

Implicit Intents

based on Chapter 15 of
Android Programming: A Big Nerd Ranch Guide (4th edition)



CrimeFragment Layout

- `fragment_crime.xml` (layout)

Photo constrained on top
and start only

Top of details constrained
to bottom of photo

Bottom of report button
is **not** constrained

TITLE

Enter a title for the crime.

DETAILS

WED NOV 14 11:56 EST 2018

☐ Solved

CHOOSE SUSPECT

SEND CRIME REPORT

Label constrained at
start and bottom to title

Bottom of title is
constrained to bottom
of **photo**

In general, views are
constrained on top and
left. Views that extend
right are constrained at
end to parent

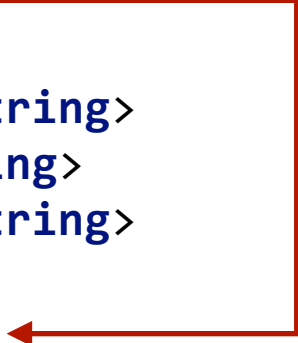
In general, be wary of
bottom constraints

Sending a Report

- `fragment_crime_detail.xml`
- `strings.xml`
- `CrimeDetailFragment`

```
<resources>
  <string name="app_name">CriminalIntent</string>
  <string name="crime_title_hint">Enter a title for the
  <string name="crime_title_label">Title</string>
  <string name="crime_details_label">Details</string>
  <string name="crime_solved_label">Solved</string>
  <string name="new_crime">New Crime</string>
  <string name="delete_all_crimes">Delete All Crimes</string>
  <string name="crime_suspect_text">Choose Suspect</string>
  <string name="crime_report_text">Send Crime Report</string>
  <string name="crime_report">%1$s!
    The crime was discovered on %2$s. %3$s, and %4$s
  </string>
  <string name="crime_report_solved">The case is solved</string>
  <string name="crime_report_unsolved">The case is not solved</string>
  <string name="crime_report_no_suspect">there is no suspect.</string>
  <string name="crime_report_suspect">the suspect is %s.</string>
  <string name="crime_report_subject">CriminalIntent Crime Report</string>
  <string name="send_report">Send crime report via</string>
</resources>
```

*Format strings use
placeholders that can be
replaced at runtime*



Parts of an Implicit Intent

- The **action** you are trying to perform
Typically constants from the Intent class (ex: Intent.ACTION_VIEW, Intent.ACTION_SEND)
- The **location** of any data
Can be outside device (ex: a URL) or inside the device (ex: URI to a file, content URI pointing to record in ContentProvider)
- The **type** of data the action is for
MIME type, like text/html or audio/mpeg3. Can sometime be inferred from location
- Optional **categories**
Describe when, where, or how you are trying to use an activity

```
class CrimeDetailFragment : Fragment(), DatePickerFragment.Callbacks {  
  
    ...  
  
    override fun onStart() {  
        ...  
  
        reportButton.setOnClickListener {  
            Intent(Intent.ACTION_SEND).apply {  
                type = "text/plain"  
                putExtra(Intent.EXTRA_TEXT, getCrimeReport())  
                putExtra(  
                    Intent.EXTRA_SUBJECT,  
                    getString(R.string.crime_report_subject))  
            }.also { intent ->  
                val chooserIntent =  
                    Intent.createChooser(intent, getString(R.string.send_report))  
                startActivity(chooserIntent)  
            }  
        }  
    }  
}
```

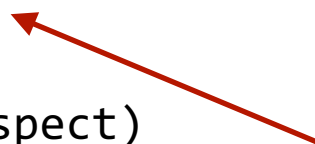
Create intent

Start activity

The ACTION_SEND
action can be fulfilled
by any number of apps

createChooser forces the
user to always choose the
app to fulfill the action

```
private fun getCrimeReport(): String {  
    val solvedString = if (crime.isSolved) {  
        getString(R.string.crime_report_solved)  
    } else {  
        getString(R.string.crime_report_unsolved)  
    }  
  
    val dateString = DateFormat.format(DATE_FORMAT, crime.date).toString()  
    val suspect = getString(R.string.crime_report_no_suspect)  
  
    return getString(R.string.crime_report,  
        crime.title, dateString, solvedString, suspect)  
}
```



We are not dealing with the “suspect” button here, so we report that there is no suspect