

# Advertising

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# Advertising

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## What for?

- Most of Android Applications are free
- advertising is one way to have money



## Paid Applications can also embed advertising

- 15% to 20% more gains



## Advertising must be controlled

- Limit the impact on the advertising
- Control and restrict according to your users



## Choose your advertising network

- AdMob, DoubleClickForPublisher, AdWhirl, MobClix, MobFox, MobPub...

# AdMob



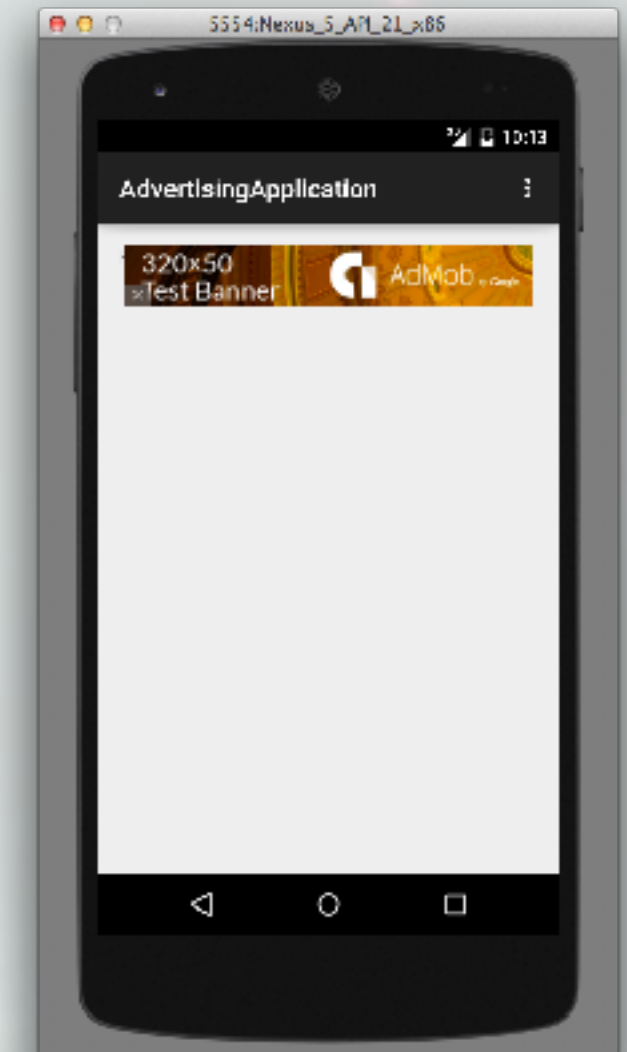
## Widely used service on Android

- More than 700 000 application use it
- Reports for the developers
- Easy filtering



## Two kind of advertising



- Banners
  - ▶ A banner is displayed on the top of the screen
  - ▶ Small impact on the user experience
- Interstitial
  - ▶ Full screen HTML5
  - ▶ The user choose to close the ad
  - ▶ Usually displayed when swapping activities



# Setup (1/2)

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## Register into AdMob

-  Declare then each advertising
-  And get AD\_UNIT\_ID for each

## Modify AndroidManifest.xml

-  Internet permission

```
<uses-permission  
    android:name="android.permission.INTERNET" />  
<uses-permission  
    android:name="android.permission.ACCESS_NETWORK_STATE" />
```

-  Clickable advertising

```
<activity android:name="com.google.android.gms.ads.AdActivity"  
    android:configChanges="keyboard|keyboardHidden|orientation|  
        screenLayout|uiMode|screenSize|smallestScreenSize"  
    android:theme="@android:style/Theme.Translucent" />
```

# Setup (2/2)

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## Modify AndroidManifest.xml

 Connect to GooglePlay

```
<meta-data  
    android:name="com.google.android.gms.version"  
    android:value="@integer/google_play_services_version" />
```

## Modify build.gradle

```
compile 'com.google.android.gms:play-services:6.5.+'
```

# Declaring a Banner



## Integrate AD\_UNIT\_ID into res/values/string.xml

```
<string name="banner_ad_unit_id">  
    ca-app-pub-XXX/YYY  
</string>
```



## Modify main layout to add the ad

```
<com.google.android.gms.ads.AdView  
    android:id="@+id/adView"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:layout_centerHorizontal="true"  
    ads:adSize="BANNER"  
    ads:adUnitId="@string/banner_ad_unit_id">  
</com.google.android.gms.ads.AdView>
```

# Trigger a Banner (1/2)

```
private AdView mAdView;
private AdRequest adRequest;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    mAdView = (AdView) findViewById(R.id.adView);
    adRequest = new AdRequest.Builder()
        // .addTestDevice(AdRequest.DEVICE_ID_EMULATOR)
        // .tagForChildDirectedTreatment(true)
        // .setGender(AdRequest.GENDER_FEMALE)
        // .setBirthday(new GregorianCalendar(1985, 1, 1).getTime())
        .build();
    mAdView.loadAd(adRequest);
}
/** Called when leaving the activity */
@Override
public void onPause() {
    if (mAdView != null) mAdView.pause();
    super.onPause();
}
```

# Trigger a Banner (2/2)

```
/** Called when returning to the activity */  
@Override  
public void onResume() {  
    super.onResume();  
    if (mAdView != null) {  
        mAdView.resume();  
    }  
}  
  
/** Called before the activity is destroyed */  
@Override  
public void onDestroy() {  
    if (mAdView != null) {  
        mAdView.destroy();  
    }  
    super.onDestroy();  
}
```





## Interface `com.google.android.gms.ad.AdListener`



`onAdLoaded`

▶ **triggered when the ad is loaded**



`onAdOpened`

▶ **triggered when the ad is open**



`onAdClosed`

▶ **triggered when the ad is closed**



`onAdLeftApplication`

▶ **triggered when the ad is dismissed**



`onAdFailedToLoad`

▶ **triggered when a problem occurs during the loading of an app**

# Interstitial Advertising



## Work the same!



### Instantiation

```
interstitial = new InterstitialAd(this);
interstitial.setAdUnitId("ca-app-pub-XXX/YYYY");
adRequest = new AdRequest.Builder().build();

// Begin loading your interstitial.
interstitial.loadAd(adRequest);
displayInterstitial();
```



### Trigger the Ad

```
// Invoke displayInterstitial() when you are ready
// to display an interstitial.
public void displayInterstitial() {
    if (interstitial.isLoaded()) interstitial.show();
    else Toast.makeText(this, "Ad did not load",
        Toast.LENGTH_SHORT).show();
}
```

# Summary

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**Easy to integrate into your application**



**To note**

 Do not overload your application with ads

 Choose your ad network

 Define the kind of ad you want to have

 Log the lifecycle of your activity



**Free-to-play game use a lot of ads**





