



Xamarin Evolve 2014

Touch in Android

<http://bit.ly/evolve-crick-day2>

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Agenda

1. Designing for Touch
2. Simple Touch
3. Gesture Detectors
4. Custom Gestures



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Design for Fingers

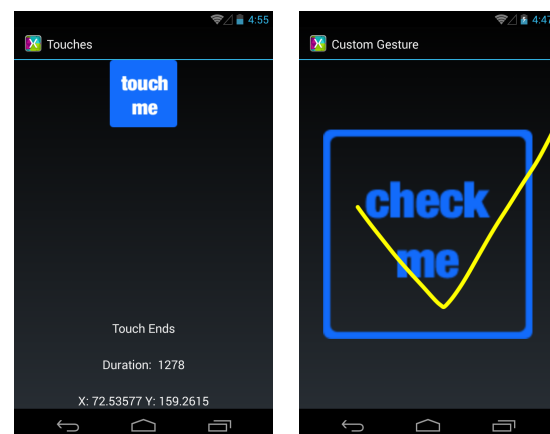
- Think about interaction scenarios
- Are UI Widgets too small? (32x32)
- What is obscured by hands?
- How much movement is required?



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Touch in Android

- Simple Touch
- Gesture Detectors
- Custom Gestures

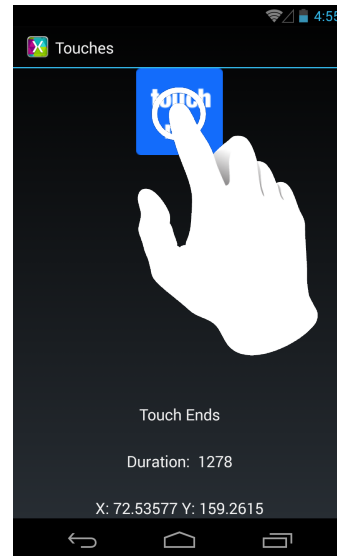


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Simple Touch

- Motion Event Actions
- Event Timing
- Location

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Simple Touch

```
TextView tv = new TextView(this);  
tv.Touch += (object sender, View.TouchEventArgs e) => {  
    // NOTE:: e.Event is of type MotionEvent  
};
```

MotionEvent

Action – Down, Move, Up, etc.

EventTime, DownTime – Timing information

GetX(), GetY() – Position information

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Simple Touch

More ways to handle basic touch events

- `View.SetOnTouchListener(OnTouchListener)`
- `Override View.OnTouchEvent()`

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Gesture Recognizer

- Detection for Gestures
- Includes
 - Scaling
 - Fling
 - Tap

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Gesture Recognizer

`GestureDetector(IOnGestureListener)`

`IOnGestureListener`

`OnDown(), OnFling(), OnLongPress(), OnScroll()`

`ScaleGestureDetector(SimpleOnScaleGestureListener)`

`OnScale(ScaleFactor)`

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Custom Gestures

- Android UI to build gestures
- Fully customizable
- Ability to create multiple

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Custom Gestures

GestureOverlayView

GesturePerformed (GesturePerformedEventArgs)

- Embed your layout into a GestureOverlayView
- Supports showing gesture performed
- Supports two-stroke gestures

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Custom Gestures

GestureLibrary

Recognize (GesturePerformedEventArgs)

GestureLibrary provides weighted predictions of what gesture was done as compared to a specified gesture file.

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Summary

1. Designing for Touch
2. Simple Touch
3. Gesture Detectors
4. Custom Gestures

Questions?

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