Lab 2 – Xamarin Framework

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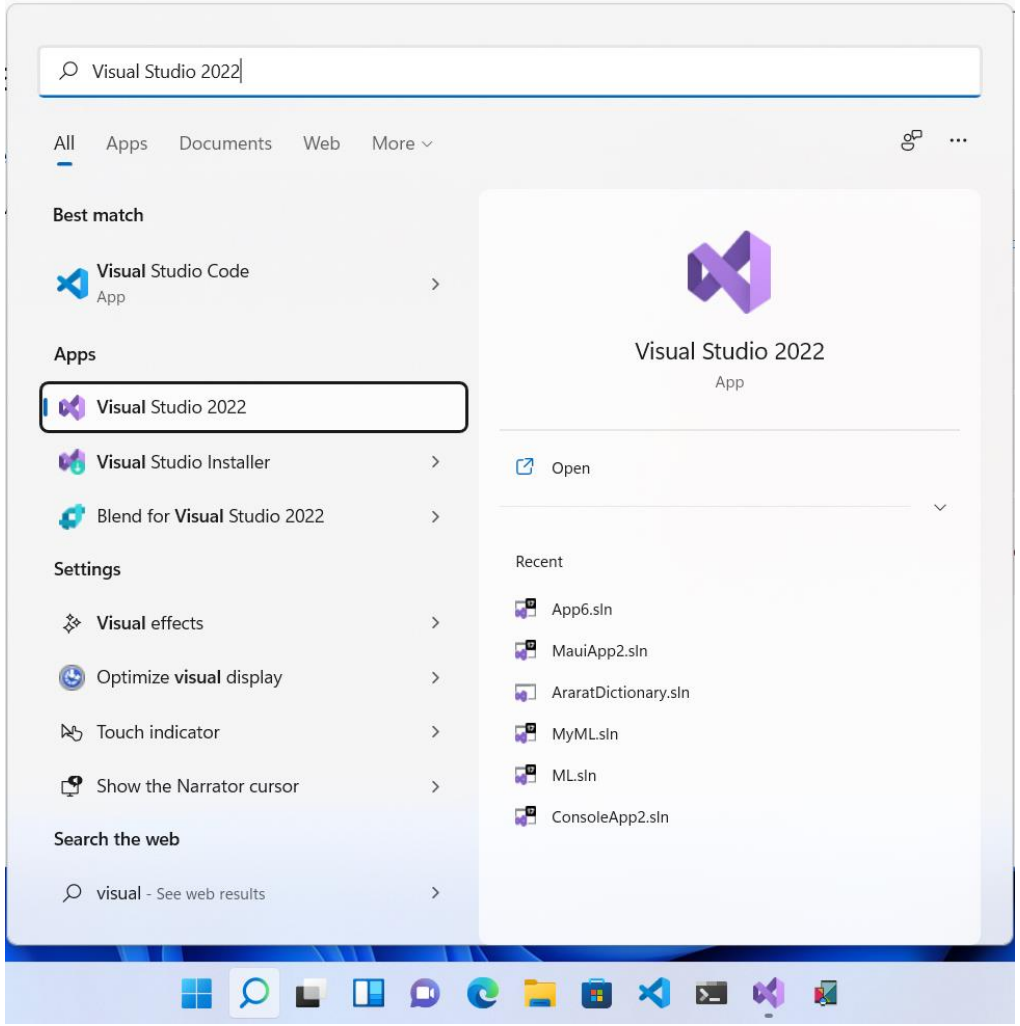
Outlines

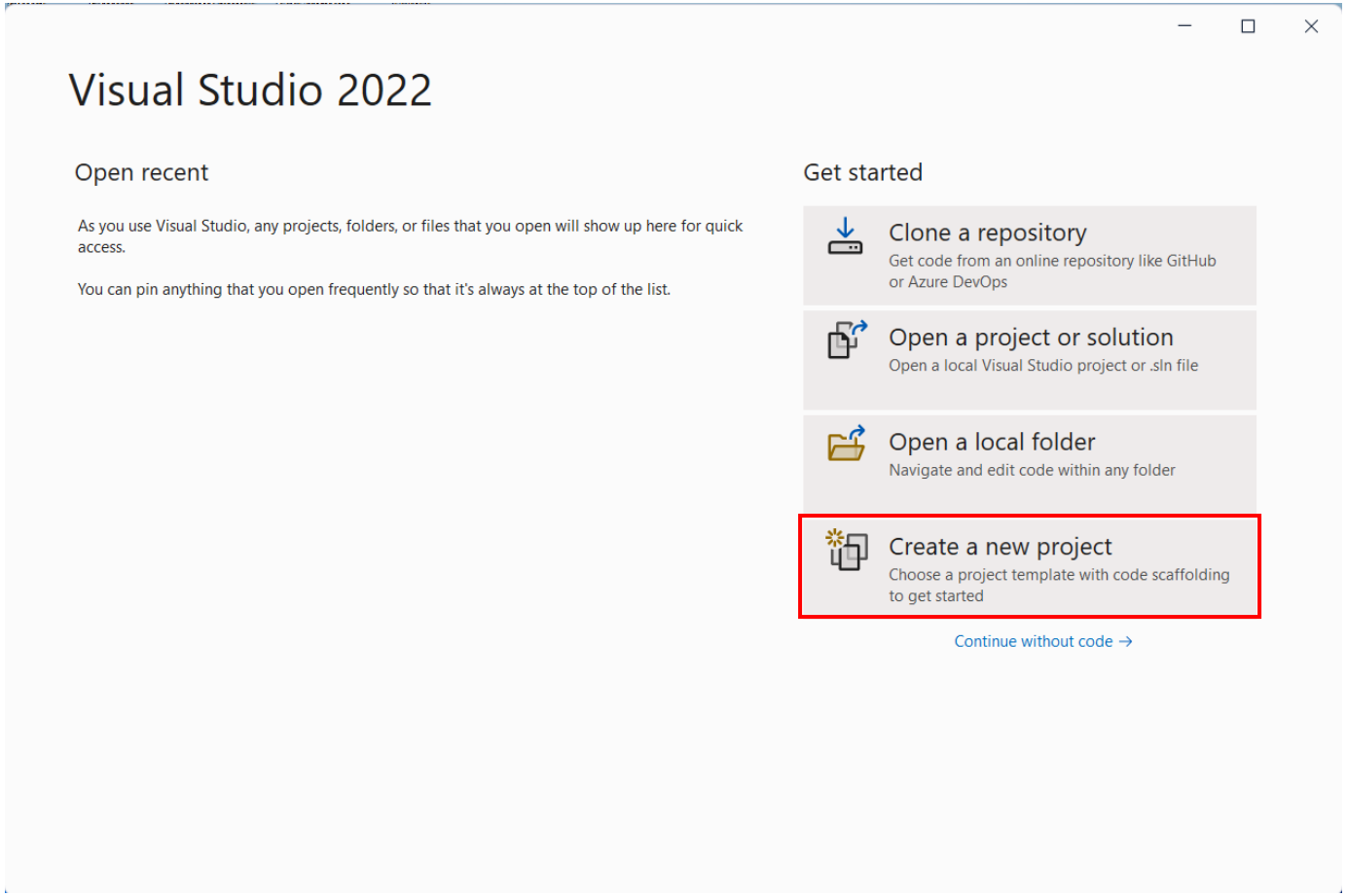
- Create a new application using Xamarin Framework
- Syntax of C# if Statement
- Syntax of C# Nested If-Else Statement
- C# For & Foreach Loop
- Array
- Any Questions?

Create a new application using Xamarin Framework

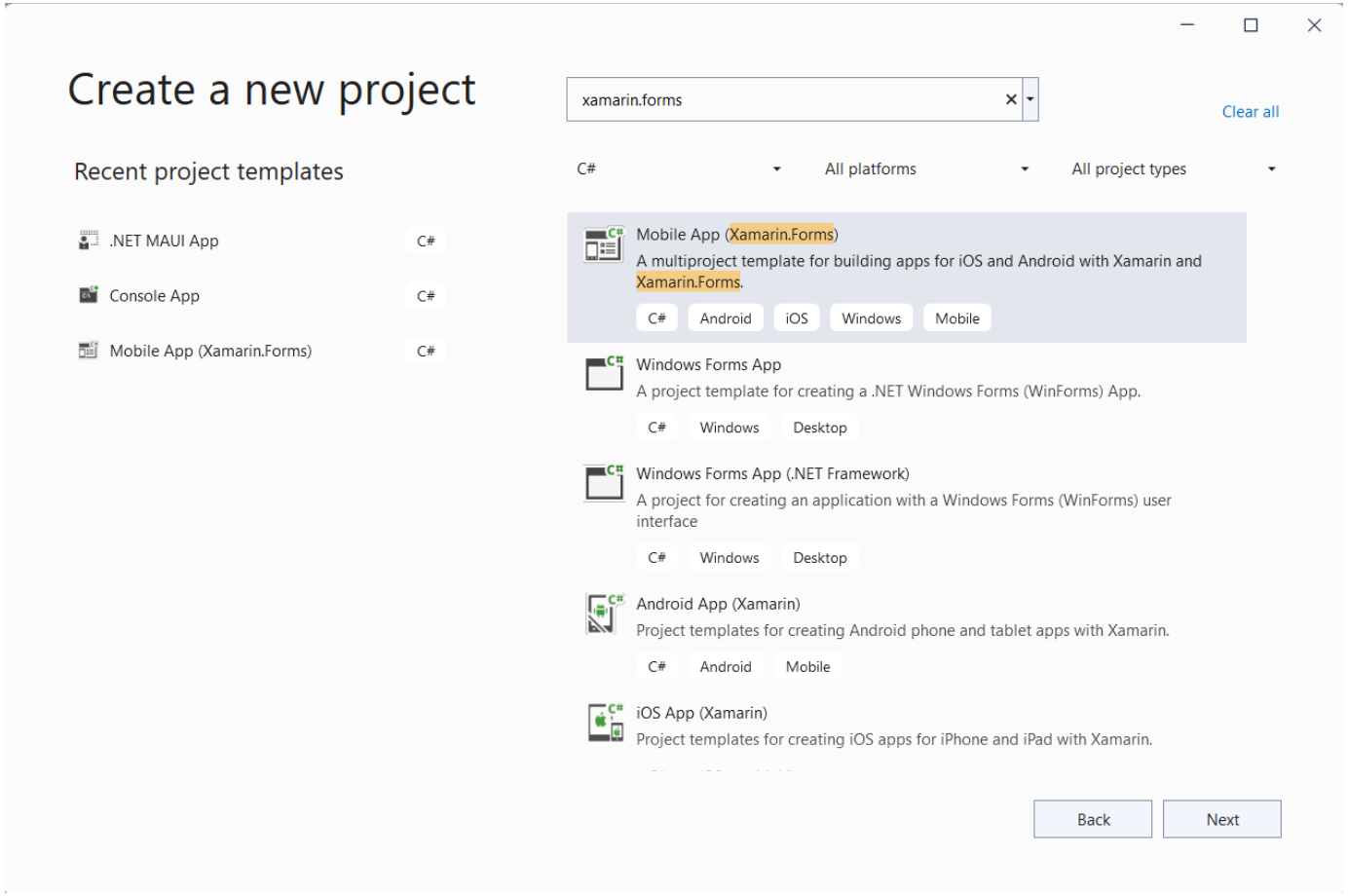
- Step1: Open Visual Studio



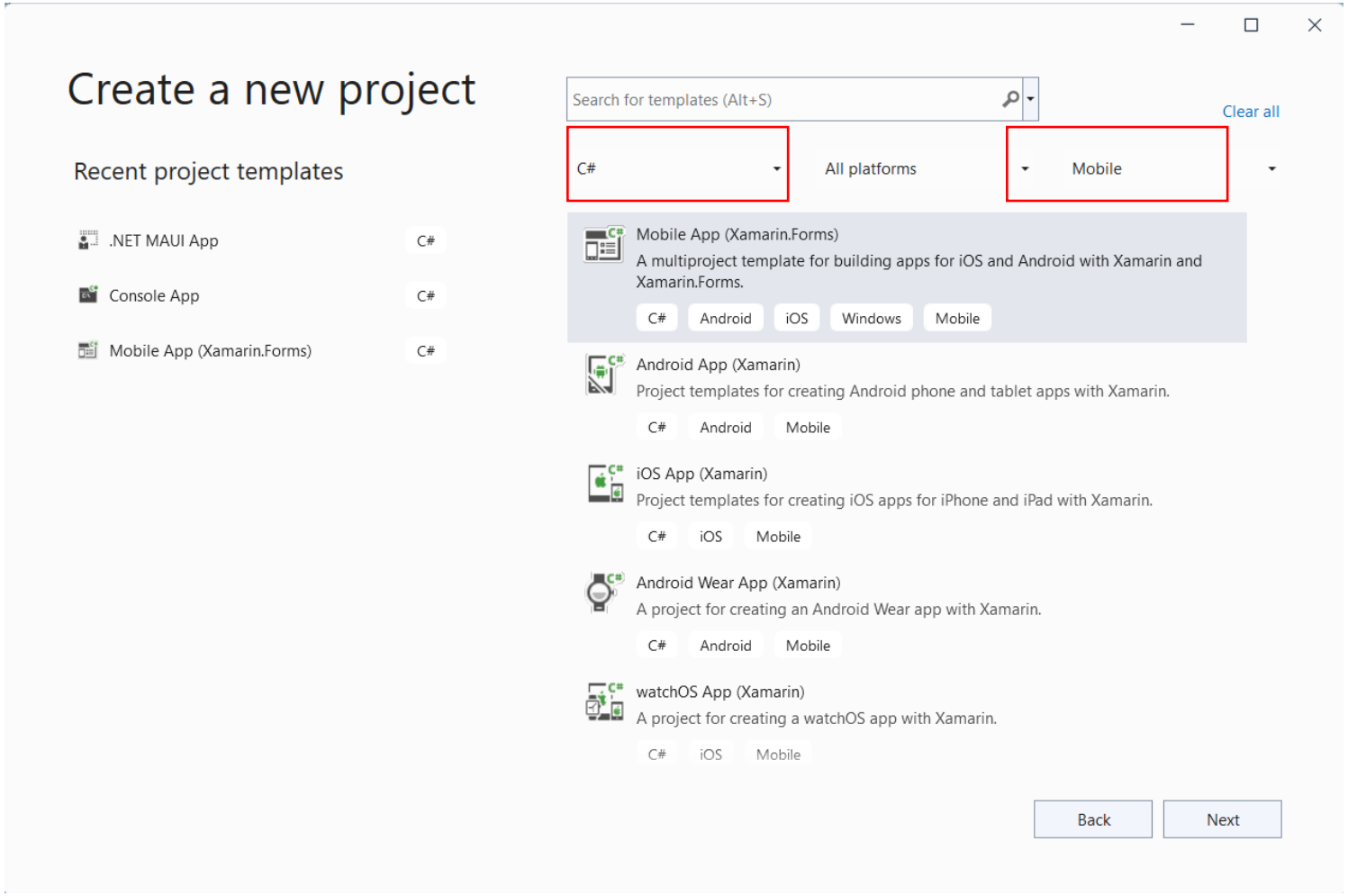
Step 2: Choose Create a new project



Step 3: Search for Xamarin.Forms

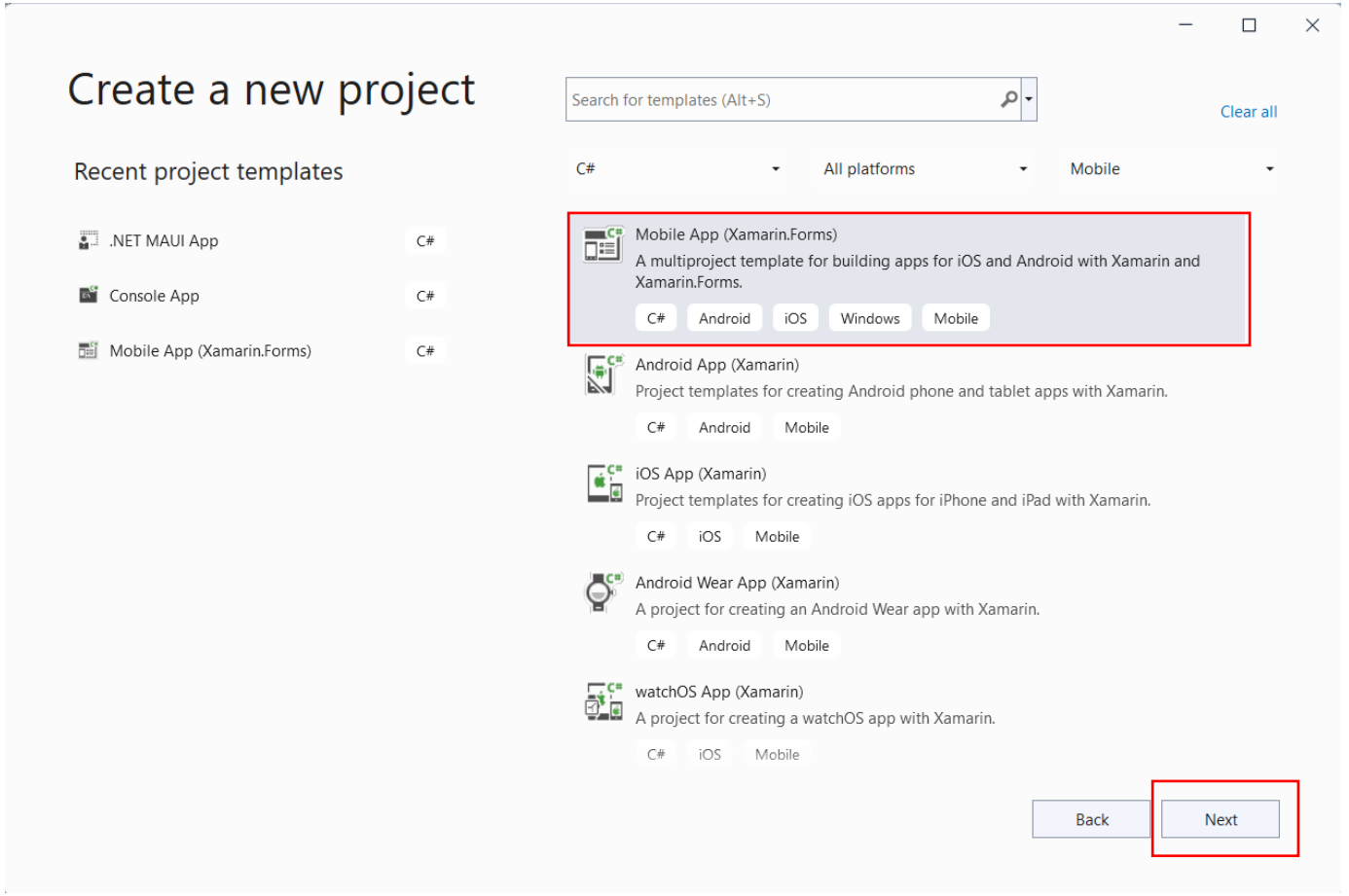


Or you can change project type to Mobile and Language to C#



Step 4: Choose a template for your project and click on Next

In our case we will choose Mobile App (Xamarin.Forms)

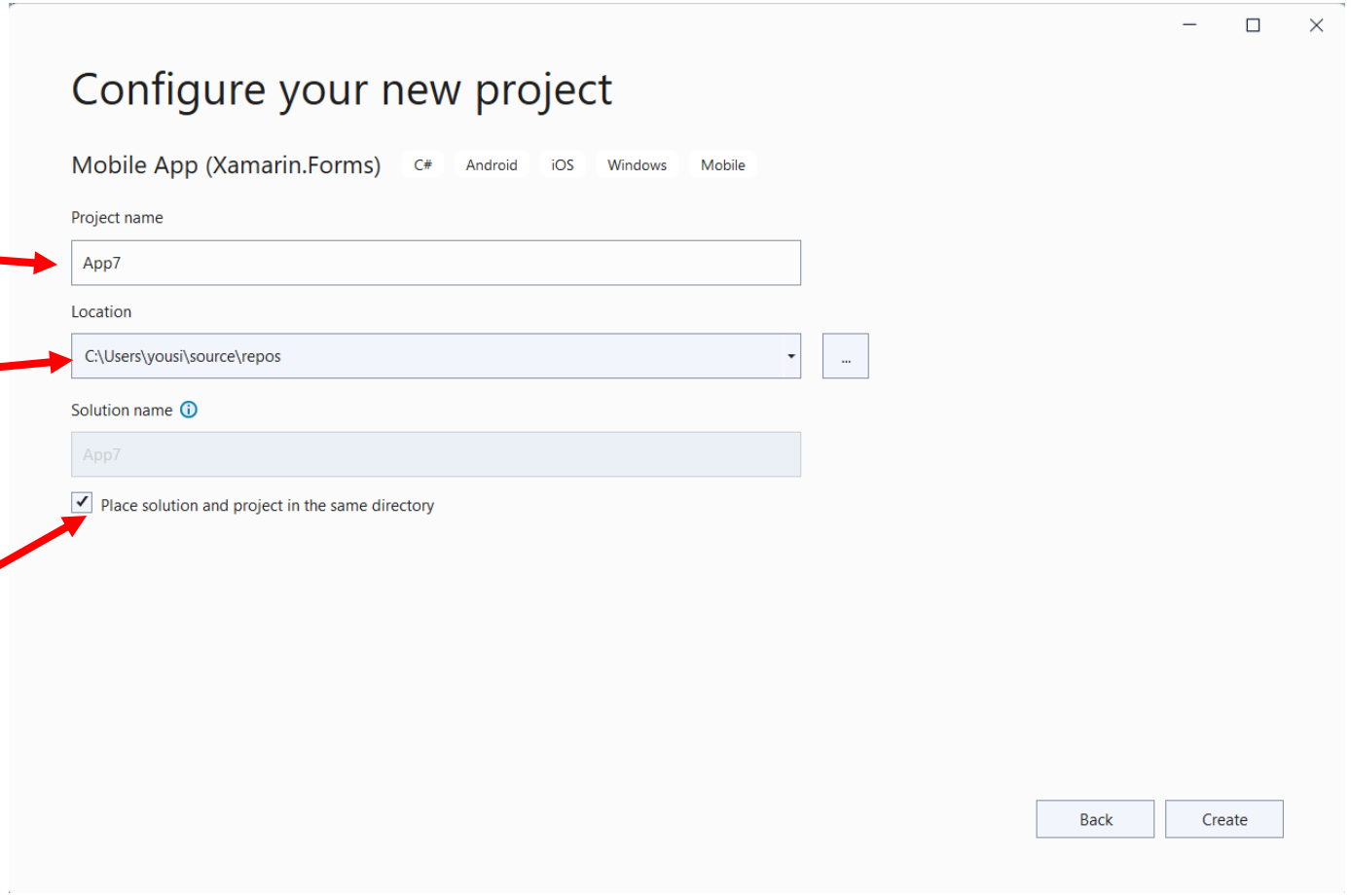


Step 5: Configure your new project

Give a name to your project

Select location where your project will be saved

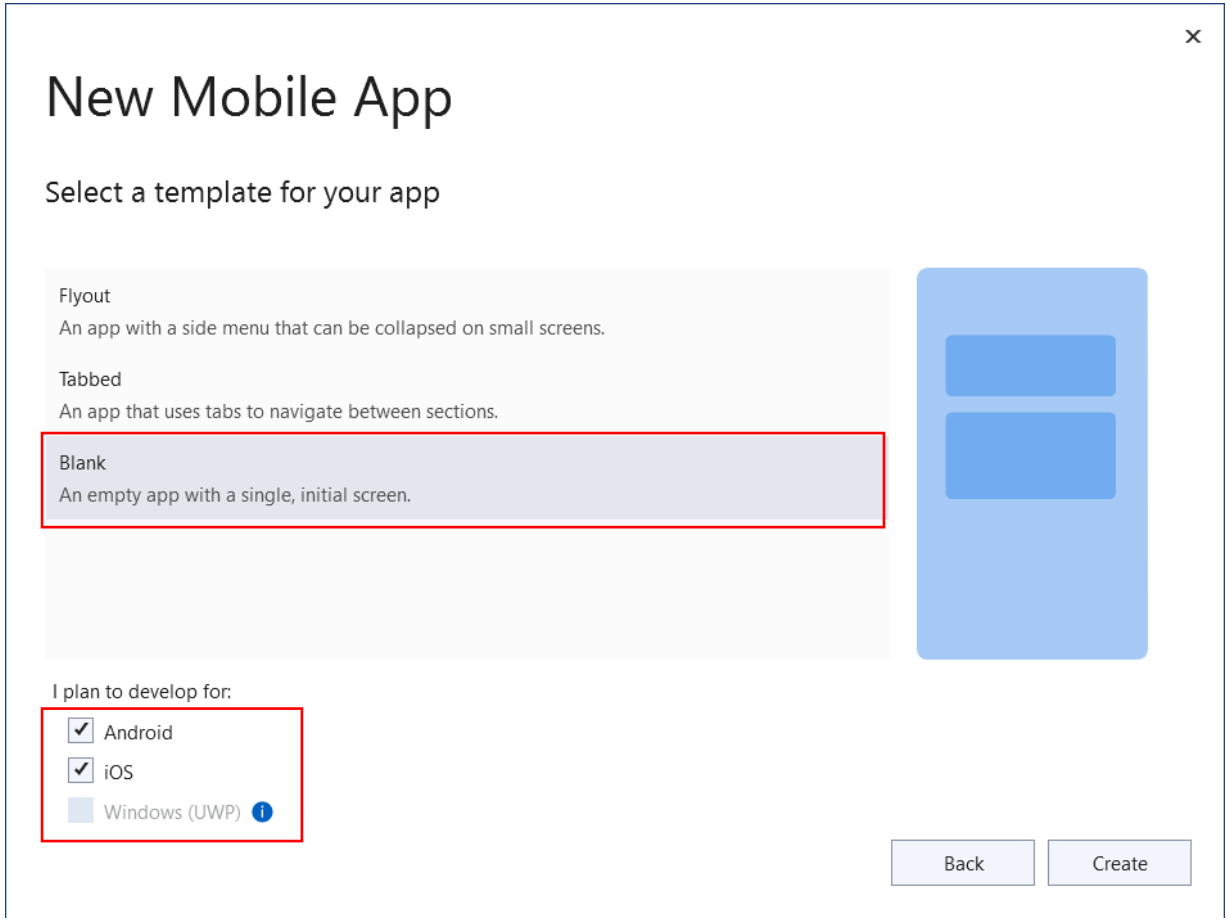
Select if you want to put project Solution and Project Files in the same Folder



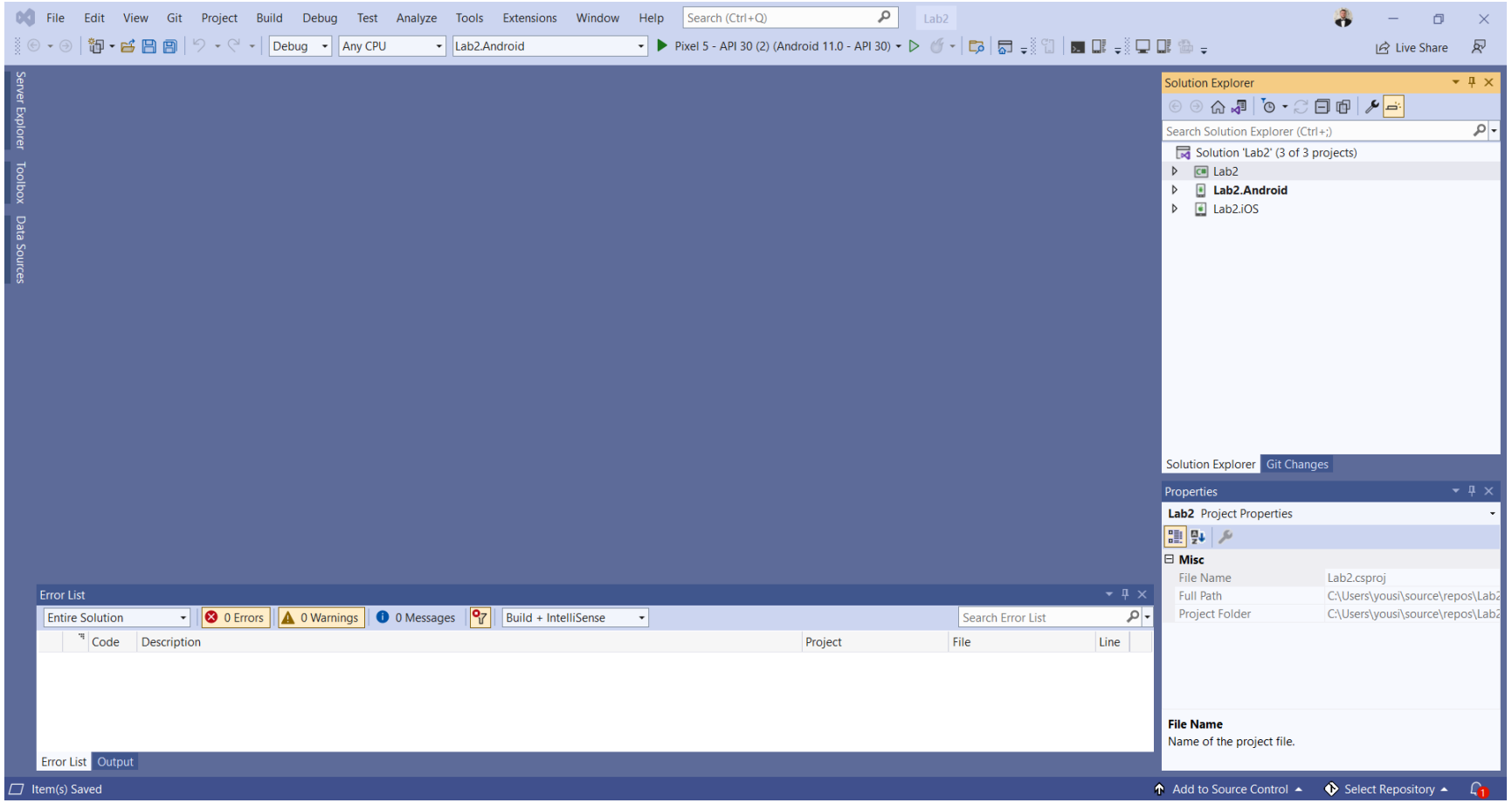
Step 6: Select a template for your application

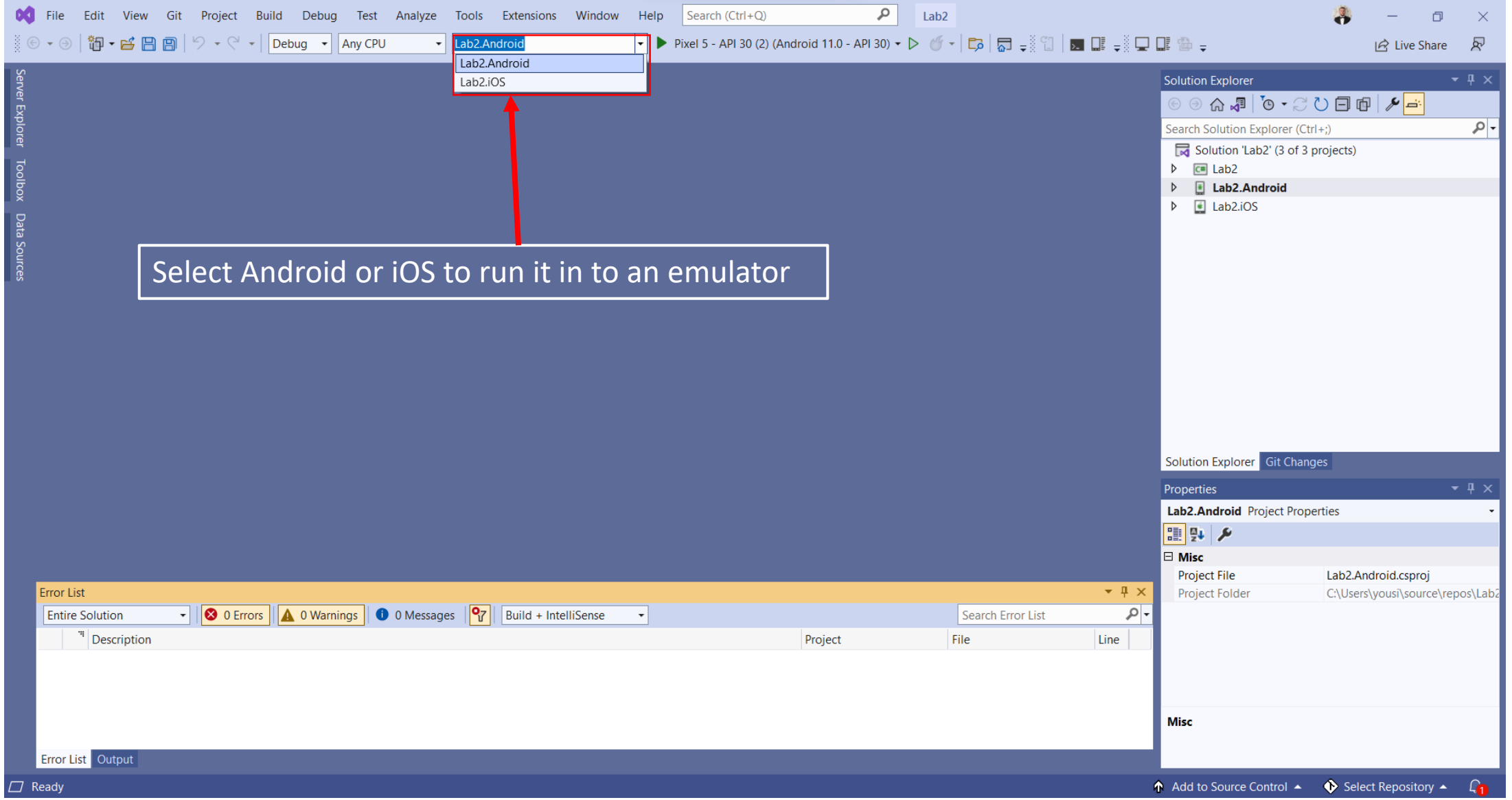
In this application we will select Blank template

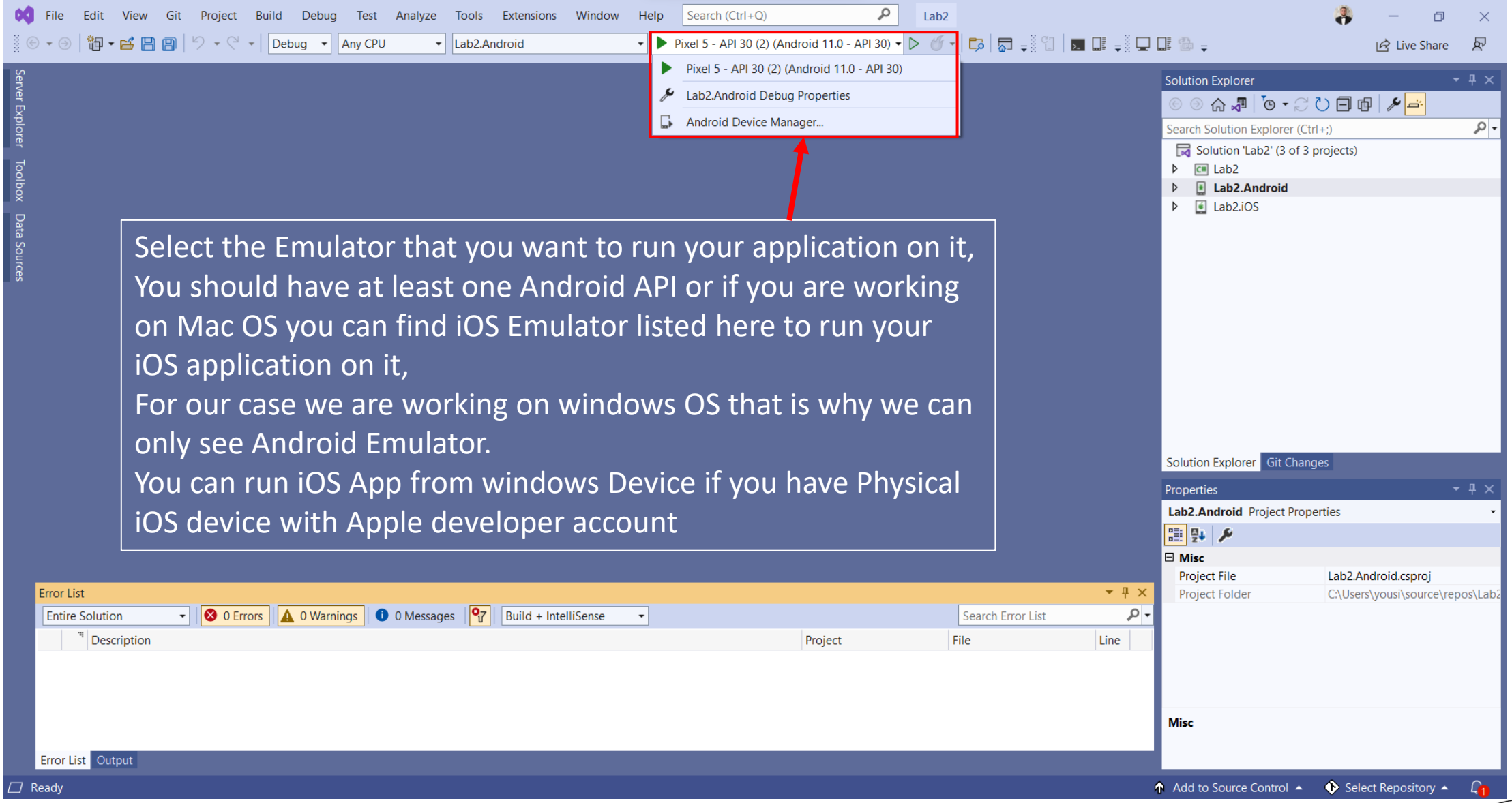
Choose android and iOS to have 2 application with single code base. We can't choose Windows (UWP) because I have not installed C++ on my laptop



Congratulations you created first project with Xamarin.Forms to create Android and iOS Applications




File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search (Ctrl+Q)
Lab2
Debug
Any CPU
Lab2.Android
Lab2.iOS
Pixel 5 - API 30 (2) (Android 11.0 - API 30)
Live Share
Server Explorer
Toolbox
Data Sources
Select Android or iOS to run it in to an emulator
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'Lab2' (3 of 3 projects)
Lab2
Lab2.Android
Lab2.iOS
Solution Explorer
Git Changes
Properties
Lab2.Android Project Properties
Misc
Project File
Lab2.Android.csproj
Project Folder
C:\Users\yousi\source\repos\Lab2
Misc
Error List
Entire Solution
0 Errors
0 Warnings
0 Messages
Build + IntelliSense
Search Error List
Description
Project
File
Line
Error List
Output
Ready
Add to Source Control
Select Repository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Any CPU
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Pixel 5 - API 30 (2) (Android 11.0 - API 30)
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Lab2.Android Debug Properties
Android Device Manager...
Server Explorer
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Project Folder
C:\Users\yousi\source\repos\Lab2
Misc
Select the Emulator that you want to run your application on it,
You should have at least one Android API or if you are working on Mac OS you can find iOS Emulator listed here to run your iOS application on it,
For our case we are working on windows OS that is why we can only see Android Emulator.
You can run iOS App from windows Device if you have Physical iOS device with Apple developer account
Error List
Entire Solution
0 Errors
0 Warnings
0 Messages
Build + IntelliSense
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Description
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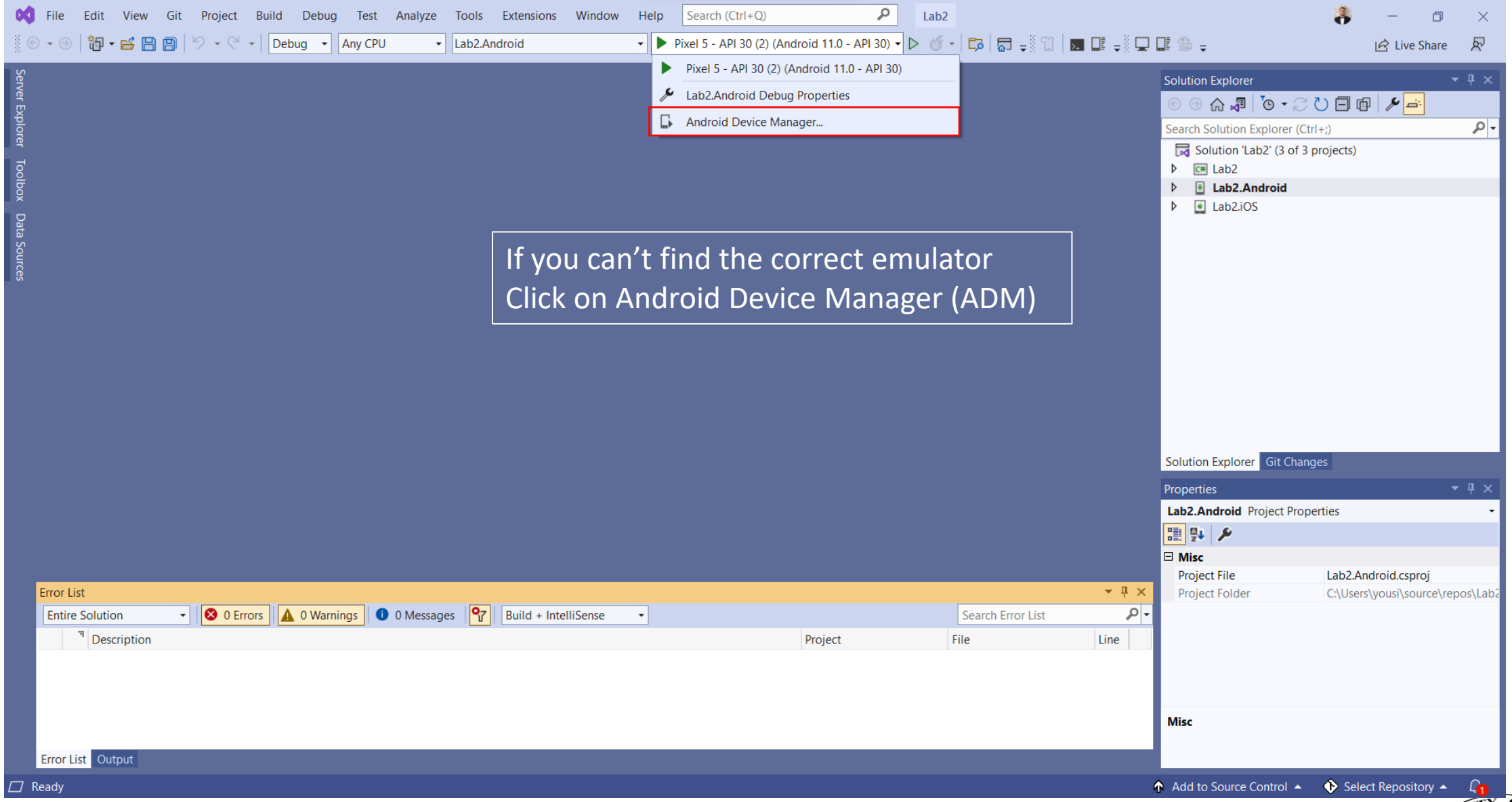
Select Repository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Lab2.Android
Pixel 5 - API 30 (2) (Android 11.0 - API 30)
Live Share
Pixel 5 - API 30 (2) (Android 11.0 - API 30)
Lab2.Android Debug Properties
Android Device Manager...
Server Explorer
Toolbox
Data Sources
If you can't find the correct emulator
Click on Android Device Manager (ADM)
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'Lab2' (3 of 3 projects)
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Lab2.Android
Lab2.iOS
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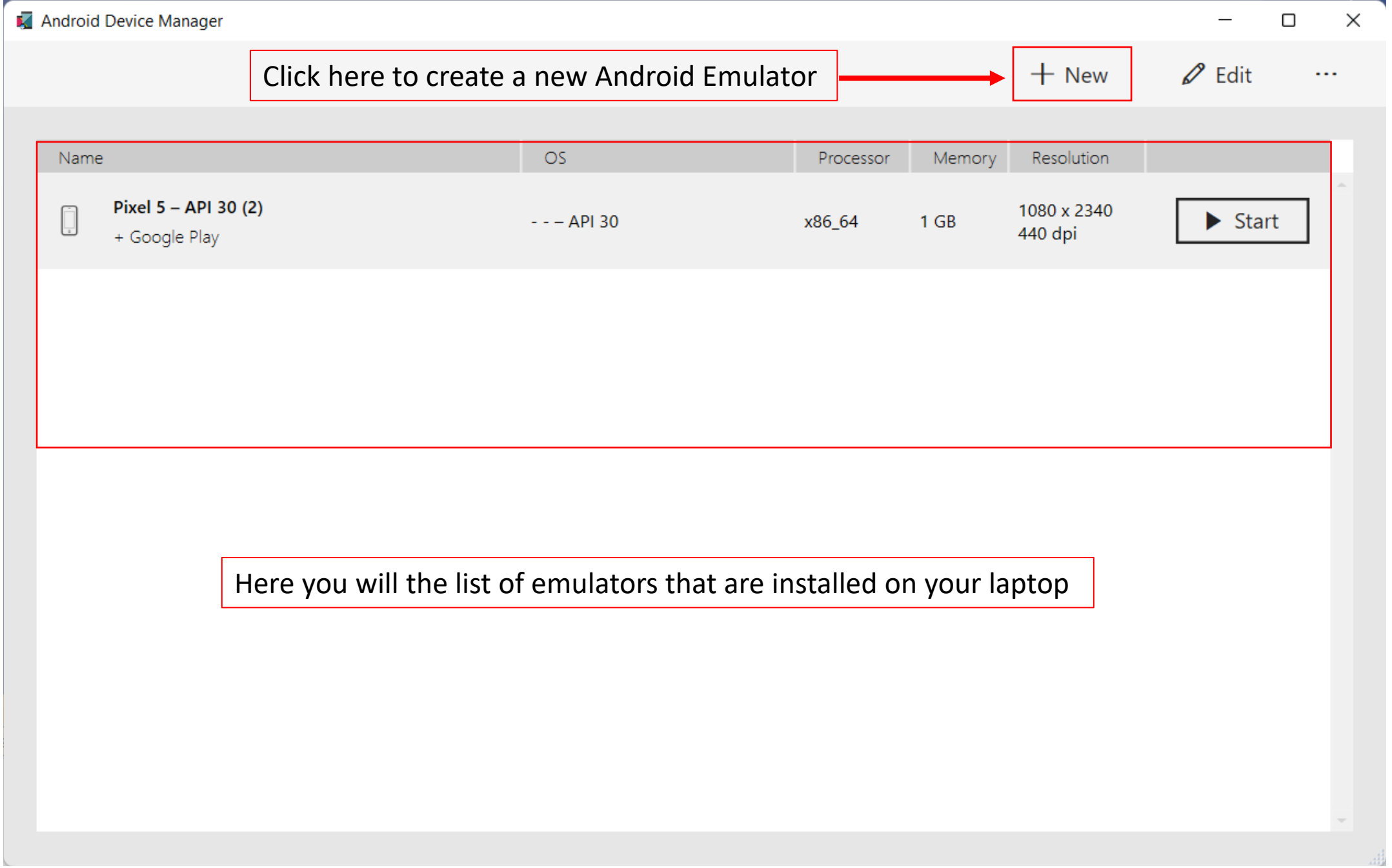
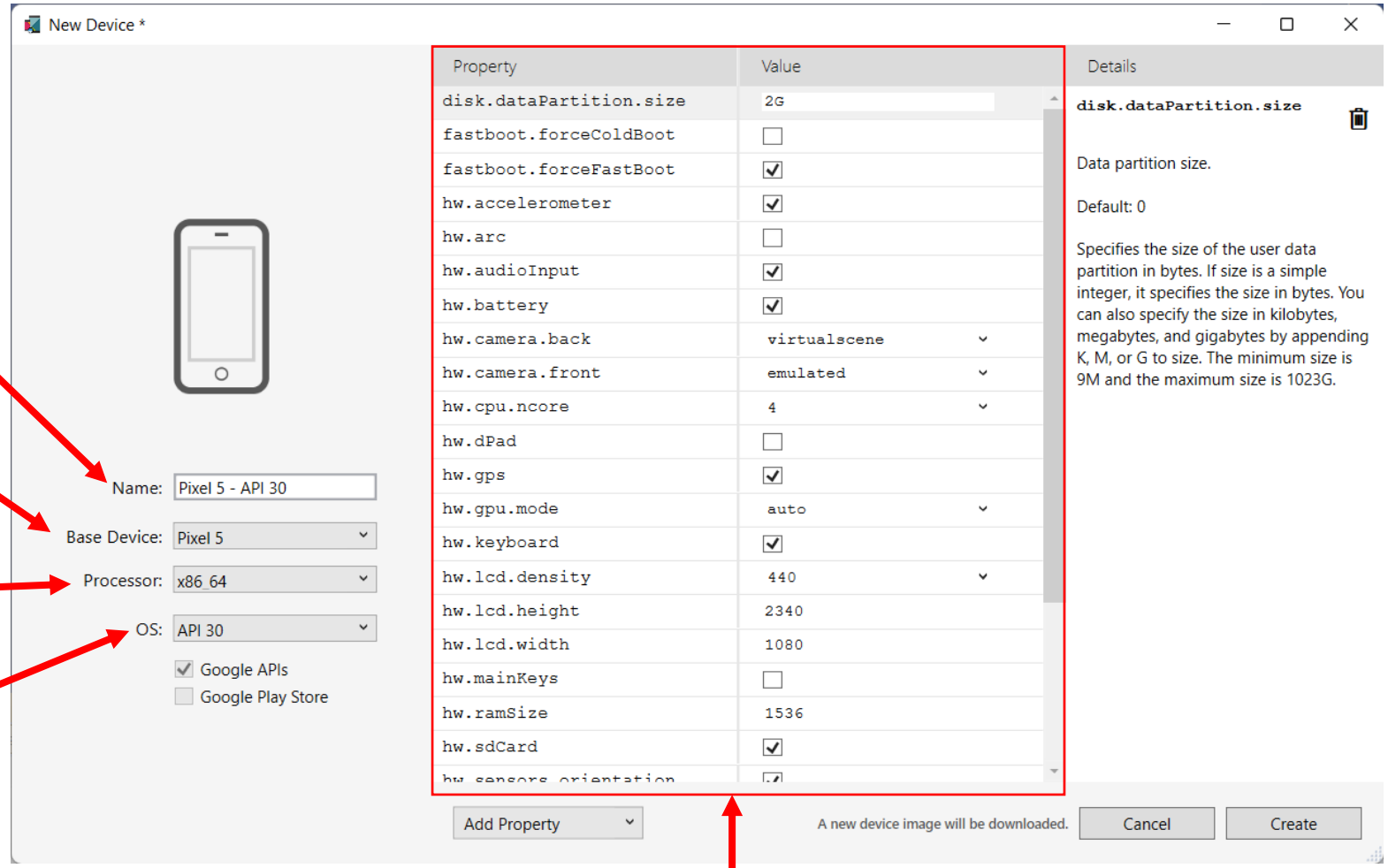

Android Device Manager
Click here to create a new Android Emulator
New
Edit
Name
OS
Processor
Memory
Resolution
Pixel 5 – API 30 (2)
+ Google Play
- - – API 30
x86_64
1 GB
1080 x 2340
440 dpi
Start
Here you will the list of emulators that are installed on your laptop

Type a name for your Emulator

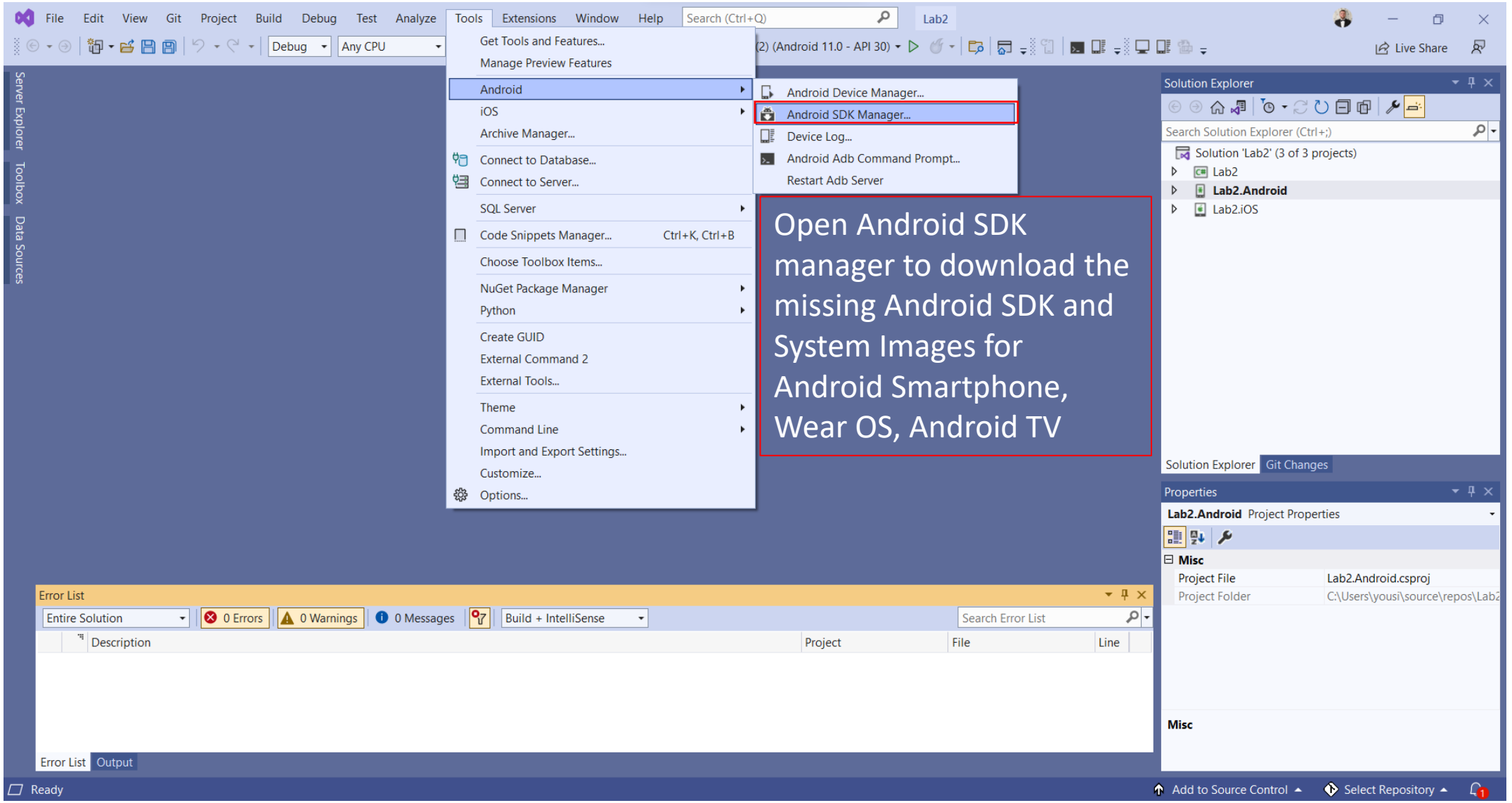
Select a device Emulator Base

Select a processor to the Emulator

Select API version for the Emulator



Keep these options default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Lab2
Debug
Any CPU
Live Share
Get Tools and Features...
Manage Preview Features
Android
iOS
Archive Manager...
Connect to Database...
Connect to Server...
SQL Server
Code Snippets Manager... Ctrl+K, Ctrl+B
Choose Toolbox Items...
NuGet Package Manager
Python
Create GUID
External Command 2
External Tools...
Theme
Command Line
Import and Export Settings...
Customize...
Options...
Android Device Manager...
Android SDK Manager...
Device Log...
Android Adb Command Prompt...
Restart Adb Server
Open Android SDK manager to download the missing Android SDK and System Images for Android Smartphone, Wear OS, Android TV
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Add to Source Control
Select Repository

You will need at least to install one Android SDK (installed the latest SDK)
Android SDK 31 is the latest one until the time of making this Lecture

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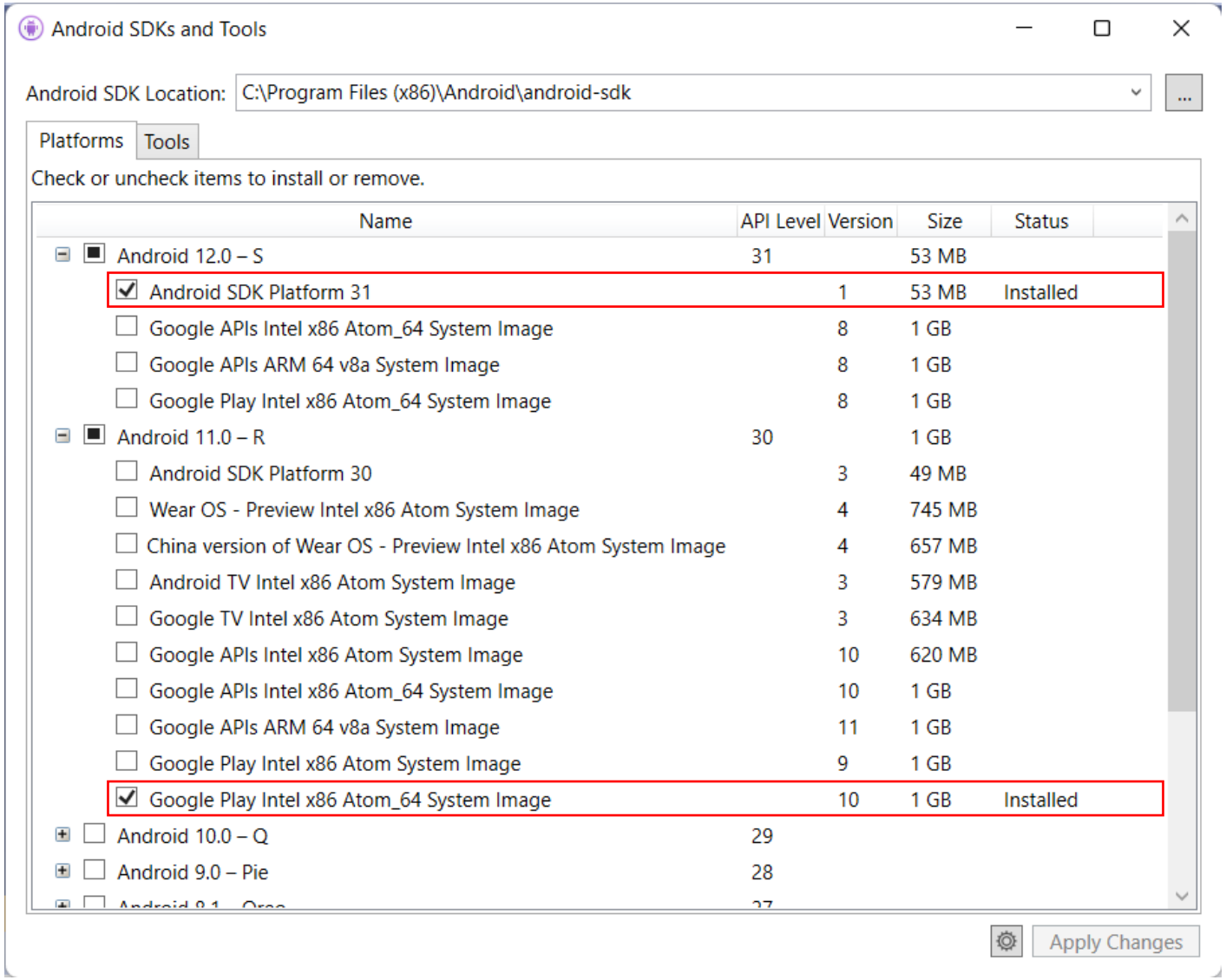

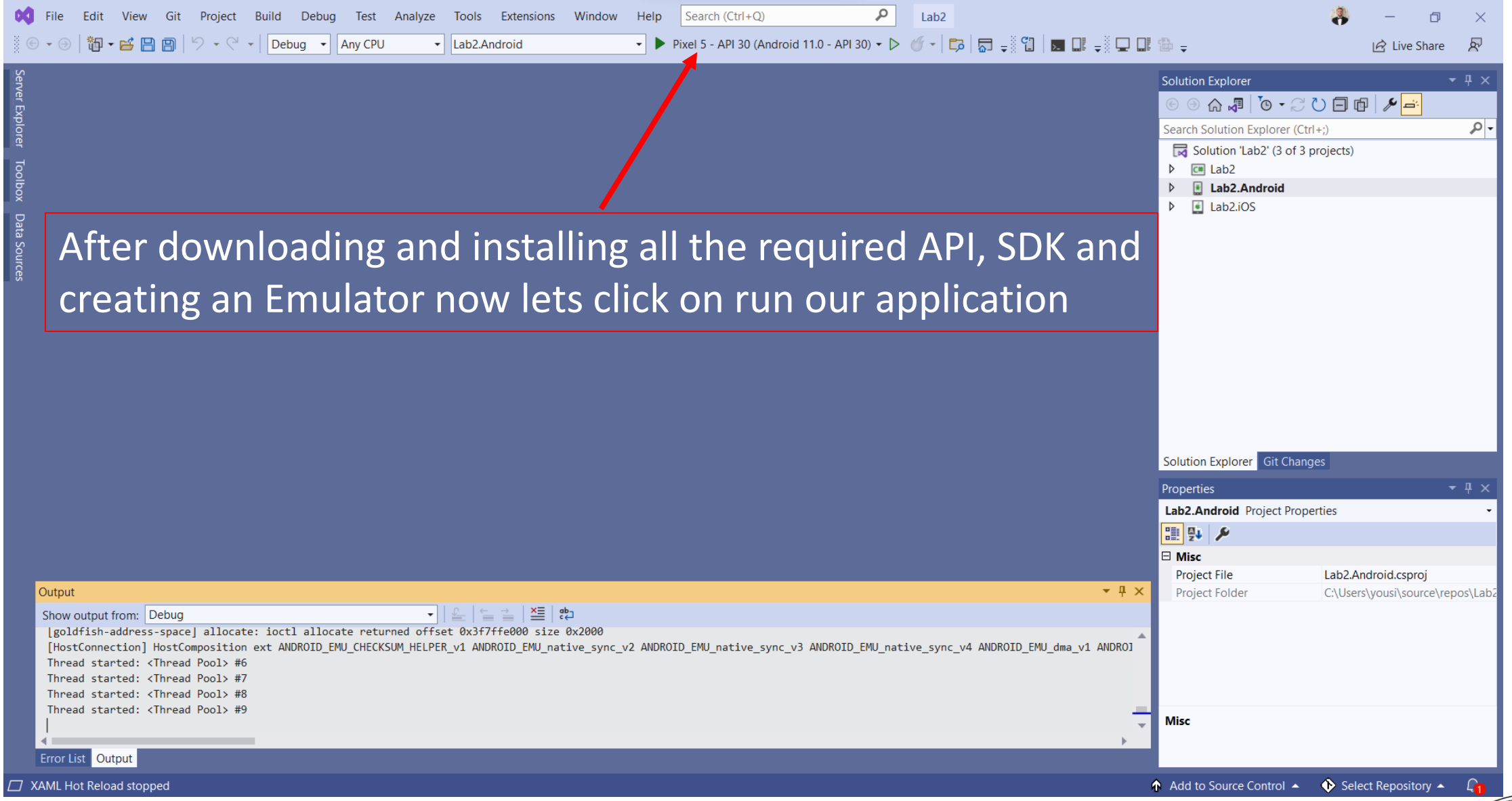
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Data Sources
After downloading and installing all the required API, SDK and creating an Emulator now lets click on run our application
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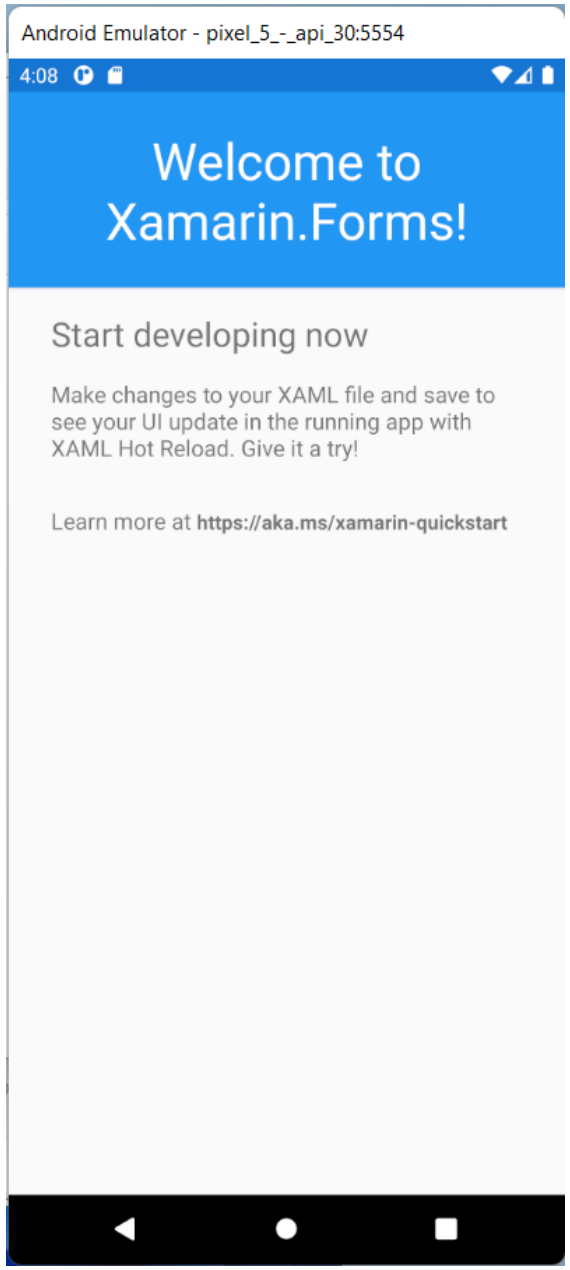
Lab2.Android.csproj
Project Folder
C:\Users\yousi\source\repos\Lab2
Misc
Output
Show output from: Debug
[goldfish-address-space] allocate: ioctl allocate returned offset 0x3f7ffe000 size 0x2000
[HostConnection] HostComposition ext ANDROID_EMU_CHECKSUM_HELPER_v1 ANDROID_EMU_native_sync_v2 ANDROID_EMU_native_sync_v3 ANDROID_EMU_native_sync_v4 ANDROID_EMU_dma_v1 ANDROI
Thread started: <Thread Pool> #6
Thread started: <Thread Pool> #7
Thread started: <Thread Pool> #8
Thread started: <Thread Pool> #9
Error List
Output
XAML Hot Reload stopped
Add to Source Control
Select Repository

Congratulations! you have run successfully your application on the Android Emulator



Any Questions?