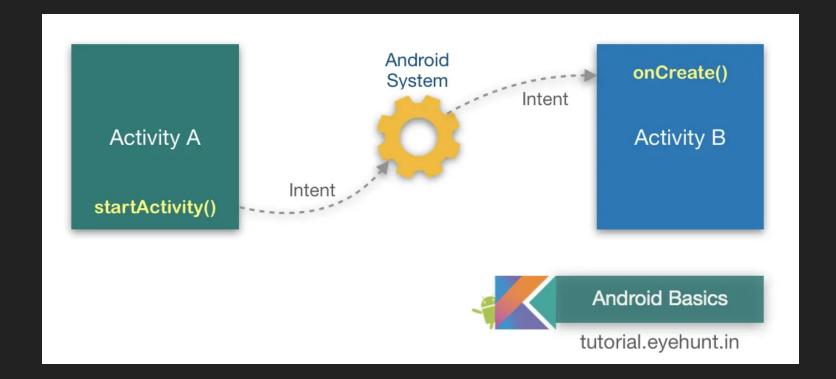
## **Intents**

#### Définition

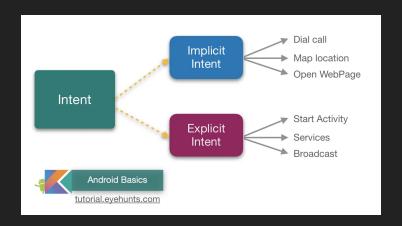


Un objet contenant les infos nécessaires à démarrer une Activity (en général) Conceptuellement proche d'un lien HTML

Sert aussi (plus rarement) à démarrer un Service ou à envoyer un Broadcast

Un intent peut être "lancé" par une application ou par le système

## **Explicit / Implicit**



```
val explicitIntent = Intent(this, MyActivity::class.java)

// implicit intents:
val callButtonIntent = Intent(Intent.ACTION_CALL_BUTTON)
val urlIntent = Intent(Intent.ACTION_VIEW, Uri.parse("http://www.google.com"))
val phoneIntent = Intent(Intent.ACTION_DIAL, Uri.parse("tel:8005551234"))

// use:
startActivity(intent)

// To use later (ex: in Notifications)
val pendingIntent = PendingIntent.getActivity(this, 1, intent,FLAG_UPDATE_CURRENT) // Parcelable
pendingIntent.send()
```

#### Send

```
// Preparing data in sending Activity:
val intent = Intent(this, SecondActivity::class.java)
intent.data = Uri.parse("http://www.google.com") // Web URL
intent.data = Uri.fromFile(File("/file path/file.jpg")) // File URI
intent.putExtra("level", 406) // Int extra
val array = arrayOf("Rice", "Beans", "Fruit")
intent.putExtra("food", array) // Array extra
val bundle = Bundle() // Use bundle to prepare a lot of data
bundle.putFloat("percent", 58f) // Float data
intent.putExtras(bundle) // Put whole bundle
val UNIQUE KEY = packageName + ".extra.MESSAGE"
intent.putExtra(UNIQUE KEY, "Hello Activity!")
startActivity(intent)
// Getting data in receiving activity:
val uri = intent.data
val level = intent.getIntExtra("level", 0)
val food = intent.getStringArrayExtra("food")
val bundle = intent.extras
val percent = bundle.getFloat("percent")
```

#### **Intent Filters**

```
<activity android:name="ShareActivity">
  <intent-filter>
       <action android:name="android.intent.action.SEND" />
       <action android:name="android.intent.action.SEND_MULTIPLE"/>
      <category android:name="android.intent.category.DEFAULT" />
      <data android:mimeType="text/plain" />
      <data android:mimeType="image/*" />
       <data android:mimeType="video/*" />
  </intent-filter>
 'activity>
cactivity android:name="BrowserActivity">
  <intent-filter>
       <action android:name="android.intent.action.VIEW" />
      <category android:name="android.intent.category.BROWSABLE" />
      <data android:scheme="https" />
       <data android:host="developer.android.com" />
  </intent-filter>
  <intent-filter>
      <category android:name="android.intent.category.LAUNCHER" />
  </intent-filter>
 'activity>
```

## Requesting

```
// setup in requesting Activity
val intent = Intent(this, SecondActivity::class.java)
const val UNIQUE REQUEST CODE = 666
startActivityForResult(intent, UNIQUE REQUEST CODE)
public override fun onActivityResult(
requestCode: Int, resultCode: Int, data: Intent?) {
   super.onActivityResult(requestCode, resultCode, data)
   if (requestCode == UNIQUE REQUEST CODE && resultCode == Activity.RESULT OK) {
        val reply = data!!.getStringExtra(SecondActivity.EXTRA REPLY)
        // ... do something with the data
// use in requested Activity
const val EXTRA REPLY = "reply key"
intent.putExtra(EXTRA REPLY, "Done !")
setResult(RESULT OK, intent)
finish()
```

#### **New API**

```
// Asking for an image
val getContent = registerForActivityResult(GetContent()) { uri: Uri? -> // Handle the returned Uri }
// ...
getContent.launch("image/*")

// Asking for a result
val startForResult = registerForActivityResult(StartActivityForResult()) { result: ActivityResult ->
    if (result.resultCode == Activity.RESULT_OK) {
        val intent = result.intent
        // Handle the Intent
    }
}
// ...
startForResult.launch(Intent(this, ResultProducingActivity::class.java))
```

#### Also:

- Default ActivityResultContracts
- Creating a custom contract

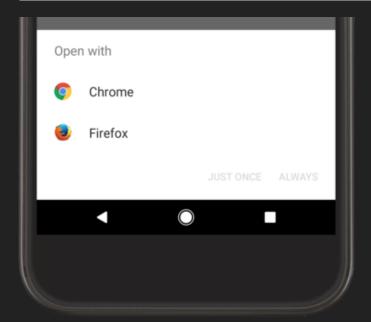
## **Specifying implicit intents**

```
val intent = Intent(Intent.ACTION_WEB_SEARCH)
intent.putExtra(SearchManager.QUERY, "query")

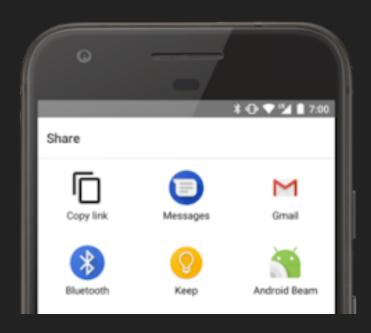
val intent = Intent(Intent.ACTION_CREATE_DOCUMENT)
intent.type = "application/pdf" // set MIME type
intent.addCategory(Intent.CATEGORY_OPENABLE)
```

## **Resolving intents**

```
// Check if that intent can be handled !
if (intent.resolveActivity(packageManager) != null) {
    startActivity(intent) // if no result needed, otherwise: 
    startActivityForResult(intent, ACTIVITY_REQUEST_CREATE_FILE)
}
```



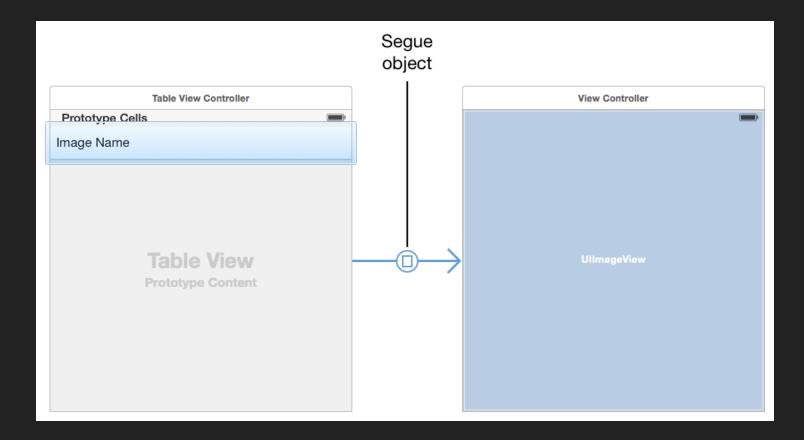
## **Using Chooser Intent / Sharesheet**



```
// using Chooser Intent / Sharesheet
val intent = Intent(Intent.ACTION_SEND)
val chooserIntent = Intent.createChooser(intent, "Chooser Title")
if (intent.resolveActivity(packageManager) != null) {
    startActivity(chooserIntent)
}
```

# iOS

### segues



self.performSegue(withIdentifier: "SECOND\_SCREEN\_SEGUE", for sender: self)

#### Documentation

## Handmade delegates for results

```
protocol ImageDelegate{
   func onImageReceived(_ picker: ImagePickerController, didReceiveValue value: UIImage)
   func onCancel(_ picker: ImagePickerController)
}
class TakePictureController : UIViewController, ImageDelegate{ ... }
```

#### **Share Extensions**

Separate module with custom ViewController

Capabilities configured with a plist file:

