

# Android Application Development

## **Agenda**



- Pre-requisites
- Setting up environment
- Android Studio overview
- Hello World App
- Formatting text
- Text fields
- Buttons
- Demo1
- Demo2

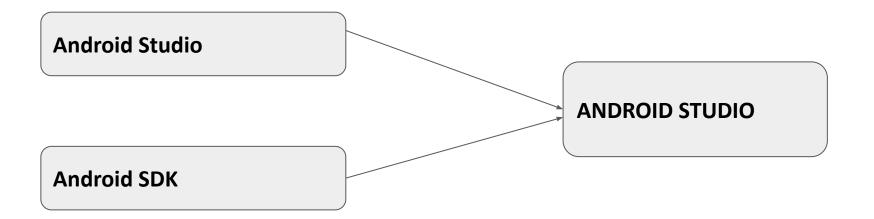
#### **Prerequisites**



- Java
  - Java Basics
  - Java Object Oriented Concepts
  - Multithreading and Exception Handling
  - Generics and Collection Classes
  - Java Annotations
- XML
  - Basic of XML
    - Structure
    - Syntax
    - Elements

## **Setting up Environment**

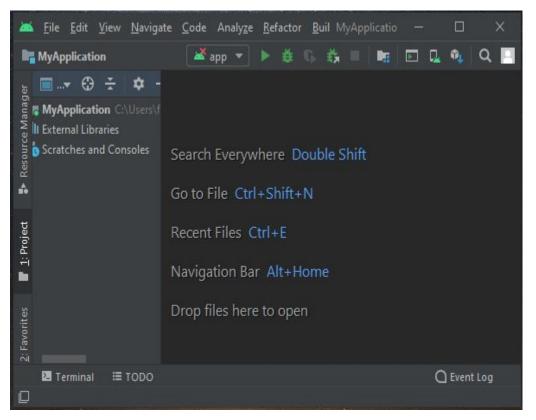




#### **Android Studio Overview**

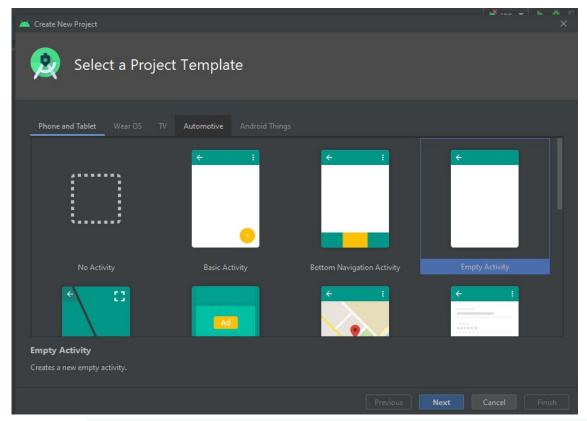












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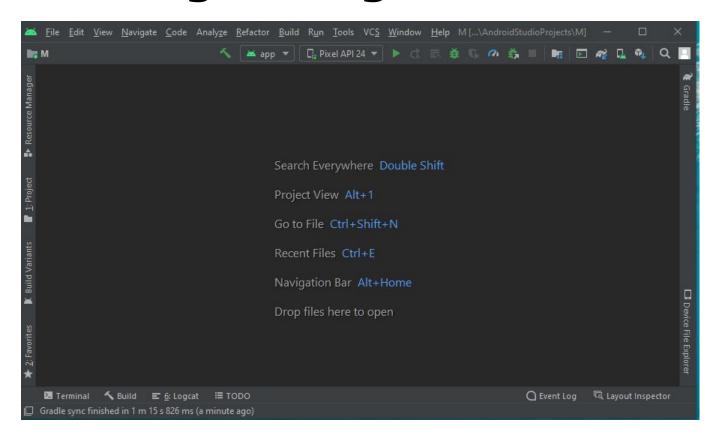
## **Configuring Project**



Configure Your Project	
Empty Activity Creates a new empty activity.	Name  My Application  Package name  com.example.myapplication  Save location  C:\Users\faizan\AndroidStudioProjects\MyApplication2  Language  Java  Minimum SDK API 17: Android 4.2 (Jelly Bean)  Your app will run on approximately 99.2% of devices.  Help me choose  Use legacy android.support libraries ③
	Previous Next Cancel Finish

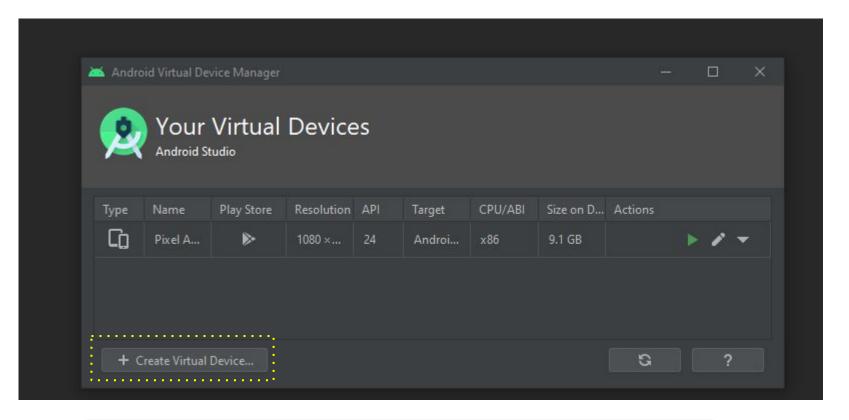
#### Walking through the IDE







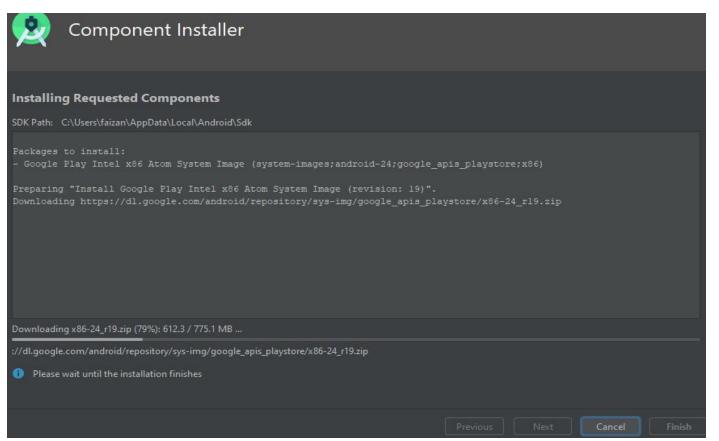




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## Step 1:





#### Step 2:



Verify Configuration						
AVD Name Pixel AP	1 24					
Pixel	5.0 1080x1920 420dpi					
Nougat Nougat	Android 7.0 x86					
Startup orientation	Portrait Landscape					
Emulated Show Advanced Sett	Granhics: Automatic					

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#### **Hello World Application**





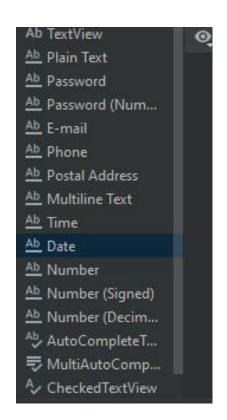


## **Formatting Text**



**Default view:** TextView

Customise it by changing its properties



#### **Text Fields**



- Text present in our application
- Single or multiple line
- Dragging the edit text
- Customise
- Input type

#### **Button**



- Action to be performed when the user presses it
- Events
- Styles
  - Border
  - Background



# **Demonstration 1**

#### **Generate Random Number**





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#### Code



```
Button btn = (Button) findViewById(R.id.button);
btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        EditText fet = (EditText) findViewById(R.id.fetch);
        TextView res = (TextView) findViewById(R.id.put);
        int range = Integer.parseInt(fet.getText().toString());
        Random random = new Random();
        int randomNumber = random.nextInt( bound: range-0) + 0;
        res.setText(randomNumber+" ");
});
```



## **Demonstration 2**

## **Adding Two Number**



OurFirstApp		<b>™ 0</b> 5:23
Adding	Two N	lumber
77		
88		
	ADD	
	165	
٥	0	

#### Code



```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main);
    Button btn = (Button) findViewById(R.id.add);
    btn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            EditText n1 = (EditText) findViewById(R.id.n1);
            EditText n2 = (EditText) findViewById(R.id.n2);
           TextView res = (TextView) findViewById(R.id.res);
            int sum = Integer.parseInt(n1.getText().toString())+Integer.parseInt(n2.getText().toString());
           res.setText(sum + " );
```

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# **Thank You**