

ANDROID

Friday Lunch Talks

Session 3

Security

Permissions

Permissions

Restrict App Access

Permissions

Restrict App Access

Defined in Manifest-File

Permissions

Restrict App Access

Defined in Manifest-File

App will not run without
required permissions

Permissions

Protect apps from...

...doing costly stuff

```
<uses-permission  
    android:name="com.android.vending.BILLING" />
```

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

Permissions

Protect apps from...

...doing costly stuff

...access sensible data


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

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

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

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

Permissions

Protect apps from...

...doing costly stuff

...access sensible data

...access specific hardware

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

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

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

Permissions

The User View

up to API 22

Asked on download/installation

Permissions

The User View

up to API 22

Asked on download/installation

since API 23

Asked on first usage of permission

Data Storage

Data Storage

Store to Server

Data Storage

Store to Server

- Request internet permission

Data Storage

Store to Server

- Request internet permission
- Do what you want

Data Storage

Store to Server

- Request internet permission
- Do what you want
- Frameworks like OkHttp + Jackson

Data Storage

Store to local database

Data Storage

Store to local database

- SQLite is included to Android

Data Storage

Store to local database

- SQLite is included to Android
- Hide it inside the ContentProvider interface

Data Storage

Store to local database

- SQLite is included to Android
- Hide it inside the ContentProvider interface
- Define custom Permissions



Data Storage

File Storage



Data Storage

File Storage

- Java OutputStream to internal/external storage



Data Storage

File Storage

- Java OutputStream to internal/external storage
- write to public or private folder



Data Storage

File Storage

- Java OutputStream to internal/external storage
- write to public or private folder

Stay tuned!



Data Storage

SharedPreferences



Data Storage

SharedPreferences

- simple key/value store



Data Storage

SharedPreferences

- simple key/value store
- write to public or private preferences



Data Storage

SharedPreferences

- simple key/value store
- write to public or private preferences

Stay tuned!

You bubbled enough!

Let's start!!!

