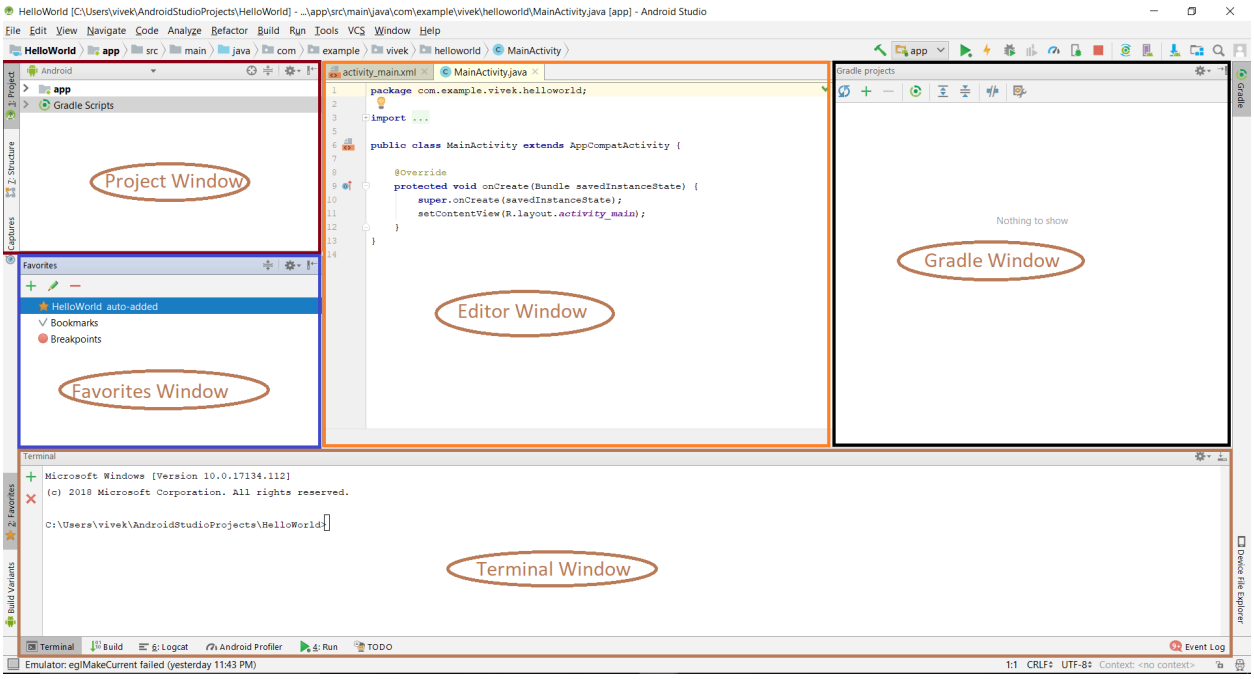
Android Studio IDE Overview

Objectives: In this tutorial you will learn about the different windows and tools in Android Studio. At the end of this session you will be able to:

- Use different Android Windows.

After you create a new project you should be able to access the below windows:



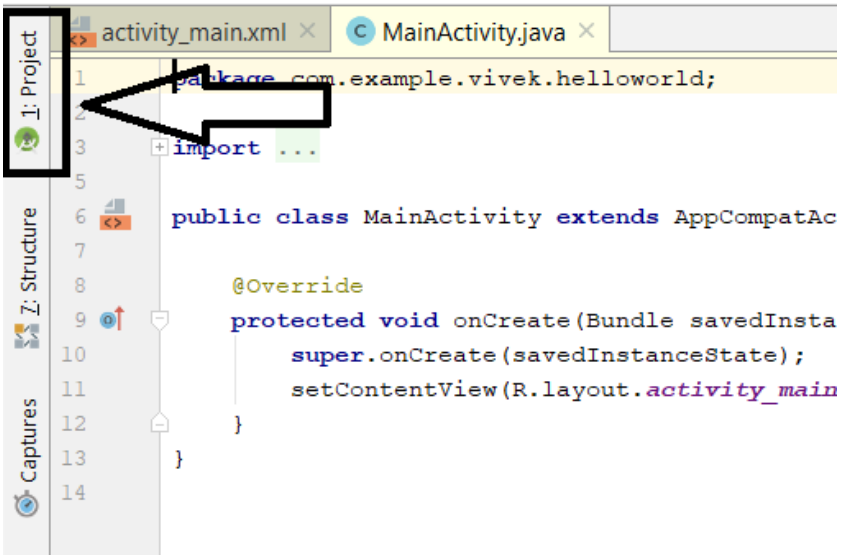
You can't see all of these windows? By default only the *Editor Window* will be shown, and the other windows will be in minimized form. The above image shows all the windows in expanded form. Android Studio offers different tools and window for various purposes.

1- Editor Window

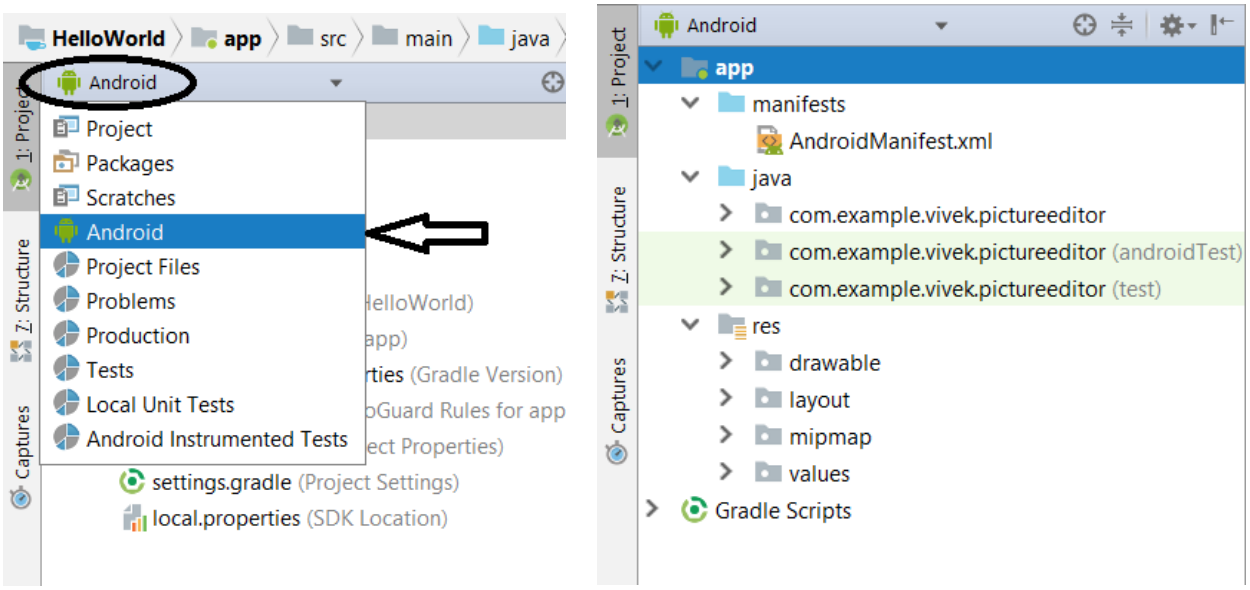
The **editor window** is where you create and modify code. By default editor window shows two files which are layout file (activity_main.xml) and java file (MainActivity.java) . Depending on the current file type, the editor can change. For example, when viewing a layout file, the editor displays the Layout Editor.

2- Project Window

To open project Window, click on project tab located on the left of editor window. Refer to the following image.



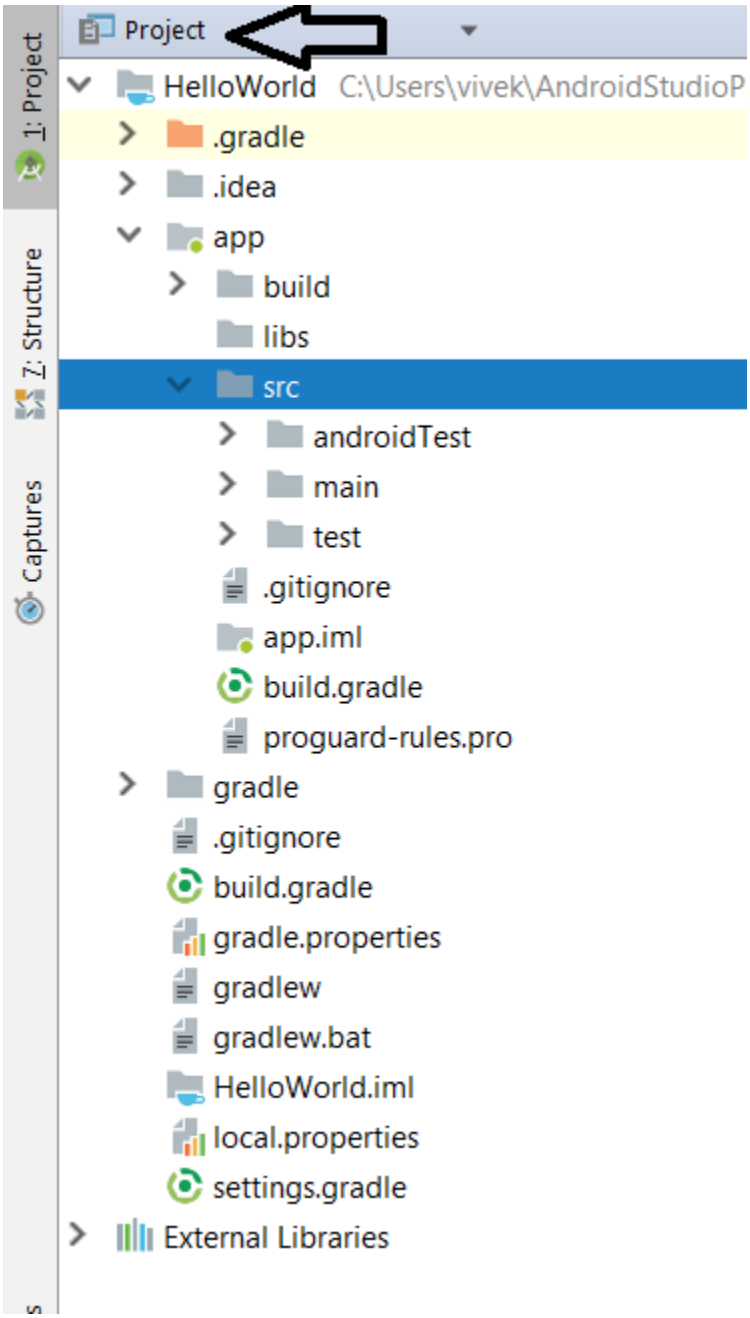
Now you should be able to see the project window as follows.



When you start a new project, Android Studio creates the necessary structure for all your files and makes them visible in the **Project** window on the left side of the IDE (click **View > Tool Windows > Project**). This window provides an overview of the key components inside your project.

There are different views/scopes in project window. By default, Android Studio displays your project files in the **Android** view. This view does not reflect the actual file hierarchy on disk, but is organized by modules and file types to simplify navigation between key source files of your project, hiding certain files or directories that are not commonly used.

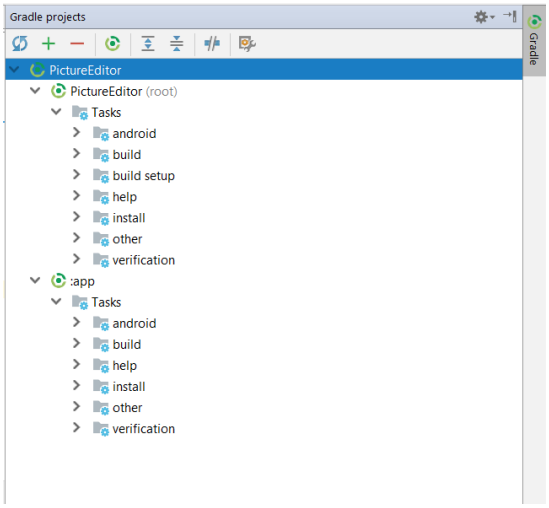
To see the actual file structure of the project including all files hidden from the Android view, select **Project** from the dropdown at the top of the **Project** window. When you select **Project** view, you can see a lot more files and directories.



4- Gradle Window

Click on the tab named ‘Gradle’ present at the upper right section of the IDE.

Gradle Window shows gradle files



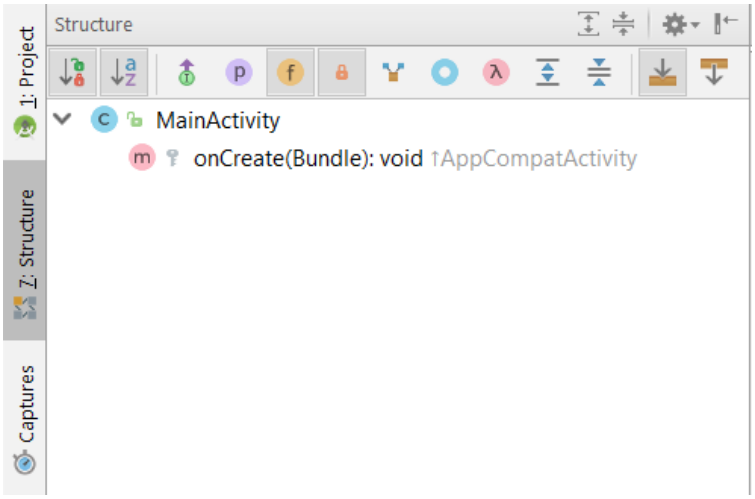
In Android Studio, Gradle is a custom build tool used to build android packages (**apk files**) by managing dependencies and providing custom build logic. An **apk file** gets signed and pushed to the device using ADB(Android **Debug** Bridge) where it gets executed. **Apk** file can be used to install the application in any android device.

Warning : Do not attempt to edit the gradle files. These are auto-generated files by Android Studio which is more than sufficient to build your project. Gradle file manipulation is done at high levels which is out of the scope of this course.

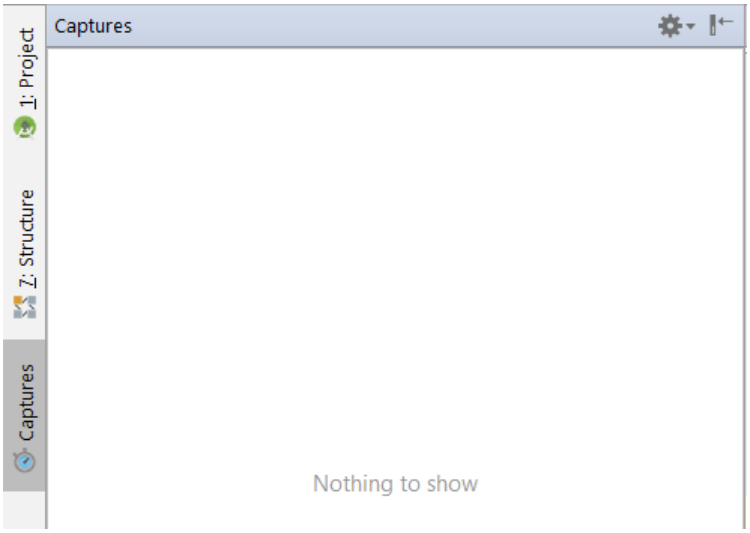
5- Other Windows

To open Structure Window, just click on the Structure tab present below Project tab.
After that you should see following image. You can open most of the windows, just by clicking on their tabs and close the windows by clicking opened windows again.

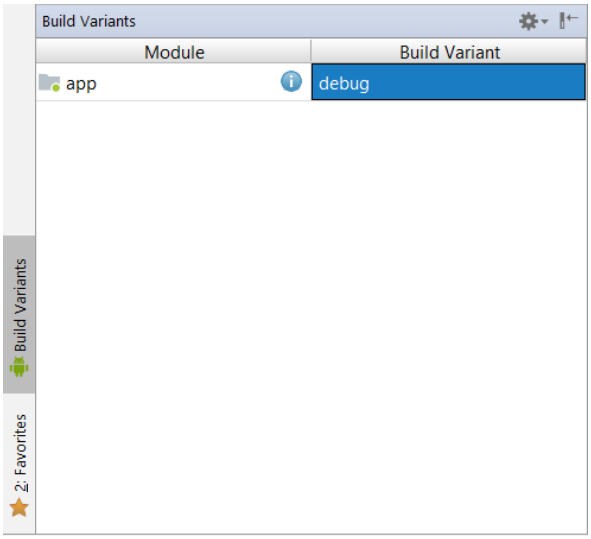
i) **Structure Window:** It shows list of methods in your java classes. You can sort them alphabetically or according to their access modifiers using buttons present at upper left corner in the window.



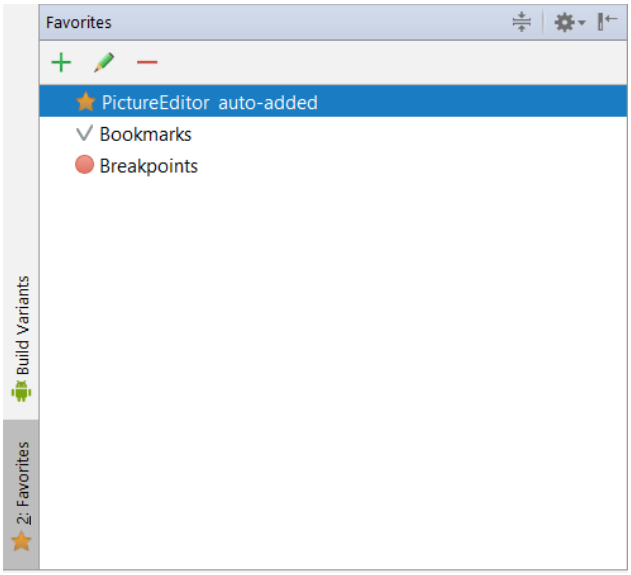
ii) Captures Window: contains the results of monitor tools such as memory or CPU monitor. This window does not show any information by default.



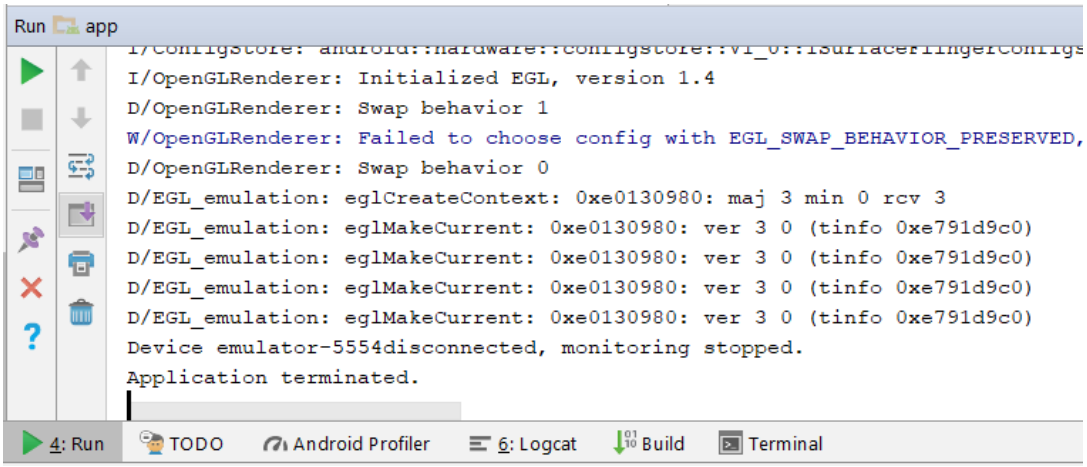
iii) Build Variance Window: it lets you manage your build process. By default you are using something called the debug variant. But there is also the release variant which you will use when your application is ready for release.



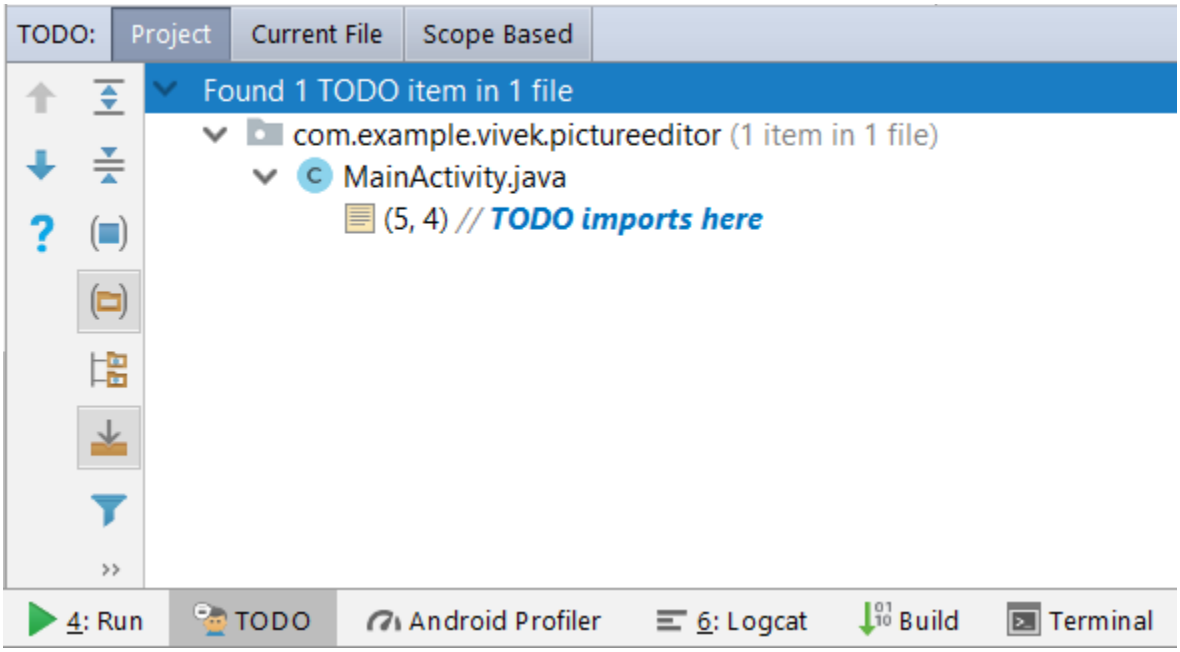
iv) Favorites Window: gives you a way to get to the classes and other resources that you use most frequently. By default, three lists are shown for project, bookmarks and breakpoints. You can make any class a favorite by right clicking and selecting add to favorite.



v) Messages Window: shows any errors or warnings which occurs while building your application.Typical error consists of compilation errors due to inaccurate code or a missing statement.



vi) TODO Window: shows a list of all of your 'to do' comments. You can make a todo list note just by using double slash in your code followed by any message.



vii) Terminal Window: opens a command prompt through which you can explore the actual files saved in your computer. It can be used to take a quick look in your computer's current directory structure and files.