# Intent – Ý định – liên kết các Component lại

### Intent là gì?

* 1. Là 1 tin nhắn yêu cầu hành động Component khác
  2. Có 2 loại:
     1. Explicit Intent: tường minh, gọi trực tiếp tên ứng dụng
     2. Implicit Intent: ẩn ý, gọi chung chung, ứng dụng nào chạy thì chạy

### Explicit Intent

Ví dụ: Gọi mở Activity khác, truyền giá trị (NAME\_TEXT\_VALUE, NAME\_NUMBER\_VALUE) vào:

/\* Gởi Explicite Intent

\* put giá trị thông qua bundle

\*/

private void sendBundle() {

Bundle bundle = new Bundle();

bundle.putString(ReceiverActivity.NAME\_TEXT\_VALUE, "giá trị chữ");

bundle.putInt(ReceiverActivity.NAME\_NUMBER\_VALUE, 3333);

Intent intent = new Intent(this, ReceiverActivity.class);

intent.putExtras(bundle);

startActivity(intent);

}

ReciverActivity nhận giá trị Intent

/\*\*

\* Nhận Intent được gởi

\*/

private void receiveIntent() {

Intent intent = getIntent();

Bundle bundle = intent.getExtras();

String value1 = bundle.getString(MainActivity.NAME\_TEXT\_VALUE);

int value2 = bundle.getInt(MainActivity.NAME\_NUMBER\_VALUE, 0);

}

### Implicit Intent

/\*\*

\* gởi implicit message

\* gởi message đến ứng dụng nào sử dụng trong máy

\*/

private void sendImplicit\_Text() {

// tạo tin nhắn chữ

Intent sendIntent = new Intent();

sendIntent.setAction(Intent.ACTION\_SEND);

sendIntent.putExtra(Intent.EXTRA\_TEXT, "nội dung giá trị abc");

sendIntent.setType("text/plain"); // "text/plain" MIME type

// Verify that the intent will resolve to an activity

if (sendIntent.resolveActivity(getPackageManager()) != null) {

startActivity(sendIntent); // gởi chữ đến ứng dụng nào sử dụng

}

}

Khai báo Activity nhận giá trị (Toàn bộ android)

<!-- Khai báo Activity trong ManifreshL: nhận intent từ app component đưa về -->

<activity ...="">

<intent-filter>

<action android:name="android.intent.action.SEND"><!-- hành động -->

<category android:name="android.intent.category.DEFAULT"><!-- loại -->

<data android:mimetype="text/plain"><!-- Kiểu dữ liệu -->

</data>

</category>

</action>

</intent-filter>

</activity>

Intent intent = getIntent();

String type = intent.getType();

String action = intent.getAction();

String extraText = intent.getStringExtra(Intent.EXTRA\_TEXT);

**Trích:**

* <http://developer.android.com/intl/vi/guide/components/intents-filters.html>

# Intent Parcelable – Gởi Object cho App Component khác

* Gởi 1 Object (Class) qua Intent

Có thể theo cách “PeopleModel implements Serializable”

### Các bước thực hiện

1. **Tạo Lớp chuyển:**
2. public class PeopleModel implements Parcelable {
3. public enum Type implements Serializable {
4. GOOD\_MAN,
5. BAD\_MAN
6. }
8. private long id;
9. private String name;
10. private Type type;
11. // TODO constructor, getter, setter
12. @Override
13. public int describeContents() {
14. return 0;
15. }
16. @Override
17. public void writeToParcel(Parcel dest, int flags) {
18. // Lưu các biến vào Parcel, khi đọc thì sẽ được đọc theo thứ tự khi ghi.
19. dest.writeValue(id);
20. dest.writeValue(name);
21. dest.writeValue(type);
22. }
23. private PeopleModel (Parcel in){
24. // Ghi thứ tự nào, đọc thứ tự đó
25. this.id = (long) in.readValue(String.class.getClassLoader());
26. this.name = (String) in.readValue(String.class.getClassLoader());
27. this.type = (Type) in.readValue(String.class.getClassLoader());
28. }
29. //Để đọc 1 Parcelable cần tham số ClassLoader, ta có thể lấy bằng hàm getClassLoader()
30. public static final Parcelable.Creator CREATOR = new Parcelable.Creator() {
31. public PeopleModel createFromParcel(Parcel source) {
32. return new PeopleModel(source);
33. }
34. public PeopleModel[] newArray(int size) {
35. return new PeopleModel[size];
36. }
37. };

}

1. **Hàm gởi:**
2. private void sendPeople() {
3. PeopleModel peopleModel = new PeopleModel(1, "dđm msdf", PeopleModel.Type.BAD\_MAN);
4. Intent intent = new Intent(this, ReceiveActivity.class);
5. Bundle bundle = new Bundle();
6. bundle.putParcelable("key", peopleModel);
7. intent.putExtras(bundle);
8. startActivity(intent);

}

1. **Hàm nhận:**
2. private void getPeople\_fromIntent() {
3. Bundle bundle = getIntent().getExtras();
4. PeopleModel peopleModel = bundle.getParcelable("key");
5. Toast.makeText(this, peopleModel.toString(), Toast.LENGTH\_SHORT).show();

}

Trích:

* <http://developer.android.com/intl/vi/reference/android/os/Parcelable.html>

# **Common Intents**

1. [Alarm Clock](https://developer.android.com/guide/components/intents-common.html?hl=vi#Clock)
   1. [Create an alarm](https://developer.android.com/guide/components/intents-common.html?hl=vi#CreateAlarm)
   2. [Create a timer](https://developer.android.com/guide/components/intents-common.html?hl=vi#CreateTimer)
   3. [Show all alarms](https://developer.android.com/guide/components/intents-common.html?hl=vi#ShowAlarms)
2. [Calendar](https://developer.android.com/guide/components/intents-common.html?hl=vi#Calendar)
   1. [Add a calendar event](https://developer.android.com/guide/components/intents-common.html?hl=vi#AddEvent)
3. [Camera](https://developer.android.com/guide/components/intents-common.html?hl=vi#Camera)
   1. [Capture a picture or video and return it](https://developer.android.com/guide/components/intents-common.html?hl=vi#ImageCapture)
   2. [Start a camera app in still image mode](https://developer.android.com/guide/components/intents-common.html?hl=vi#CameraStill)
   3. [Start a camera app in video mode](https://developer.android.com/guide/components/intents-common.html?hl=vi#CameraVideo)
4. [Contacts/People App](https://developer.android.com/guide/components/intents-common.html?hl=vi#Contacts)
   1. [Select a contact](https://developer.android.com/guide/components/intents-common.html?hl=vi#PickContact)
   2. [Select specific contact data](https://developer.android.com/guide/components/intents-common.html?hl=vi#PickContactDat)
   3. [View a contact](https://developer.android.com/guide/components/intents-common.html?hl=vi#ViewContact)
   4. [Edit an existing contact](https://developer.android.com/guide/components/intents-common.html?hl=vi#EditContact)
   5. [Insert a contact](https://developer.android.com/guide/components/intents-common.html?hl=vi#InsertContact)
5. [Email](https://developer.android.com/guide/components/intents-common.html?hl=vi#Email)
   1. [Compose an email with optional attachments](https://developer.android.com/guide/components/intents-common.html?hl=vi#ComposeEmail)
6. [File Storage](https://developer.android.com/guide/components/intents-common.html?hl=vi#Storage)
   1. [Retrieve a specific type of file](https://developer.android.com/guide/components/intents-common.html?hl=vi#GetFile)
   2. [Open a specific type of file](https://developer.android.com/guide/components/intents-common.html?hl=vi#OpenFile)
7. [Local Actions](https://developer.android.com/guide/components/intents-common.html?hl=vi#Local)
   1. [Call a car](https://developer.android.com/guide/components/intents-common.html?hl=vi#CallCar)
8. [Maps](https://developer.android.com/guide/components/intents-common.html?hl=vi#Maps)
   1. [Show a location on a map](https://developer.android.com/guide/components/intents-common.html?hl=vi#ViewMap)
9. [Music or Video](https://developer.android.com/guide/components/intents-common.html?hl=vi#Music)
   1. [Play a media file](https://developer.android.com/guide/components/intents-common.html?hl=vi#PlayMedia)
   2. [Play music based on a search query](https://developer.android.com/guide/components/intents-common.html?hl=vi#PlaySearch)
10. [New Note](https://developer.android.com/guide/components/intents-common.html?hl=vi#NewNote)
    1. [Create a note](https://developer.android.com/guide/components/intents-common.html?hl=vi#CreateNote)
11. [Phone](https://developer.android.com/guide/components/intents-common.html?hl=vi#Phone)
    1. [Initiate a phone call](https://developer.android.com/guide/components/intents-common.html?hl=vi#DialPhone)
12. [Search](https://developer.android.com/guide/components/intents-common.html?hl=vi#Search)
    1. [Search in a specific app](https://developer.android.com/guide/components/intents-common.html?hl=vi#SearchOnApp)
    2. [Perform a web search](https://developer.android.com/guide/components/intents-common.html?hl=vi#SearchWeb)
13. [Settings](https://developer.android.com/guide/components/intents-common.html?hl=vi#Settings)
    1. [Open a specific section of Settings](https://developer.android.com/guide/components/intents-common.html?hl=vi#OpenSettings)
14. [Text Messaging](https://developer.android.com/guide/components/intents-common.html?hl=vi#Messaging)
    1. [Compose an SMS/MMS message with attachment](https://developer.android.com/guide/components/intents-common.html?hl=vi#SendMessage)
15. [Web Browser](https://developer.android.com/guide/components/intents-common.html?hl=vi#Browser)
    1. [Load a web URL](https://developer.android.com/guide/components/intents-common.html?hl=vi#ViewUrl)
16. [Verify Intents with the Android Debug Bridge](https://developer.android.com/guide/components/intents-common.html?hl=vi#AdbIntents)

## **See also**

1. [Intents and Intent Filters](https://developer.android.com/guide/components/intents-filters.html?hl=vi)