

03

o3-b. ConstraintLayout

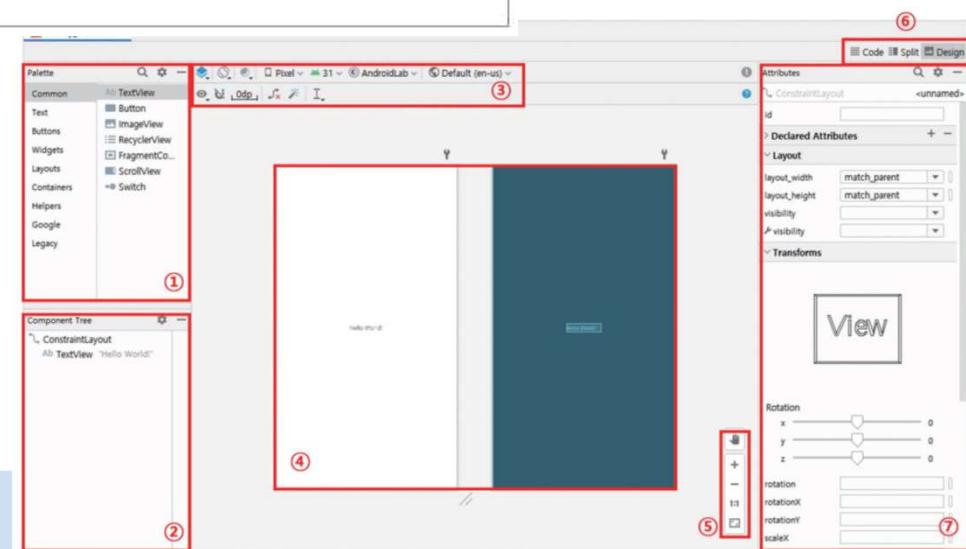
Layout Programming

ConstraintLayout

ConstraintLayout 이란

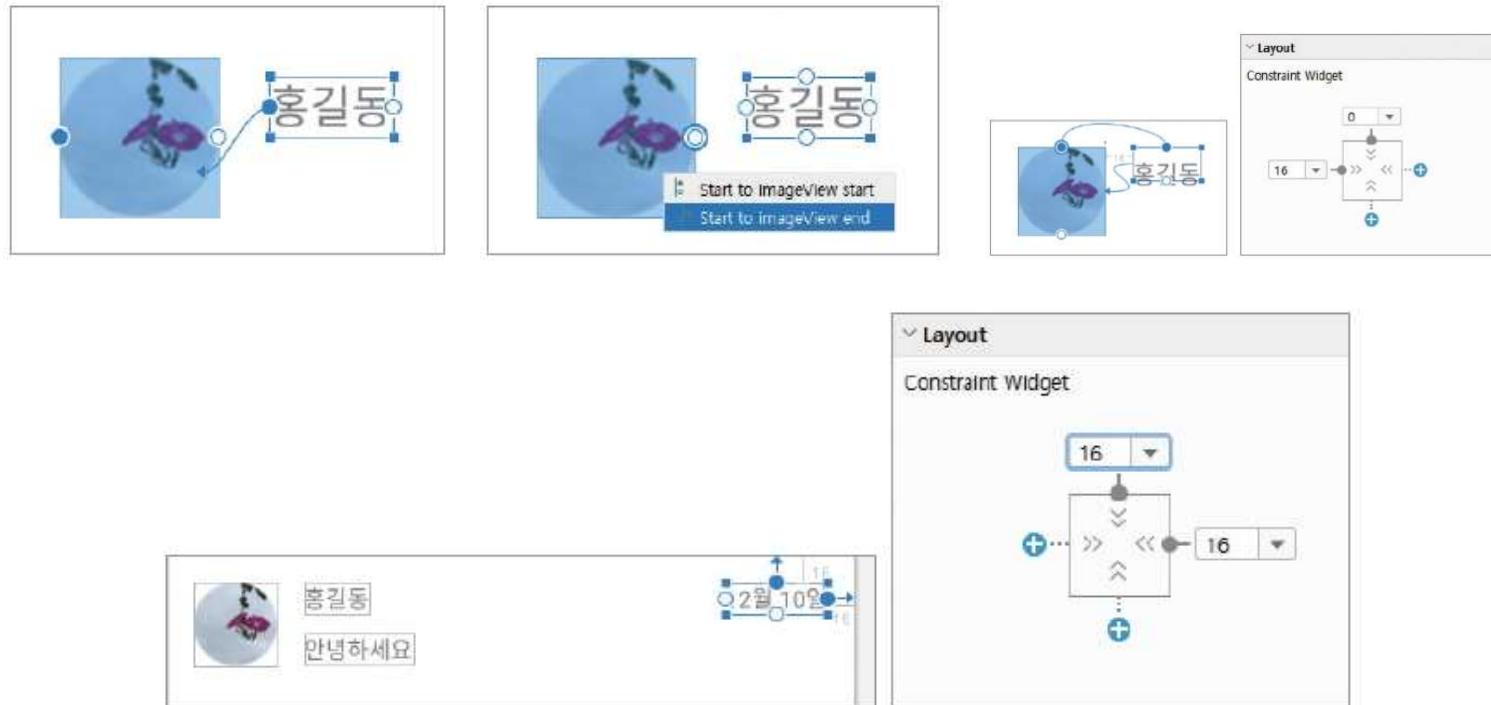
- 2016년 Google IO 행사에서 발표
- RelativeLayout과 마찬가지로 상대 위치에 따라 뷰의 배치
- Horizontal Axis : Left, Right, Start and End sides
- Vertical Axis : top, bottom sides and text baseline

• constraintlayout 사용을 위한 빌드 설정
`implementation(libs.androidx.constraintlayout)`



ConstraintLayout

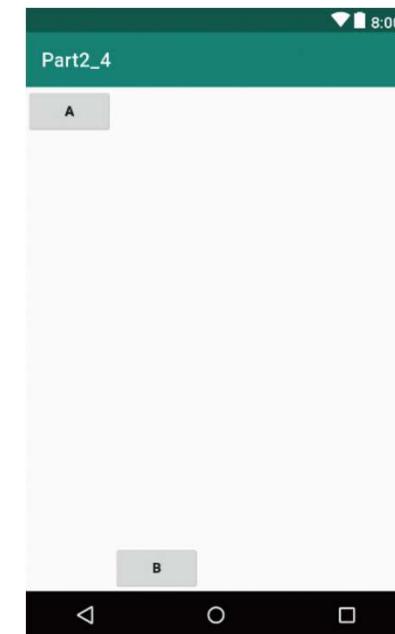
ConstraintLayout 이란



ConstraintLayout

ConstraintLayout 속성

- layout_constraintLeft_toLeftOf
- layout_constraintLeft_toRightOf
- layout_constraintRight_toLeftOf
- layout_constraintRight_toRightOf
- layout_constraintTop_toTopOf
- layout_constraintTop_toBottomOf
- layout_constraintBottom_toTopOf
- layout_constraintBottom_toBottomOf
- layout_constraintBaseline_toBaselineOf
- layout_constraintStart_toEndOf
- layout_constraintStart_toStartOf
- layout_constraintEnd_toStartOf
- layout_constraintEnd_toEndOf

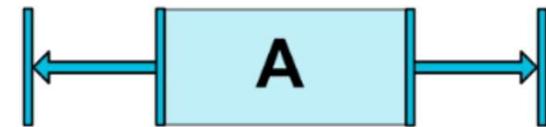


```
<Button  
    android:id="@+id	btn1"  
    .....>  
  
<Button  
    ....."  
    app:layout_constraintLeft_toRightOf="@+id	btn1"  
    app:layout_constraintBottom_toBottomOf="parent"/>
```

ConstraintLayout

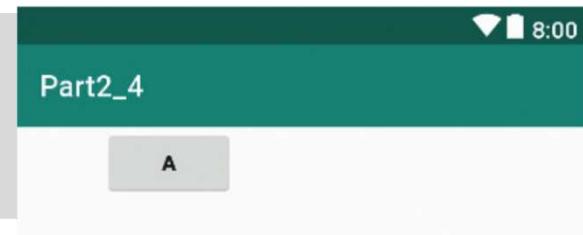
가운데 맞춤과 치우침(bias)

```
<Button  
    ...  
    app:layout_constraintLeft_toLeftOf="parent"  
    app:layout_constraintRight_toRightOf="parent"/> >
```



- layout_constraintHorizontal_bias : 가로 치우침 조절
- layout_constraintVertical_bias : 세로 치우침 조절

```
<Button  
    ...  
    app:layout_constraintLeft_toLeftOf="parent"  
    app:layout_constraintRight_toRightOf="parent"  
    app:layout_constraintHorizontal_bias="0.2"/> >
```



- 값을 0.2로 지정하면 20%의 의미로 왼쪽에서 20% 위치(뷰 중심)



감사합니다

단단히 마음먹고 떠난 사람은
산꼭대기에 도착할 수 있다.
산은 올라가는 사람에게만 정복된다.



윌리엄 셰익스피어

William Shakespeare