Insecure Data Storage – Part 4

1. The objective is to find out where/how the credentials are being stored and the vulnerable code.

2. This is the code of its activity.

```
public void saveCredentials(View view) {
    EditText usr = (EditText) findViewById(R.id.ids4Usr);
    EditText pwd = (EditText) findViewById(R.id.ids4Pwd);
    File sdir = Environment.getExternalStorageDirectory();
    try {
        File uinfo = new File(sdir.getAbsolutePath() + "/.uinfo.txt");
        uinfo.setReadable(true);
        uinfo.setWritable(true);
        FileWriter fw = new FileWriter(uinfo);
        fw.write(usr.getText().toString() + ":" + pwd.getText().toString() + "\n");
        fw.close();
        Toast.makeText(this, "3rd party credentials saved successfully!", 0).show();
    } catch (Exception e) {
        Toast.makeText(this, "File error occurred", 0).show();
        Log.d("Diva", "File error: " + e.getMessage());
    }
}
```

   He creates folder in external storage named "**.uinfo.txt**". The '**.**' at the start of the file name means that the file is hidden.

3. In the application when I enter credentials he says "**file error occurred**" because the diva app doesn't have permission to storage. I turn it on from the app info.

4. I entered data and went to the cmd and I found the file and I could read it.

```
star2lte:/ # cd mnt/sdcard/
star2lte:/mnt/sdcard # ls -a
.   .uinfo.txt  Android  DCIM      Movies  Notifications  Podcasts
..  Alarms      Apps     Download  Music   Pictures       Ringtones
star2lte:/mnt/sdcard # cat .uinfo.txt
koko:kaka
star2lte:/mnt/sdcard #
```