

Mobile Application Development

Produced
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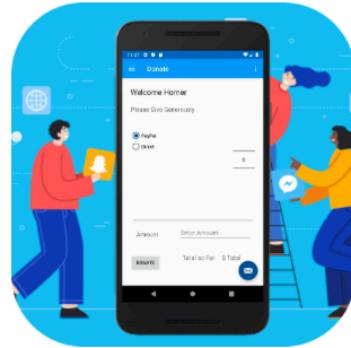


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KTX in Donation

Donation & KTX



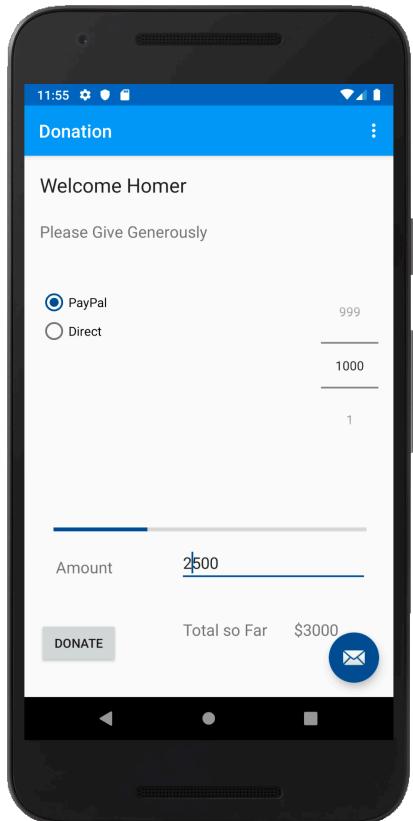
A quick look at our new
Android App and some
KTX Examples

Donation

Let's get Homer Elected!

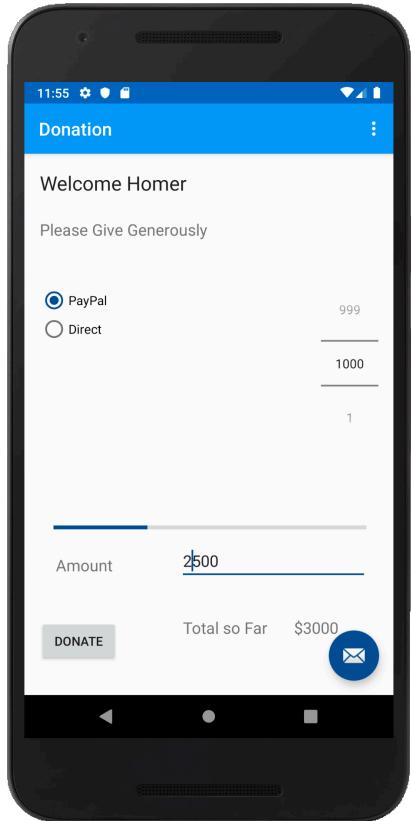


Introduction – What is Donation?



- ❑ An Android App to keep track of donations made to 'Homers Presidential Campaign '.
- ❑ App Features
 - Accept donation via number picker or typed amount
 - Keep a running total of donations
 - Display report on donation amounts and types
 - Display running total on progress bar

Donate Screen

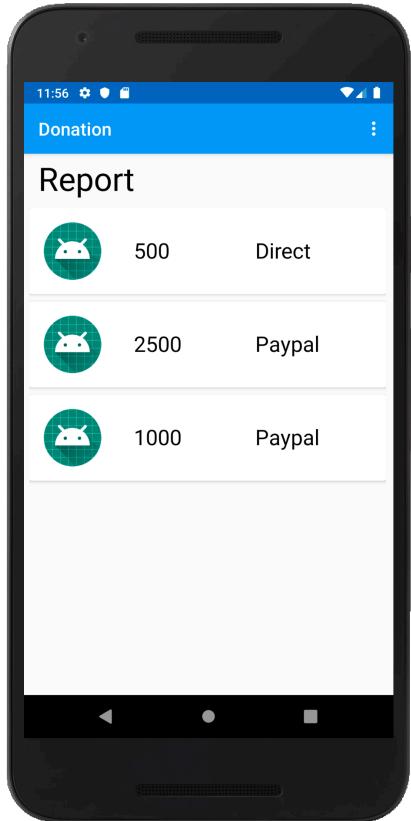


□ This is the main (launch) screen

□ Single Activity

- Welcome message
- Multiple Widgets
 - ◆ NumberPicker
 - ◆ RadioButtons
 - ◆ Button
 - ◆ ProgressBar
 - ◆ EditText etc.

Report Screen



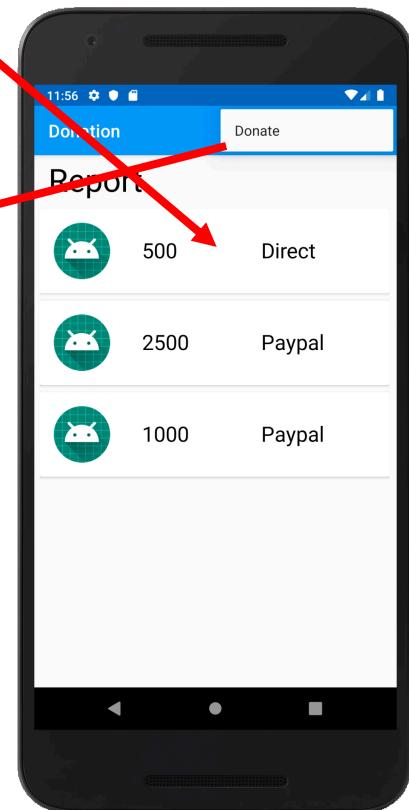
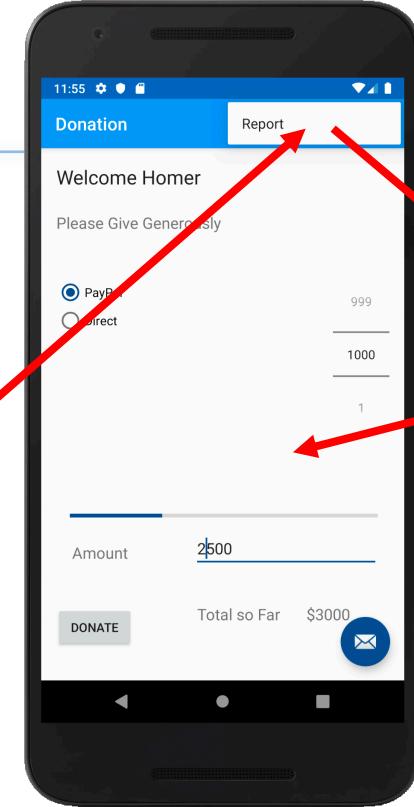
☐ Single Activity:

- ☐ 1 TextView
- ☐ 1 RecyclerView
 - amount donated
 - payment type
 - placeholder for photo

Action Bar / Menus

☐ App has an action bar with:

- Menu options to navigate between activities.
- Overflow option can display other Menu Options



DonationKTX

intents, dialogs, logging;



Dependencies

```
buildscript {  
    ext.kotlin_version = '1.3.71'  
    ext.anko_version = '0.10.8'  
    ext.splitties_version = '2.0.0'  
    repositories {
```

```
implementation("com.louiscad.splitties:splitties-activities:$splitties_version")  
implementation("com.louiscad.splitties:splitties-toast:$splitties_version")  
implementation("com.louiscad.splitties:splitties-snackbar:$splitties_version")  
implementation("com.louiscad.splitties:splitties-alertdialog:$splitties_version")  
  
implementation "org.jetbrains.anko:anko-commons:$anko_version"  
implementation "org.jetbrains.anko:anko-design:$anko_version"
```

KTX Usage - Toast

❑ Before

```
if(totalDonated >= progressBar.max)
    Toast.makeText(this,
        "Donate Amount Exceeded!",
        Toast.LENGTH_LONG).show()
```

❑ After

```
if(totalDonated >= progressBar.max)
    toast("Donation Amount Exceeded!")
```



KTX Usage - Toast

```
if(totalDonated >= progressBar.max)
    toast("Donation Amount Exceeded!")
else {
    val toast = if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
        Toast.makeText(context, "Donation Amount Exceeded!", Toast.LENGTH_SHORT)
    } else {
        Toast.makeText(context, "Donation Amount Exceeded!", Toast.LENGTH_SHORT)
    }
    toast.show()
    totalSoFar += amount
    totalSoFar.text = "$totalSoFar"
}
```

KTX Usage - Snackbar

❑ Before

```
fab.setOnClickListener { view ->
    Snackbar.make(view, "Replace with your own action",
        Snackbar.LENGTH_LONG)
        .setAction("Action", null).show()
}
```

❑ After

```
fab.setOnClickListener { view ->
    view.snackbar("Replace with your own action", "Action") { null }
}
```

KTX Usage - Snackbar

❑ Or

```
fab.setOnClickListener { view ->
    view.longSnackbar("Replace with your own action", "Action")
    { alertSplittiesDemo() }
}
```

KTX Usage - Intents

❑ Before

```
R.id.action_report -> {
    startActivity(Intent(this, Report::class.java))
    true
}
```

❑ After

```
R.id.action_report -> {
    start<Report>()
    true
}
```

KTX Usage – Alerts (Before)

```
fun alertDemo() {
    val builder = AlertDialog.Builder(this)
    builder.setTitle("Androidly Alert")
    builder.setMessage("This is a message")

    builder.setPositiveButton(android.R.string.yes) { dialog, which ->
        Toast.makeText(applicationContext,
            android.R.string.yes, Toast.LENGTH_SHORT).show()
    }

    builder.setNegativeButton(android.R.string.no) { dialog, which ->
        Toast.makeText(applicationContext,
            android.R.string.no, Toast.LENGTH_SHORT).show()
    }

    builder.setNeutralButton("Maybe") { dialog, which ->
        Toast.makeText(applicationContext,
            "Maybe", Toast.LENGTH_SHORT).show()
    }
    builder.show()
}
```

Usage – Alerts (After)

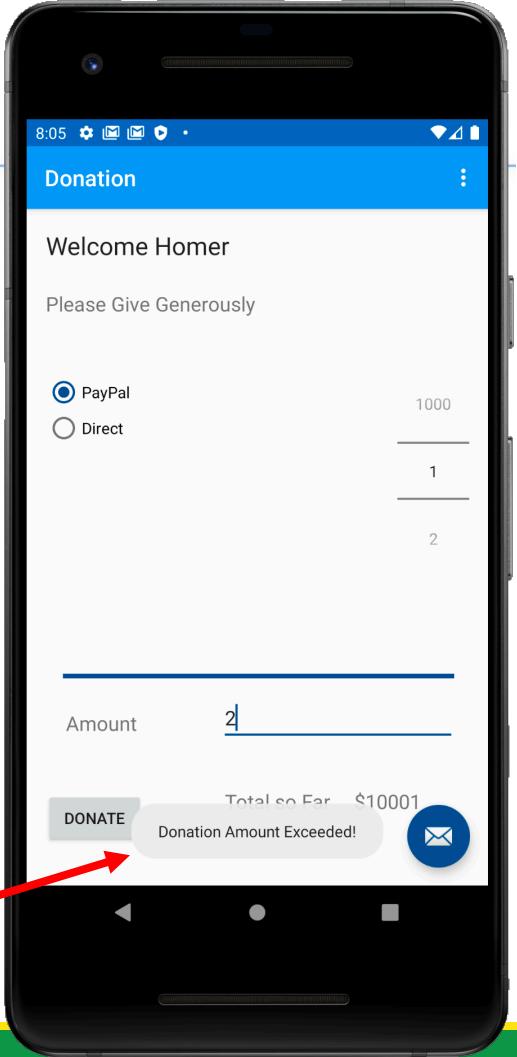
```
fun alertAnkoDemo()
{
    alert("This is a message", "Androidly Alert") {
        yesButton { toast(android.R.string.yes) }
        noButton {toast(android.R.string.no)}
        neutralPressed("Maybe") {toast("Maybe")}
    }.show()
}
```

Usage – Alerts (After)

```
fun alertSplittiesDemo() {  
    alert {  
        messageResource = R.string.confirm  
        okButton { longToast(R.string.message) }  
        cancelButton()  
    }.onShow { positiveButton.text = getString(R.string.ok) }  
    .show()  
}
```

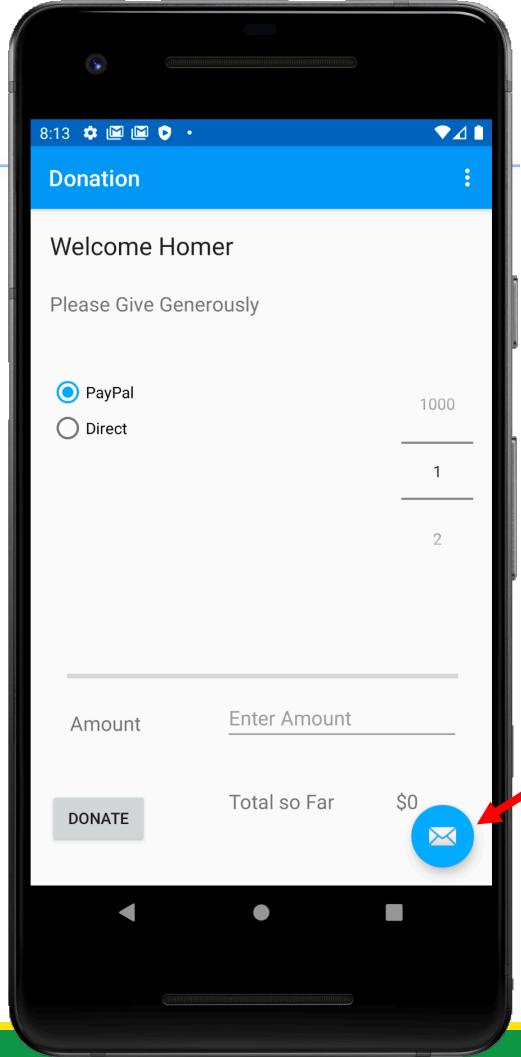
Usage – Demo

Toast



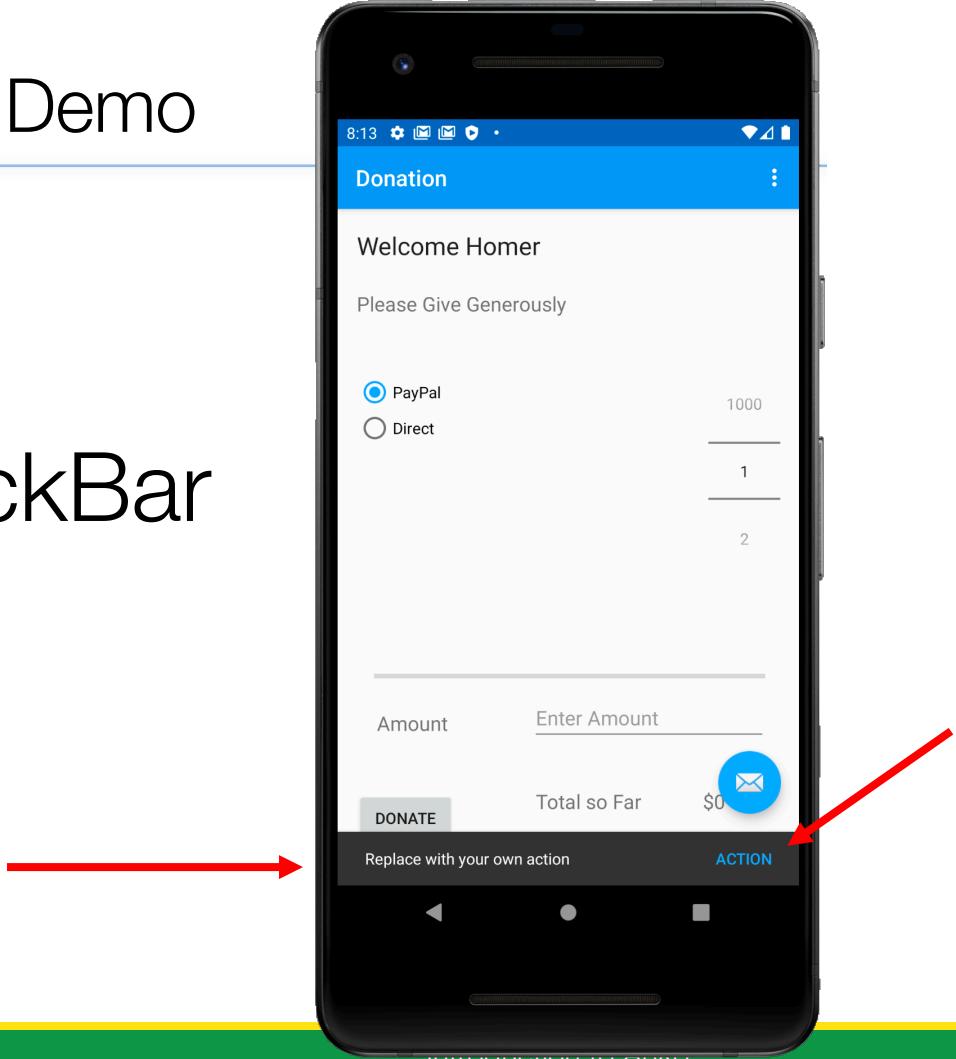
Usage – Demo

SnackBar



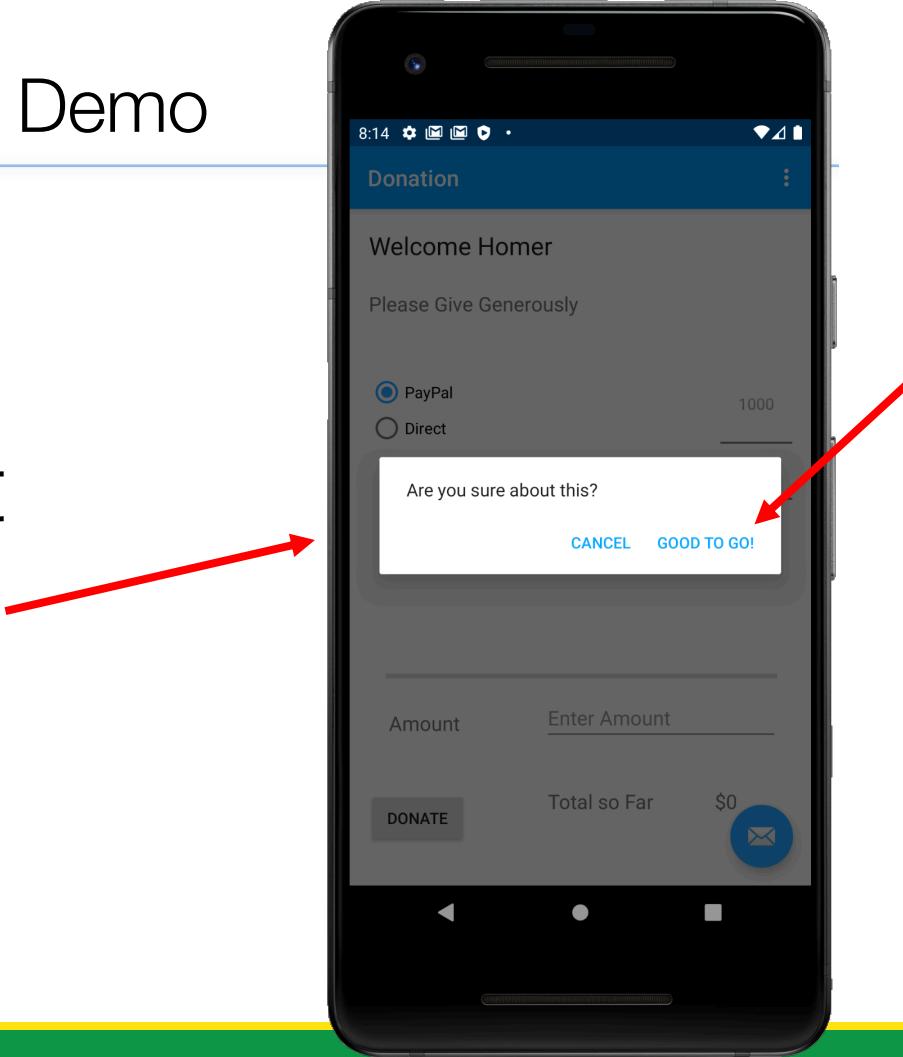
Usage – Demo

SnackBar



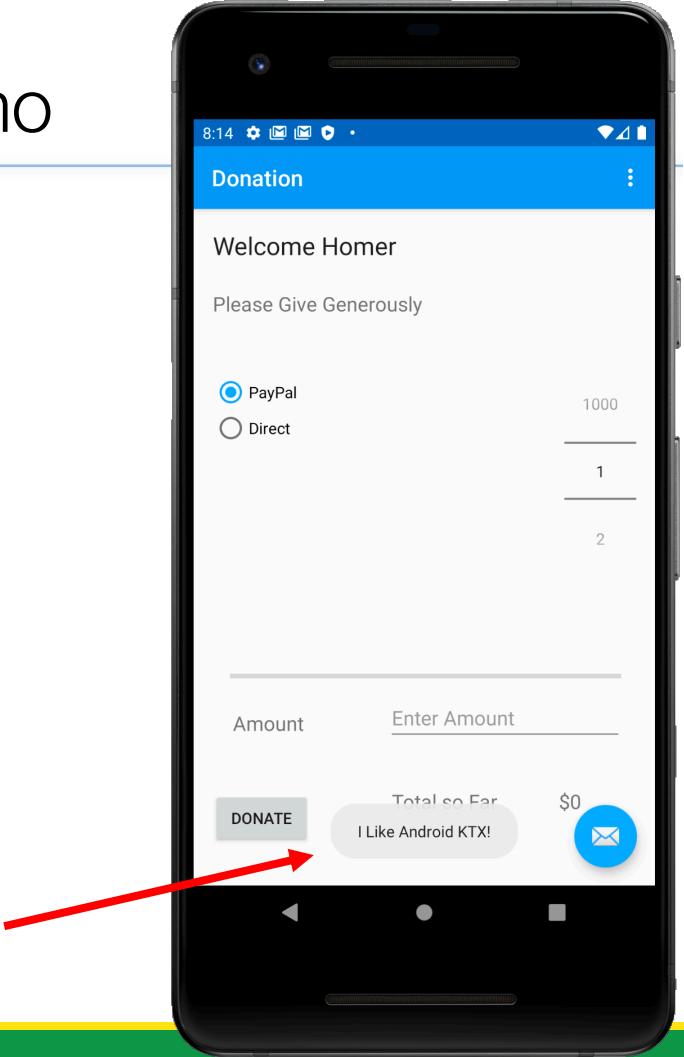
Usage – Demo

Alert



Usage – Demo

□ Alert





References

Sources:

- <https://github.com/Kotlin/anko>
- <https://adorahack.com/introduction-to-anko>
- <https://github.com/LouisCAD/Splitties>

Thanks.

