

# P82 Mobile Application Development - Android

Intents

# Intents



This is a message object used to perform an action on another application component. There are three use cases:

- To start another activity
  - Without passing information
  - With passage of information
  - With Return Information
- To start a Service
- To start notifications

# Intents

- There are two types of Intents
  - **Explicit:** where we will start a component by name (used in our own application)
  - **Implicit :**
    - does not start a component but an action. Use in general to launch component from other application.
    - system decision to find the right application, if multiple user choices

# Explicit Intents

- Without passing a message  
`Intent intent = new Intent (Activity_A.this, Activity_B.class);`  
`startActivity (intent);`
- With message passing
  - Send  
`String msg = "a message"; Intent intent = new Intent`  
`(Activity_A.this, Activity_B.class); intent.putExtra ("myKey",`  
`msg); startActivity (intent);`
- Recovery in the second activity  
`Intent return = getIntent (); String msgBack =`  
`return.getExtr.String ("myKey");`

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# Explicit Intents

- With waiting for answer

- Send

```
int id = 0;
```

```
Intent secondActivity = new Intent (Activity_A.this, Activity_B.class);
```

```
startActivityForResult (secondActivite, id);
```

- Redefines a method to retrieve the answer

```
@Override
```

```
protected void onActivityResult (requestCode int, int resultCode, Intent data) {
```

```
int id = 0;
```

```
// We first check which intent we are referring to here using our identifier
```

```
    if (requestCode == id) {
```

```
        // We also check that the operation went well
```

```
        if (resultCode == RESULT_OK ) {
```

```
            // Display the button that was chosen
```

```
            String msg = data.getStringExtra ("myKey");
```

```
        }
```

```
    }
```

```
}
```

# Intents Explicite

- With waiting for answer
  - reply

```
Intent result = new Intent ();  
result.putExtra ("myKey", "my message");  
setResult (RESULT_OK, result);  
finish ();  
// to close the activity
```

# Implicit Intent



- Later in the course