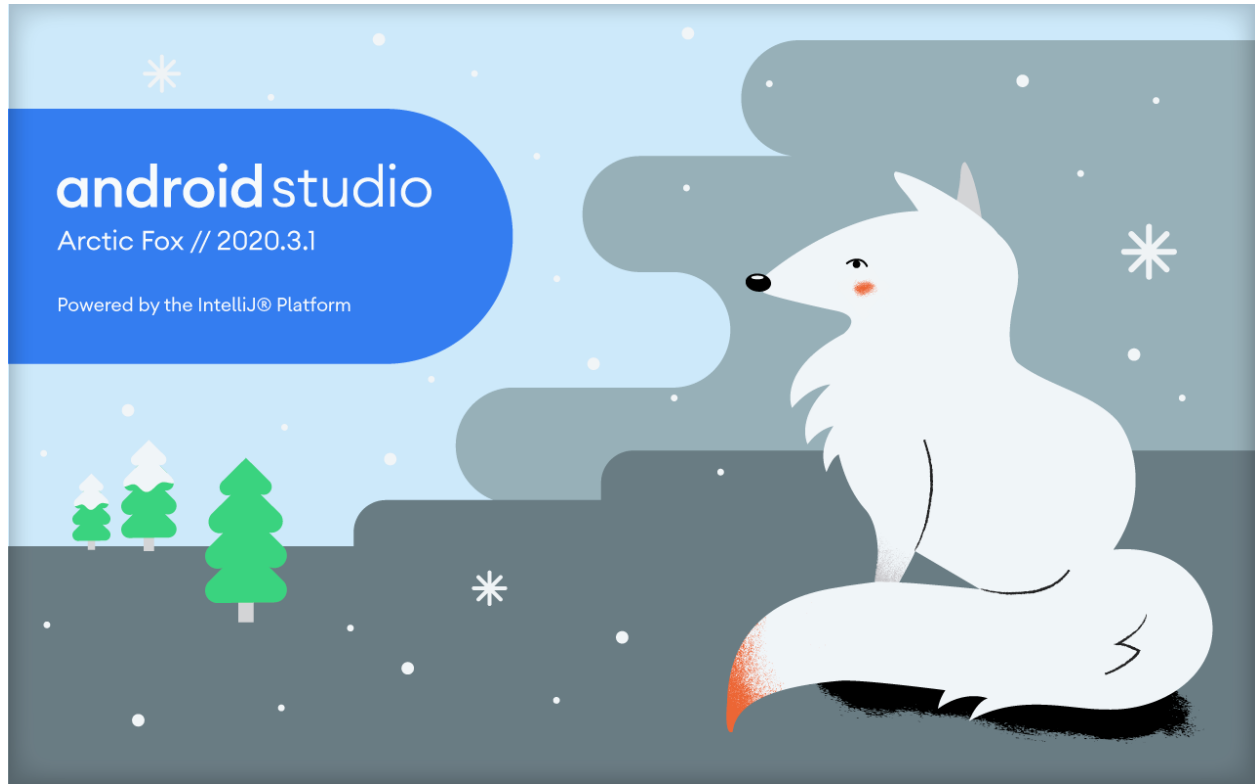


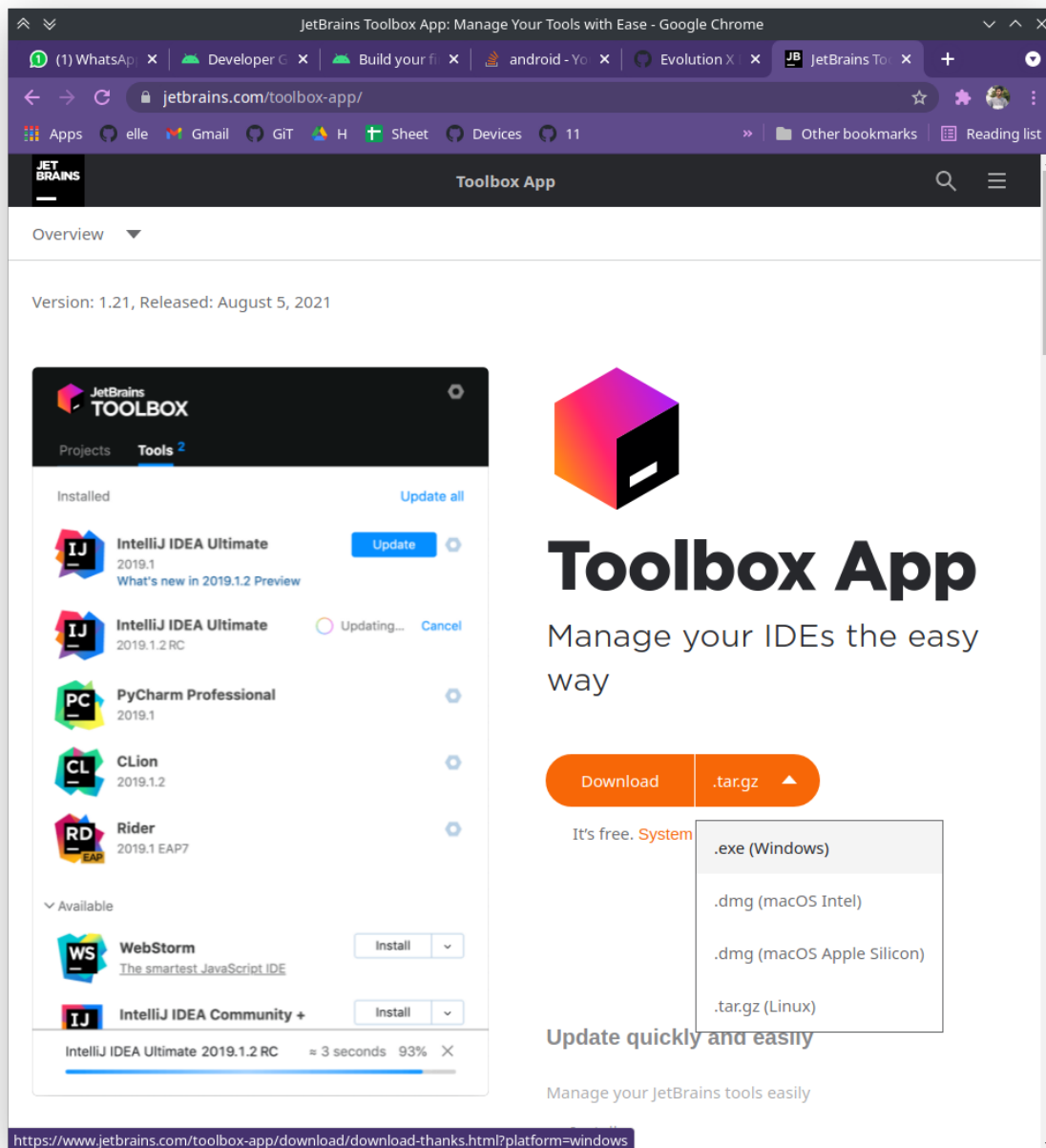
# App Basics:

Choosing IDE: We will use Android Studio Beta (Arctic Fox) IDE

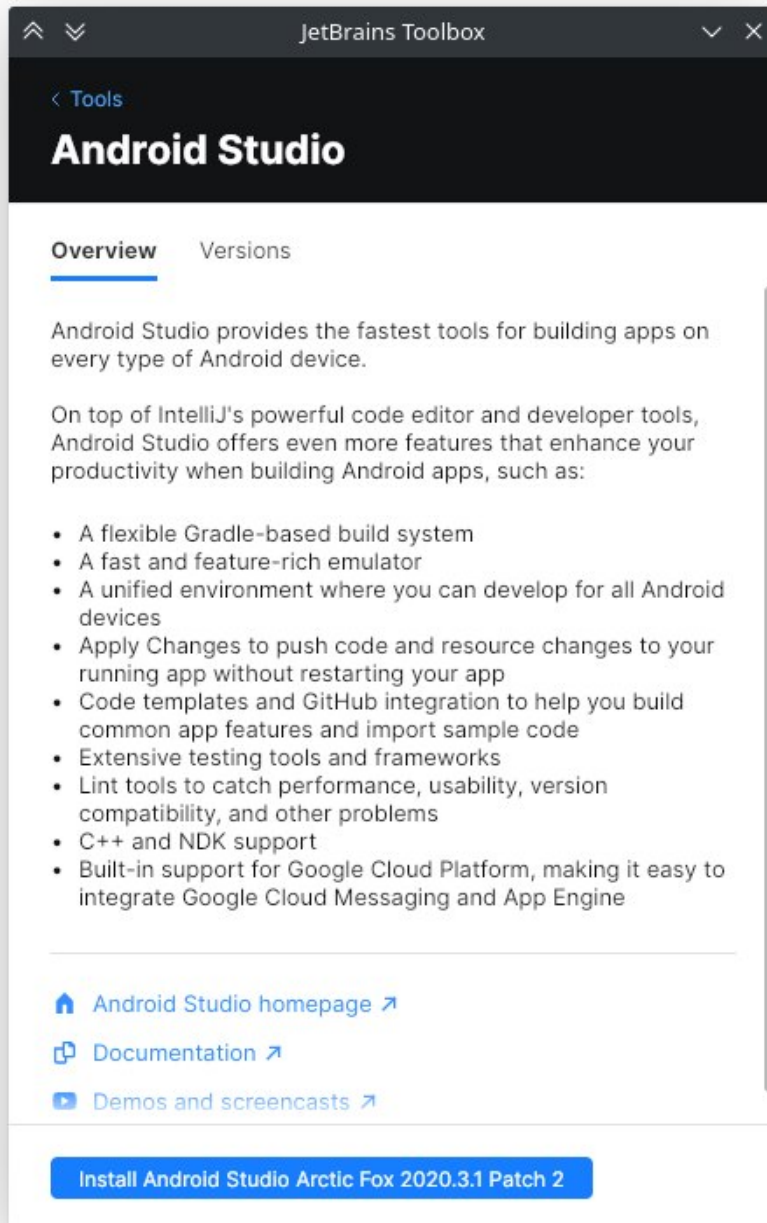


To install the IDE first we will download JetBrains' ToolBox (According to your Operating System) and then IDE from the toolbox.

Link to the toolbox [HERE](https://www.jetbrains.com/toolbox-app/)



You may find Android Studio in the first 5-10 options in the **toolbox**. Below is the exact version we will be using here (Latest by today)



Follow the onscreen instructions, use default settings and let it install all the default libraries, SDK, Generic Image files (optional), licenses etc. It would take upto 1GB of your data. You can ping me at any time you want (contact details are at end of this guide), we can even have a google meet session, I know setting up android build environment sometimes messes up at start

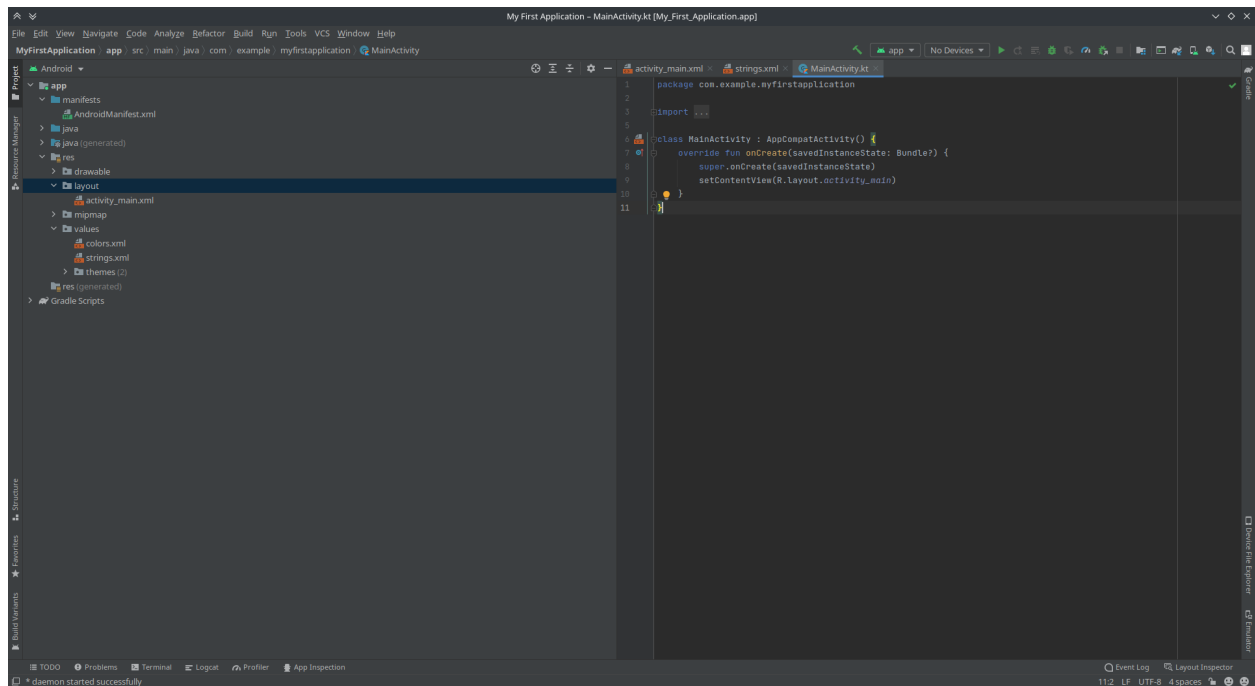
Now after successfully installing Android Studio IDE we have to ***create a new project***. Creating a new folder outside Android folder is recommended for the project to keep Android SDK and our Android app source separate.

During creation of new project you will need to select following standard options:

1. In the **Select a Project Template** window, select **Empty Activity** and click **Next**.
2. In the **Configure your project** window, complete the following:
  - Enter "My First Application" in the **Name** field.
  - Enter "com.example.myfirstapplication" in the **Package name** field.
  - If you'd like to place the project in a different folder, change its **Save** location.
  - Select **Kotlin** (for now) from the **Language** drop-down menu.
  - Select the lowest version of Android you want your app to support in the **Minimum SDK** field. (Android 9.0 pie will be fine)
  - If your app will require legacy library support, mark the **Use legacy android.support libraries** checkbox. (No need to select this for now)
  - Leave the other options as they are.
3. Click **Finish**.

After some processing time, the Android Studio main window appears. (It may take upto 5-10 minutes to gather all the initial files according to the language (kotlin) and Android Version (pie) we selected above while creating the project.

4. Now take a moment to review the most important files.



First, be sure the **Project** window is open (select **View > Tool Windows > Project** or directly press **Project** option from the left side bar) and the Android view is selected from the drop-down list at the top of that window. You can then see the following files:

**app > java > com.example.myfirstapp > MainActivity**

This is the main activity. It's the entry point for your app. When you build and run your app, the system launches an instance of this [Activity](#) and loads its layout.

**app > res > layout > activity\_main.xml**

This XML file defines the layout for the activity's user interface (UI). It contains a [TextView](#) element with the text "Hello, World!"

**app > manifests > AndroidManifest.xml**

The [manifest file](#) describes the fundamental characteristics of the app and defines each of its components.

**Gradle Scripts > build.gradle**


There are two files with this name: one for the project, "Project: My\_First\_App," and one for the app module, "Module: My\_First\_App.app." Each module has its own build.gradle

file, but this project currently has just one module. Use each module's build.gradle file to control how the [Gradle plugin](#) builds your app. For more information about this file, see [Configure your build](#).

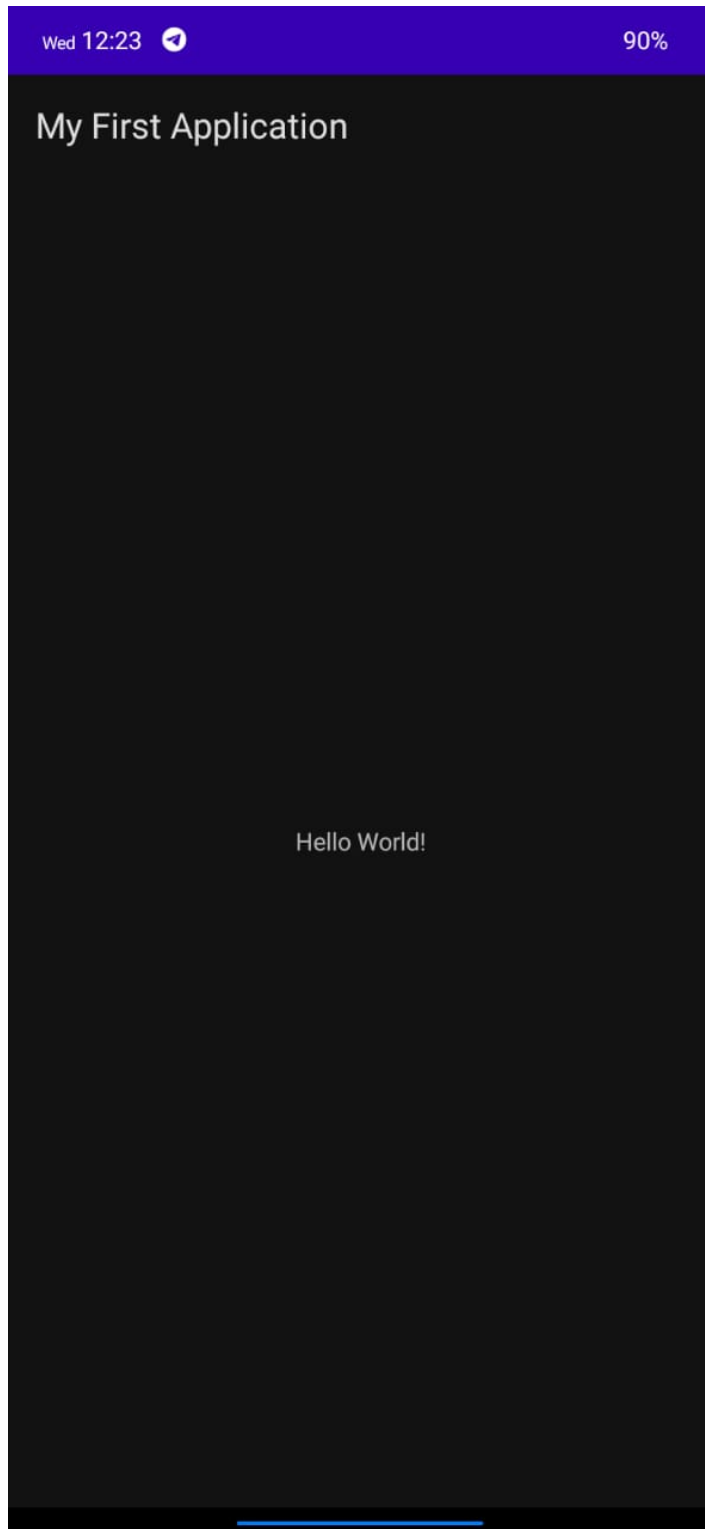
**Run your app:**

## Run on a real device

Set up your device as follows:

- Connect your device (mobile phone) to your development machine (laptop/pc) with a USB cable. If you developed on Windows, you might need to [install the appropriate USB driver](#) for your device.
- Perform the following steps to enable **USB debugging** in the **Developer options** window:
  - Open the **Settings** app.
  - If your device uses Android v8.0 or higher, select **System**. Otherwise, proceed to the next step.
  - Scroll to the bottom and select **About phone**.
  - Scroll to the bottom and tap **Build number** seven times.
  - Return to the previous screen, scroll to the bottom, and tap **Developer options**.
  - In the **Developer options** window, scroll down to find and enable **USB debugging**.
- Click **Run** .

Android Studio installs your app on your connected device and starts it. You now see "Hello, World!" displayed in the app on your device.



Expected interface of **My First Application** on our connected device.

Keep in mind we all are learners here learning together. There should be no place for hesitation.

References: <https://developer.android.com/training/basics/firstapp/>

I have added all the basic needed steps above in the guide. You don't need to go through all the steps given in the reference link. There will be more tasks and events we will be performing. This is just an introduction to how **App Building** takes place.

Hemant Sachdeva

App Dev Head

GDSC BBSBEC

Whatsapp: +919041669596

LinkedIn: <https://www.linkedin.com/in/hemant-sachdeva>

Instagram: [https://www.instagram.com/hemant\\_007.me](https://www.instagram.com/hemant_007.me)

Email: [heamnt.evolver@gmail.com](mailto:heamnt.evolver@gmail.com)