INSECUREBANK2

Ejercicio1

La lista de permisos de obtiene en el manifest de la aplicación:

INTERNET

WRITE_EXTERNAL_STORAGE (NO FIGURA EN ANDROLIZE)

SEND_SMS

USE_CREDENTIALS

GET_ACCOUNTS (NO FIGURA EN ANDROLIZE)

READ_PROFILE (NO FIGURA EN ANDROLIZE)

READ_CONTACTS

READ_PHONE_STATE

READ_EXTERNAL_STORAGE (NO FIGURA EN ANDROLIZE)

READ_CALL_LOG (NO FIGURA EN ANDROLIZE)

ACCESS_COARSE_LOCATION (NO FIGURA EN ANDROLIZE)

ACCESS_NETWORK_LOCATION

Ejercicio2

En el almacenamiento externo se guardan los datos de las trasnsferencias

En el CryptoClass

String key = "This is the super secret key 123";

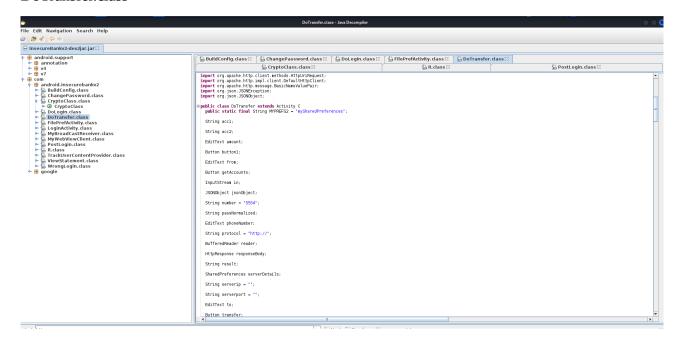
Ejercicio3

ChangePassword.class

```
Complementations in the Complementation of th
```

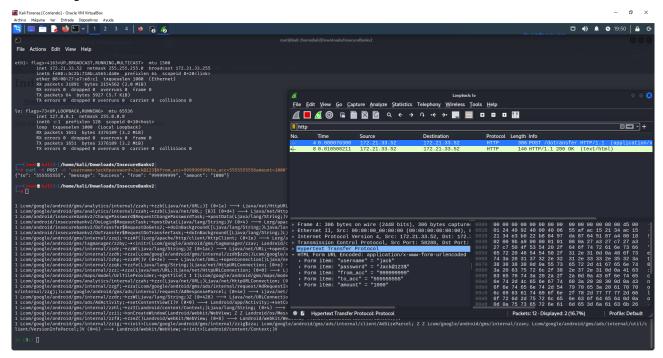
DoLogin.class

DoTransfer.class



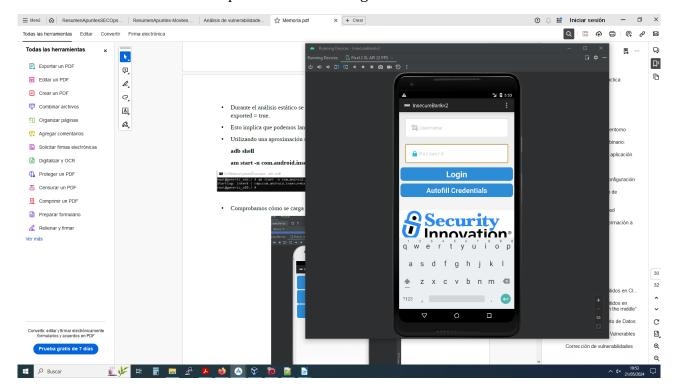
Ejercicio4

Ejercicio7



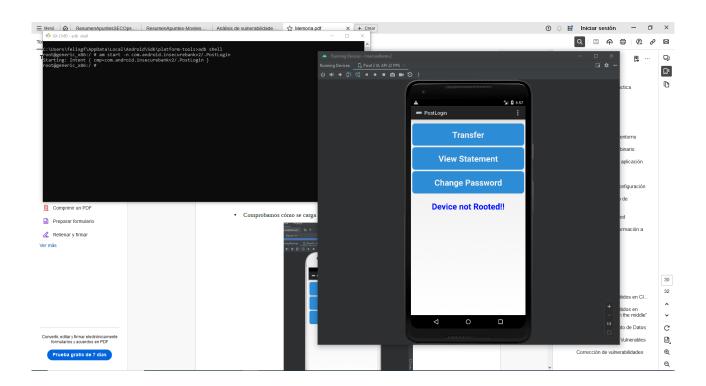
Ejercicio8

Partimos de una situación de la aplicación sin estar logueada



Entramos en la ruta donde está el adb

y ejecutamos el comando para loguearnos



Ejercicio10

En la aplicación se hace uso indebido del almacenamiento por ejemplo en la ruta /sdcard se usa para guardar los datos de las trasferencias en el fichero Statements_jack.html

```
show_Paths(d, dx.tainted_packages.search_methods(".", "getExternalFilesDir", "."))
show_Paths(d, dx.tainted_packages.search_methods(".", "getExternalStorageDirectory", "."))
```

```
L Landroid/support/w/Content/ContextCompatry-jegEtzernalFilesDir(Landroid/content/Context; )_awa/lang/String;)\[]_awa/io/File; (0.0) -> Landroid/support/w/Content/Context(Daya/String;)\[]_awa/io/File; (0.0) -> Landroid/support/w/Content/Context(Daya-String;)\[]_awa/io/File; (0.0) -> Landroid/support/w/Content/Context(Daya-String;)\[]_awa/io/F
```

Comprobando el código de ViewStatement.

```
if (var3.exists()) {
    webView var4 = (WebView)this.findViewById(2131558530);
    var4.loadUrl("inler//" + Environment.getExternalStorageDirectory() + "/Statements_" + this.uname + ".html");
    var4.getSettings().setJavaScriptEnabled(true);
    var4.getSettings().setSaveFormData(true);
    var4.getSettings().setBuiltInZoomControls(true);
    var4.setWebViewClient(new MyWebViewClient());
    var4.setWebViewClient(new MyWebViewClient());
} else {
    this.startActivity(new Intent(this, PostLogin.class));
    Toast.makeText(this, "Statement does not Exist!", 1).show();
}
```

Estos serían los pasos a seguir

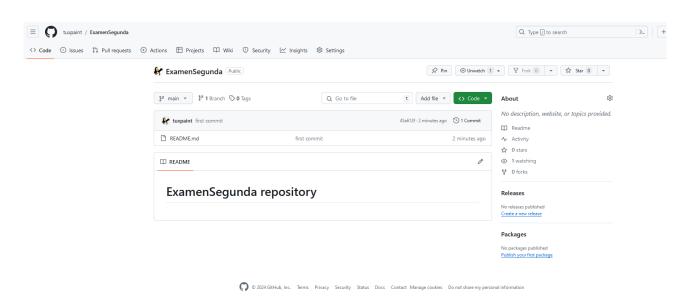
Implementar cifrado de datos y almacenamiento seguro para proteger información sensible.

Evitar modos inseguros: No usar modos de almacenamiento como WRITEABLE o READABLE para datos sensibles.

Almacenamiento interno y cifrado: Utilizar almacenamiento interno del dispositivo y cifrar cada archivo individualmente, especialmente en versiones de Android 7+.

Evitar almacenamiento externo: No almacenar datos sensibles en almacenamiento externo, ya que es más vulnerable.

GIT



```
# history | grep git

113 mkdir github

114 cd github

115 git clone https://github.com/komljen/dockerfile-examples.git

119 apt-get install git

121 mkdir github

124 git init

126 git add .

127 git commit -m "Primer commit: Añadido README"

128 git config --global user.email tuxpaint@protonmail.com

129 git config --global user.name tuxpaint

130 git remote add origin https://github.com/tuxpaint/ExamenSegunda.git

131 git branch -M main

132 git push -u origin main

135 git add README.md

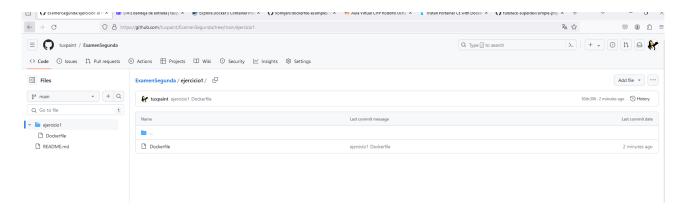
136 git push -u origin main

142 git status

143 git commit -m "first commit"

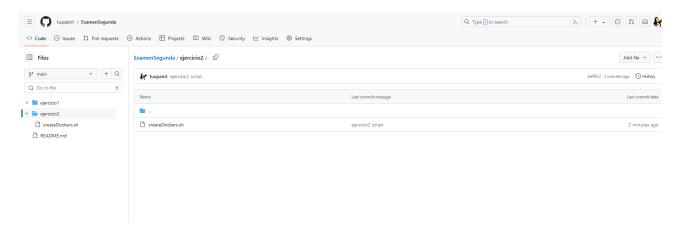
144 git push -u origin main
```

Subimos el primer ejercicio de docker



Subimos el script

```
ot® kali)-[~kali/ExamenSegunda/ejercicio2]
git add <u>createDockers.sh</u>
  -(root@kali)-[~kali/ExamenSegunda/ejercicio2]
git commit -m "ejercicio2 script'
[main 3ef99c2] ejercicio2 script
 1 file changed, 8 insertions(+)
create mode 100755 ejercicio2/createDockers.sh
  -(root@kali)-[~kali/ExamenSegunda/ejercicio2]
git push -u origin main
Username for 'https://github.com': tuxpaint@protonmail.com
Password for 'https://tuxpaint@protonmail.com@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 489 bytes | 489.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/tuxpaint/ExamenSegunda.git
   50dc306..3ef99c2 main → main
branch 'main' set up to track 'origin/main'.
   (root@ kali)-[~kali/ExamenSegunda/ejercicio2]
```



DOCKER

Ejercicio1

Creamos el Dockerfile

```
"more Dockerfile
# Usa una imagen base de Ubuntu
FROM ubuntu:latest
# Instala Apache y PHP
RUN apt-get update δ6 \
apt-get install -y apache2 php libapache2-mod-php git δ6 \
rm -rf /var/lib/apt/lists/*
# Exponer el puerto 80 para Apache
EXPOSE 80
# Copia la aplicación web PHP al directorio de Apache
RUN rm -rf /var/www/html/*
RUN git clone https://github.com/fullstack-superdev/simple-php-website/var/www/html/
# CMD predeterminado para el contenedor
CMD ["apache2ctl", "-D", "FOREGROUND"]
```

Creamos la imágen

Creamos un contenedor

```
| CREATED | STATUS | Sta
```

Comprobamos que funciona

Simple PHP Website

Home | About Us | Products | Contact

Home

This is **home** page. Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to usin 'Content here, content here,' making it look like readable English. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem Ipsum' will uncover many web sites still in their infancy. Various versions have evolved over the years, sometimes by accident, sometimes on purpose (injected humour and the like).

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```
(<mark>root⊕ kali</mark>)-[~kali/Examer
docker stop 2666f137eb1e
                 li)-[~kali/ExamenSegunda/ejercicio1]
2666f137eb1e
(root to kali)-[~kali/ExamenSegunda/ejercicio1]
// docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
                                                                             PORTS
                                                                                           NAMES
                ali)-[~kali/ExamenSegunda/ejercicio1]
 <mark>(root⊕ kali</mark>)-[~kali/Exan
# docker rm 2666f137eb1e
2666f137eb1e
root  kali)-[~kali/ExamenSegunda/ejercicio1]

# docker ps -a

CONTAINER ID IMAGE COMMAND CREATED
                                                                                                                  PORTS
                                                                                                                               NAMES
                                                                             STATUS
598fcce1b093 hello-world "/hello"
                                                     25 hours ago Exited (0) 25 hours ago
                                                                                                                                zealous_pare
           🐯 kali)-[~kali/ExamenSegunda/ejercicio1]
```

Creamos script para creacion de dockers

```
)-[/home/kali/ExamenSegunda/ejercicio2]
    chmod +x <u>createDockers.sh</u>
    (<mark>vno: © kali</mark>)-[/home/kali/ExamenSegunda/ejercicio2]
more <u>createDockers.sh</u>
#/bin/bash
port=10000
for i in 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20; do
port=$((port+1))
echo $port
echo $i
docker run -d -p $port:80 mi-aplicacion1-php
reateDockers.sh

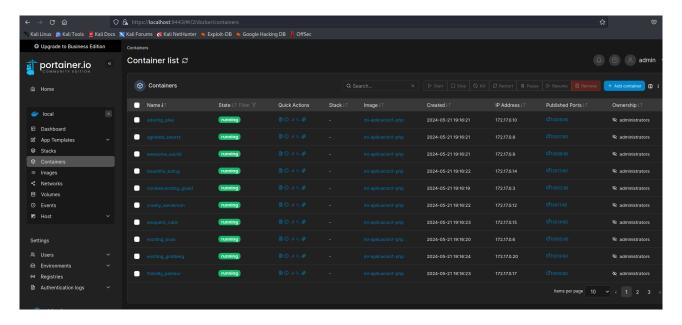
10001

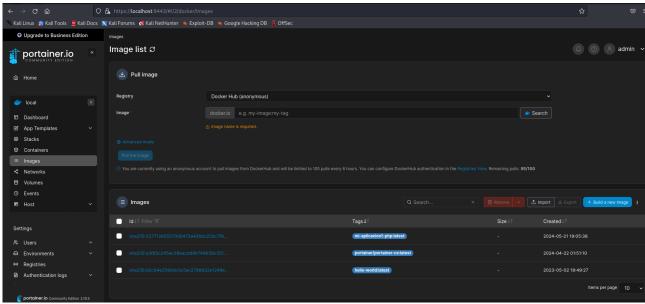
(reateDockers.sh)
-
9679b02c6c76fd86a2bc7d23c8821377ac6633b5ee43c55eedc69b3eef8172b9
ead7e2eb701849a1ba7b16ea75909f8e511c8967b2f5dda3b2307ec7ae0e6b19
399e50d4cadee07340a0af30ebdc521c025c50de189e30bdd7c6364ab93fff15
8b75238c6434d5674c28d8a30272a8f962286878e39e74d9034d7ac5fbb25daa
10005
-
7ffba957250495823b7882d051270ec23edf2d7bfe80b9d7834ea31fe85e807a
10006
bd97dc6cea4996cb7414149c8a79b674f83186252d363b01e596b8dbd710a15e
.
c19dde78eee1f622175a41a866b49fd3ba84206d46c7f9427faea71ea7cc8183
d8effb0018bdaa2ef88e93509d4ef759850498507ef833b1a32869a8a85657c5
10009
8426664047b453b58bc9b04113291d5dbec683ba1b19719fb59a042f62cc5c92
10010
3a218ea1fe6e38e875f36a52223c9904376acb32c2086b1543ad258028081f14
10011
--
20b0ef2fa18efb7d42bc2c1e3c7731285a03954f1ead5d2a02d2c9c78b97aad9
10012
```

```
(root® kali)-[/home/kali/ExamenSegunda/ejercicio2]
chmod +x <u>createDockers.sh</u>
            uali)-[/home/kali/ExamenSegunda/ejercicio2]
(root@ kali)-[/home/kal
more createDockers.sh
#/bin/bash
port=10000
for i in 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20; do
port=$((port+1))
echo $port
echo $i
docker run -d -p $port:80 mi-aplicacion1-php
(rooto kali)-[/home/kali/ExamenSegunda/ejercicio2]
sh createDockers.sh
1
9679b02c6c76fd86a2bc7d23c8821377ac6633b5ee43c55eedc69b3eef8172b9
10002
- ead7e2eb701849a1ba7b16ea75909f8e511c8967b2f5dda3b2307ec7ae0e6b19
399e50d4cadee07340a0af30ebdc521c025c50de189e30bdd7c6364ab93fff15
10004
8b75238c6434d5674c28d8a30272a8f962286878e39e74d9034d7ac5fbb25daa
10005
.
7ffba957250495823b7882d051270ec23edf2d7bfe80b9d7834ea31fe85e807a
bd97dc6cea4996cb7414149c8a79b674f83186252d363b01e596b8dbd710a15e
c19dde78eee1f622175a41a866b49fd3ba84206d46c7f9427faea71ea7cc8183
-
d8effb0018bdaa2ef88e93509d4ef759850498507ef833b1a32869a8a85657c5
10009
8426664047b453b58bc9b04113291d5dbec683ba1b19719fb59a042f62cc5c92
10
3a218ea1fe6e38e875f36a52223c9904376acb32c2086b1543ad258028081f14
10011
11
20b0ef2fa18efb7d42bc2c1e3c7731285a03954f1ead5d2a02d2c9c78b97aad9
10012
```

— (100 © 101)-[/home/kali/ExamenSegunda/ejercicio2]						
docker ps	THAGE COMMAND	CREATED STATUS PORTS				
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
5d05b68a36f6	mi-aplicacion1-php	"apache2ctl -D FOREG"	7 seconds ago	Up 6 seconds	0.0.0.0:10020→80/tcp, :::10020→80/tcp	modest austin
6a7a7411ed00	mi-aplicacion1-php	"apache2ctl -D FOREG"	7 seconds ago	Up 6 seconds	0.0.0.0:10019→80/tcp, :::10019→80/tcp	exciting_goldberg
c5d63f00d1cd	mi-aplicacion1-php	"apache2ctl -D FOREG"	7 seconds ago	Up 6 seconds	0.0.0.0:10018→80/tcp, :::10018→80/tcp	hungry_hermann
5963477daf90	mi-aplicacion1-php	"apache2ctl -D FOREG"	7 seconds ago	Up 7 seconds	0.0.0.0:10017→80/tcp, :::10017→80/tcp	gallant curran
f2a7d2dd26c	mi-aplicacion1-php	"apache2ctl -D FOREG"	8 seconds ago	Up 7 seconds	0.0.0.0:10016→80/tcp, :::10016→80/tcp	friendly_pasteur
7004963e84b1	mi-aplicacion1-php	"apache2ctl -D FOREG"	8 seconds ago	Up 7 seconds	0.0.0.0:10015→80/tcp, :::10015→80/tcp	nostalgic_pike
7ba405076405	mi-aplicacion1-php	"apache2ctl -D FOREG"	8 seconds ago	Up 8 seconds	0.0.0.0:10014→80/tcp, :::10014→80/tcp	eloquent rubin
80710ba78088	mi-aplicacion1-php	"apache2ctl -D FOREG"	9 seconds ago	Up 8 seconds	0.0.0.0:10013→80/tcp, :::10013→80/tcp	beautiful_turing
fe0a5661588b	mi-aplicacion1-php	"apache2ctl -D FOREG"	9 seconds ago	Up 8 seconds	0.0.0.0:10012→80/tcp, :::10012→80/tcp	keen_franklin
20b0ef2fa18e	mi-aplicacion1-php	"apache2ctl -D FOREG"	9 seconds ago	Up 8 seconds	0.0.0.0:10011→80/tcp, :::10011→80/tcp	cranky_sanderson
3a218ea1fe6e	mi-aplicacion1-php	"apache2ctl -D FOREG"	10 seconds ago	Up 9 seconds	0.0.0.0:10010→80/tcp, :::10010→80/tcp	quizzical_fermat
3426664047b4	mi-aplicacion1-php	"apache2ctl -D FOREG"	10 seconds ago	Up 9 seconds	0.0.0.0:10009→80/tcp, :::10009→80/tcp	adoring_pike
18effb0018bd	mi-aplicacion1-php	"apache2ctl -D FOREG"	10 seconds ago	Up 9 seconds	0.0.0.0:10008→80/tcp, :::10008→80/tcp	awesome_euclid
19dde78eee1	mi-aplicacion1-php	"apache2ctl -D FOREG"	10 seconds ago	Up 10 seconds	0.0.0.0:10007→80/tcp, :::10007→80/tcp	agitated_swartz
bd97dc6cea49	mi-aplicacion1-php	"apache2ctl -D FOREG"	11 seconds ago	Up 10 seconds	0.0.0.0:10006→80/tcp, :::10006→80/tcp	zealous_kare
7ffba9572504	mi-aplicacion1-php	"apache2ctl -D FOREG"	11 seconds ago	Up 10 seconds	0.0.0.0:10005→80/tcp, :::10005→80/tcp	exciting_buck
8b75238c6434	mi-aplicacion1-php	"apache2ctl -D FOREG"	11 seconds ago	Up 11 seconds	0.0.0.0:10004→80/tcp, :::10004→80/tcp	funny_allen
399e50d4cade	mi-aplicacion1-php	"apache2ctl -D FOREG"	12 seconds ago	Up 11 seconds	0.0.0.0:10003→80/tcp, :::10003→80/tcp	suspicious_montalcini
ead7e2eb7018	mi-aplicacion1-php	"apache2ctl -D FOREG"	12 seconds ago	Up 11 seconds	0.0.0.0:10002→80/tcp, :::10002→80/tcp	condescending_gould
9679b02c6c76	mi-aplicacion1-php	"apache2ctl -D FOREG"	12 seconds ago	Up 11 seconds	0.0.0.0:10001→80/tcp, :::10001→80/tcp	sharp_kilby

Portainer





```
(kali@ kali)-[~/Downloads/Android-InsecureBankv2/AndroLabServer]
$ python2 app.py
The server is hosted on port: 8888
u = <User u'jack'>
{"message": "Correct Credentials", "user": "jack"}
s[]
6a7a7411ed00
c5d63f00d1cd
5963477daf90
0f2a7d2dd26c
7004963e84b1
7ba405076405
80710ba78088
fe0a5661588b
20b0ef2fa18e
3a218ea1fe6e
8426664047b4
d8effb0018bd
c19dde78eee1
bd97dc6cea49
7ffba9572504
8b75238c6434
399e50d4cade
ead7e2eb7018
9679b02c6c76
     -(<mark>root⊕ keli</mark>)-[~kali/ExamenSegunda/ejercicio3]
| docker ps
||TAINER ID IMAGE COMMAND CREATED STA
```