P82 Mobile Application Development - Android

Menus

Menus

- There are basically 3 types of menu
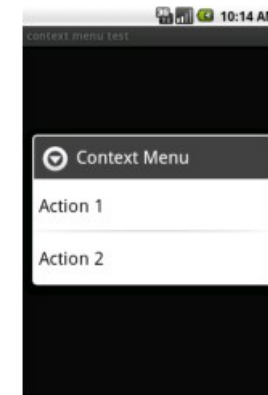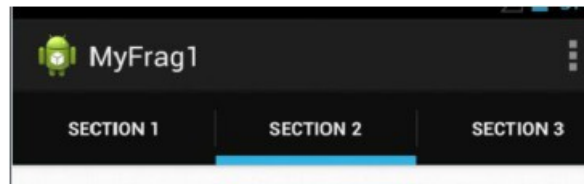 - Menus activated by the menu key
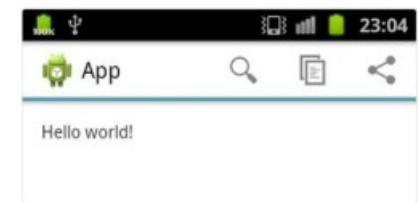   Only exists on old phones
    Android 2.3 or lower

  - Contextual menus
    The user must make a long press

  - The ActionBar
    Three bar or icons appear in the activity title

Context menu (no example)

♦ *A context menu is triggered by a LongClick on an interface element and is associated with this element*

♦ **The graphic composition of the menu is defined in an XML fil**e (under **/res/menu**)

♦ In the onCreate of the activity, we give to the component View the listener of ContextMenu, example:

linearL.setOnCreateContextMenuListener (this);

Using the ActionBar

Create the layout in the resources:

```
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context=".MainActivity">
<item
    android:id="@+id/action_Start"
    android:orderInCategory="100"
    android:title="Start"
    app:showAsAction="always" />
<item
    android:id="@+id/action_quit"
    android:icon="@drawable/guatemala"
    android:orderInCategory="100"
    android:title="quitter"
    app:showAsAction="always" />
<item
    android:id="@+id/action_pause"
    android:orderInCategory="100"
    android:title="pause"
    app:showAsAction="never" />
</menu>
```

ActionBar

- The main attributes
  - **id**
  - **Title**: text to be displayed
  - **Icon**: image to display if it is necessary
  - **app:showAsAction** : if in the three points or on the title bar
    - **ifRoom**: if there is room
    - **Withtext**: add text too
    - **Never**: stays in the three points
    - **always**

Conditions

- Since API7 or higher

- Must indicate a theme with an ActionBar
  `<activity`
  `android: theme = "@ style / Theme.AppCompat.Light" ...`
  `>`
  Or   `<application ...`
        `android: theme = "@ style / AppTheme">`

- Activity must be inherited from ActionBarActivity or from AppCompatActivity

- Obviously your activity must have a title bar

Java Side

Two methods to redefine:

```java
@Override
public boolean onCreateOptionsMenu (menu menu) {
    //retrieve the menu from the XML
    getMenuInflater().inflate (R.menu.menu_main,menu);
        return true;
    }

@Override
public boolean onOptionsItemSelected (MenuItem item) {...}
```

To define actions when clicking on the options from the menu

Java side menus

- @Override
  public boolean onOptionsItemSelected(MenuItem item)
  {
```java
    String msg = null;
    switch (item.getItemId()) {
        case R.id.action_start:
                    msg = "Start";
            break;
        case R.id.action_pause:
            msg = "Pause";
            break;
        case R.id.action_quit:
            msg = "Quit";
            break;
    }

    Toast.makeText(getBaseContext(), msg,
Toast.LENGTH_SHORT).show();
    return true;
}
```

Links for more information

□ http://developer.android.com/guide/topics/ui/actionbar.html (more info on actionBar)

□ http://openclassrooms.com/courses/creez-des- applications-pour-android/gestion-des-menus- de-l-application (touch menu)