**Day 4**

WORKING WITH DATA

**Today:**

* SharedPreferences
* Internal Storage (IO)
* External Storage (IO)
* SQLite Database
* Network Connection (restful services)

How can you persist data on Android? Preferences Object or SharedPreferences Object, they are key value pairs.

Internal is private or public. Deprecated. Now is all private.

External is private or public.

Cache folder, is going to stay there, but if android needs the space, it will delete the space.

**SharedPreferences**

* getPreferences(int mode)
  + mode
    - MODE\_PRIVATE
    - MODE\_WORLD\_READABLE
    - MODE\_WORLD)\_WRITEABLE
* getSharedPreferences(String name, int mode)
  + name
    - The name of the file

**Write:**

SharedPreferences settings = getSharedPreferences(“File”, MODE\_PRIVATE);

SharedPreferences.Editor editor = settings.edit();

Editor.putString(“isGood”, “Fernando”);

editor.commit();

**Read:**

SharedPreferences settings = getSharedPreferences(“File”, MODE\_PRIVATE);

String myName = settings.getString(“myName”, “No Name”);

Log(a, myName);

**Internal Storage**

* FileOutPutStream openFileOutput(String name, int mode)
  + Open a private file for writing. Creates the fil if it doesn’t already exist.
* Mode:
  + MODE\_APPEND
  + MODE\_PRIVATE
* write()

FileOutputStream fOut = openFileOutput(“filename”, “MODE\_PRIVATE”);

String str = “data”;

fOut.write(str.getBytes());

fOut.close();

int c;

FileInputStreram fIn = openFileInput(filename);

String temp= “”;

While ( (c = fIn.read()) != -1) {

Temp = temp + Character.toString((char) c);

}

fIn.close();

**Cache Files**

You should use getCacheDir() to open a File that represents the internal directory where your applicaition should save temporary cache files.

If the device is low on internal storage, Android may delete these cache files to recover space.

Don’t rely on the system to clean up these files for you.

**Other useful methods**

getFilesDir() gets absolute path to the filesystem directory where your internal files are saved

getDir() access or create

deleteFile()

fileList()