



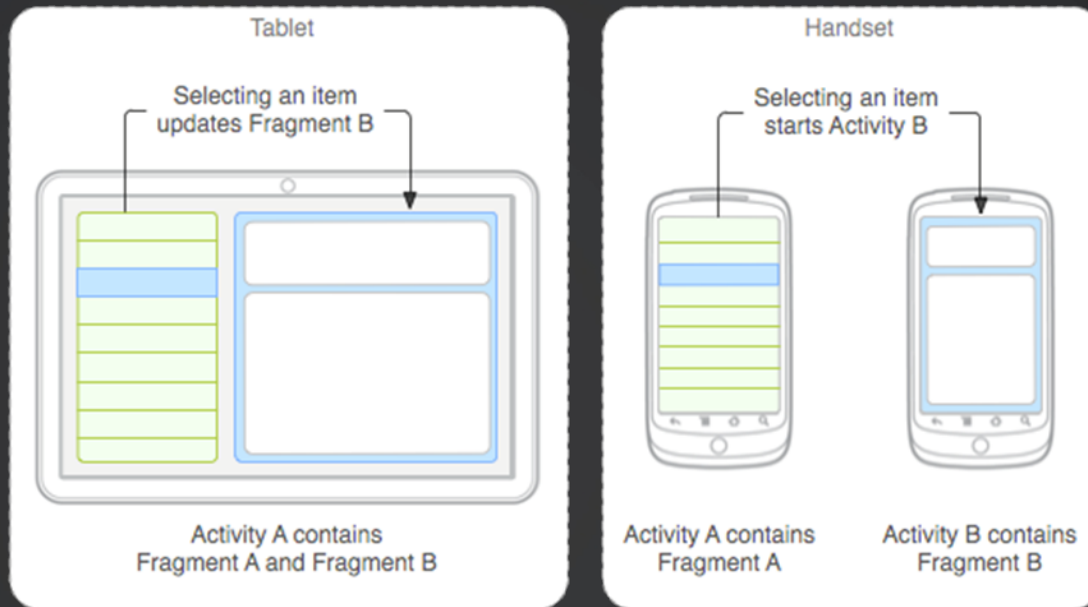
Friday Lunch Talks

Session 4

# Advance UI Development

# Fragments

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Can be compared to a JPanel in Swing

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Available since Android 3.0 (API 11)

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Can be compared to a JPanel in Swing

Available since Android 3.0 (API 11)

Have their dedicated lifecycle

# Fragments

## Inflate the View

```
@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
                        Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    return inflater.inflate(R.layout.example_fragment, container, false);
}
```



# Fragments

## Fragment Transaction

```
FragmentManager fm = getFragmentManager();  
FragmentTransaction fragmentTransaction = fm.beginTransaction();  
  
ExampleFragment fragment = new ExampleFragment();  
fragmentTransaction.add(R.id.fragment_container, fragment);  
fragmentTransaction.commit();
```

# Animations

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Can be applied to every View

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Animations for Alpha, Scale, Translate and  
Rotate available

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Animations can be combined

# Animations

Animation in XML

# Animations

## Animation in XML

```
<set android:shareInterpolator="false"
    android:interpolator="@android:anim/decelerate_interpolator">

    <scale
        android:fromXScale="0.0"
        android:toXScale="1.0"
        android:fromYScale="0.0"
        android:toYScale="1.0"
        android:duration="250"/>
    <rotate
        android:fromDegrees="0"
        android:toDegrees="360"
        android:duration="250" />
</set>
```



# Animations

Animation in Java

# Animations

## Animation in Java

```
Animation scaleAnim = new ScaleAnimation(0.0f, 1.0f, 0.0f, 1.0f);  
scaleAnim.setDuration(250);
```

```
Animation rotateAnim = new RotateAnimation(0.0f, 360.0f);  
scaleAnim.setDuration(250);
```

```
AnimationSet fancyAnimationSet = new AnimationSet(true);  
fancyAnimationSet.setInterpolator(new DecelerateInterpolator());  
fancyAnimationSet.addAnimation(scaleAnim);  
fancyAnimationSet.addAnimation(rotateAnim);
```

# Animations

Load Animation (only XML)

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## Load Animation (only XML)

```
Animation fancyAnimationSet =  
    AnimationUtils.loadAnimation(this, R.anim.fancy_animation);
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## Start Animation

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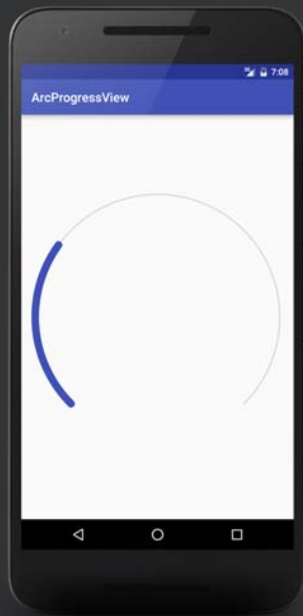
## Start Animation

```
myView.startAnimation(fancyAnimationSet);
```

Own Views

# Own Views

## Custom View



override onDraw()



# Own Views

## Custom View



override onDraw()

## Compound View



stick together existing View

You bubbled enough!

# Let's start!!!

