Android Storage Options

Option 1: SharedPreferences

Storage Options

- Shared Preferences
- Internal Storage
- External Storage
- SQLite Databases
- Network Connection

Using Shared Preferences

- The SharedPreferences class provides a general framework that allows you to save and retrieve persistent key-value pairs of primitive data types
- You can use SharedPreferences to save any primitive data: booleans, floats, ints, longs, and strings
- This data will persist across user sessions (even if your application is killed)

Get a SharedPreferences object

- getSharedPreferences() - Use this if you need multiple preferences files identified by name, which you specify with the first parameter
- getPreferences() - Use this if you need only one preferences file for your Activity. Because this will be the only preferences file for your Activity, you don't supply a name

Write to a SharedPreferences Object

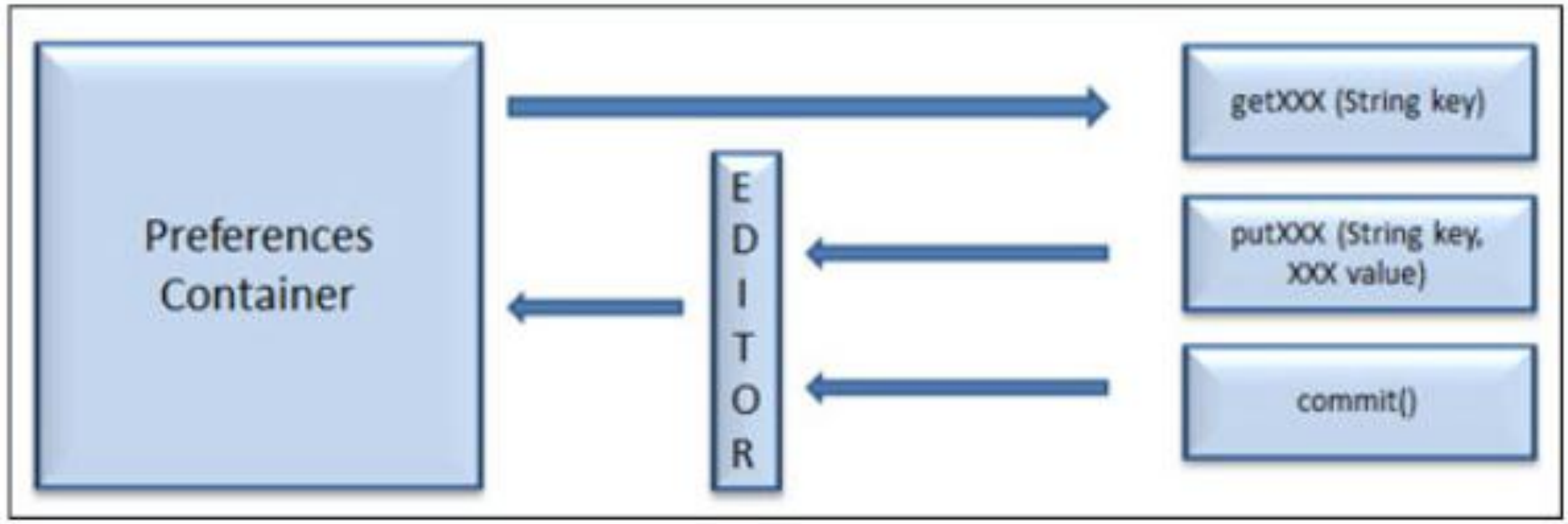
- Call edit() to get a SharedPreferences.Editor
- Add values with methods such as putBoolean() and putString()
- Commit the new values with commit()

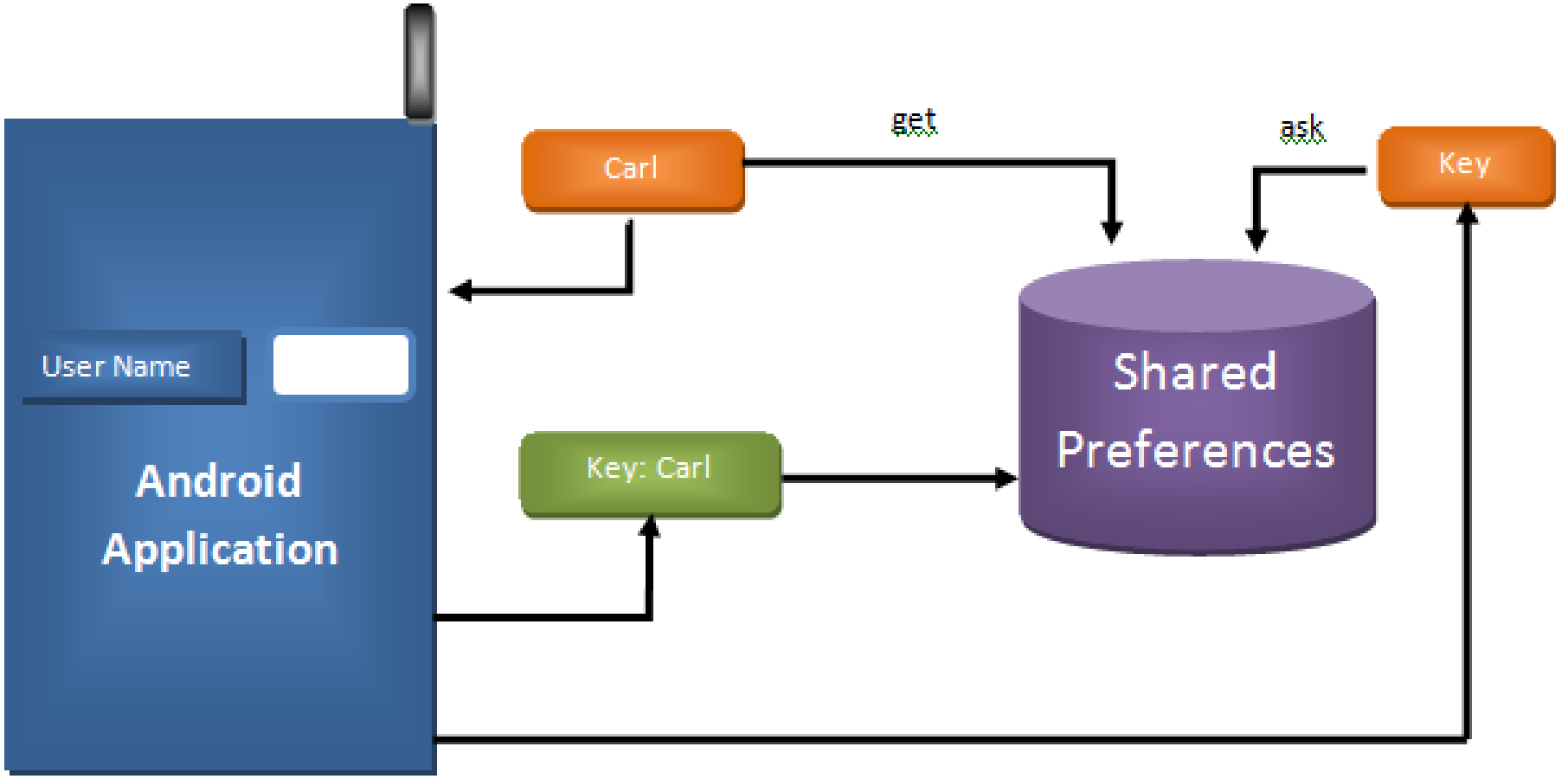
```
SharedPreferences sharedPref = getActivity().getPreferences(Context.MODE_PRIVATE);
SharedPreferences.Editor editor = sharedPref.edit();
editor.putInt(getString(R.string.saved_high_score), newHighScore);
editor.commit();
```

Read from a SharedPreferences Object

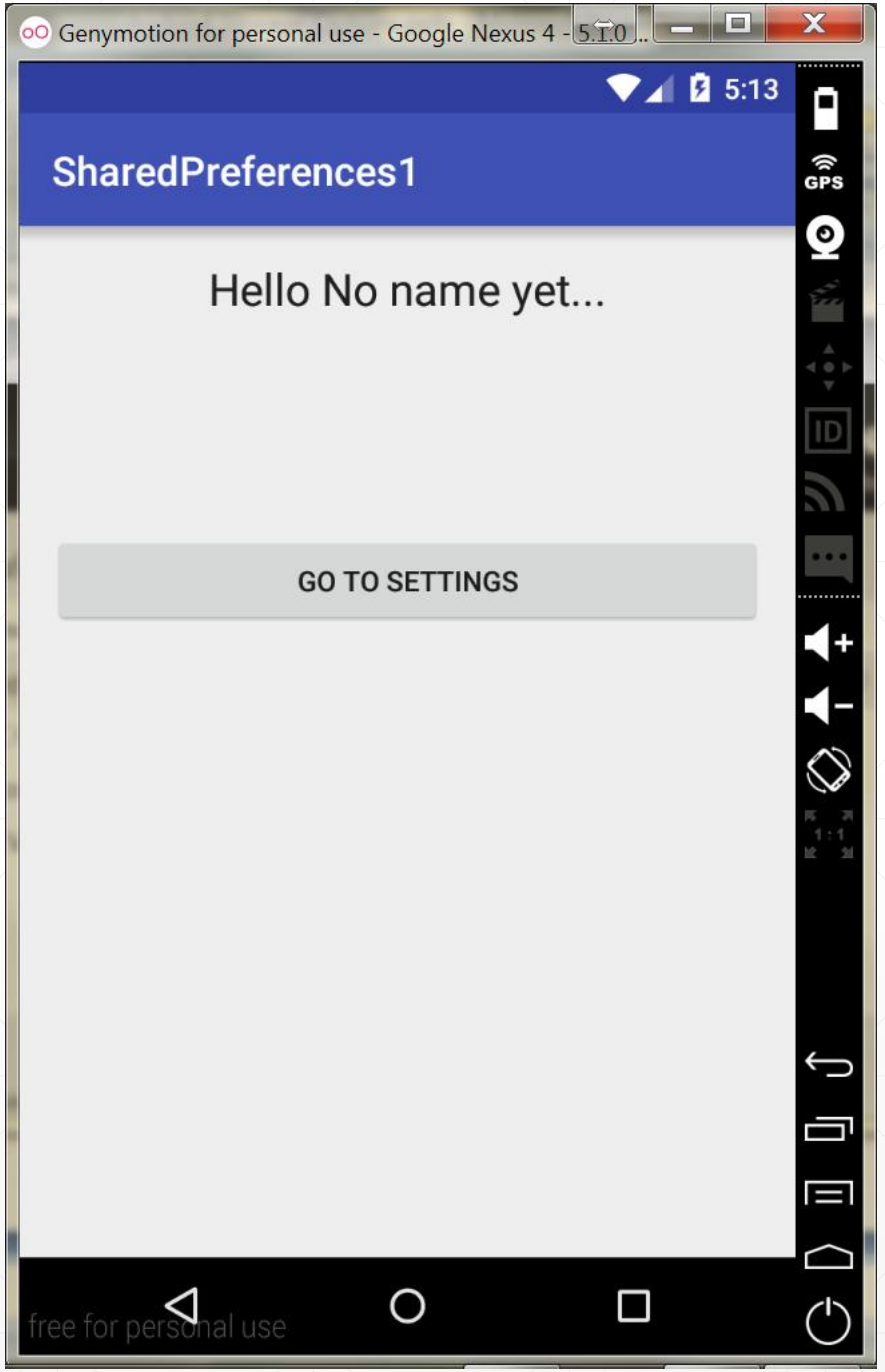
abstract Map<String, ?>	getAll () Retrieve all values from the preferences.
abstract boolean	getBoolean (String key, boolean defValue) Retrieve a boolean value from the preferences.
abstract float	getFloat (String key, float defValue) Retrieve a float value from the preferences.
abstract int	getInt (String key, int defValue) Retrieve an int value from the preferences.
abstract long	getLong (String key, long defValue) Retrieve a long value from the preferences.
abstract String	getString (String key, String defValue) Retrieve a String value from the preferences.
abstract Set<String>	getStringSet (String key, Set<String> defValues) Retrieve a set of String values from the preferences.

```
SharedPreferences sharedPref = getActivity().getPreferences(Context.MODE_PRIVATE);
int defaultValue = getResources().getInteger(R.string.saved_high_score_default);
long highScore = sharedPref.getInt(getString(R.string.saved_high_score), defaultValue);
```

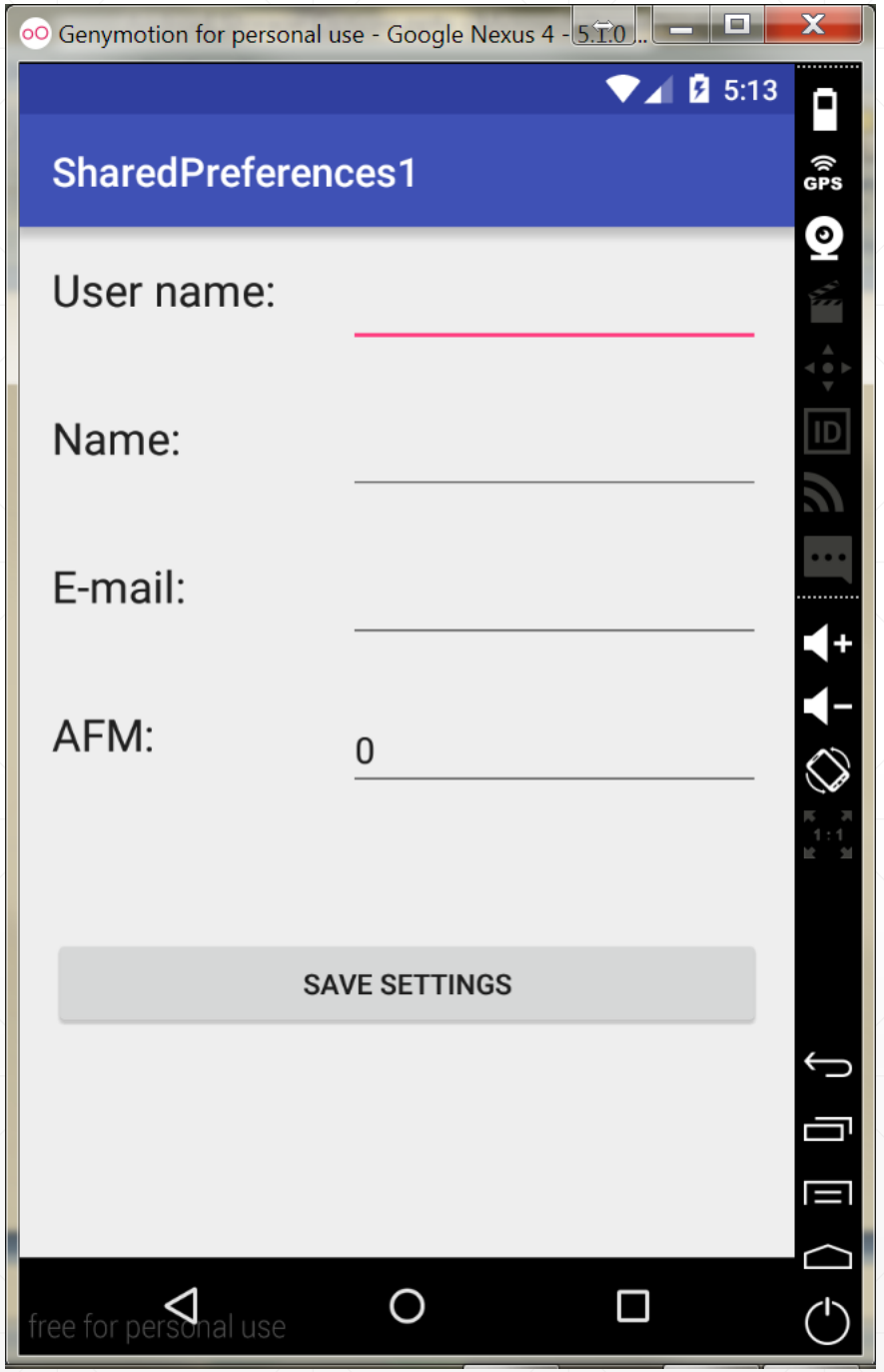

Preferences Container
EDITOR
getXXX (String key)
putXXX (String key, XXX value)
commit()


get
ask
Carl
Key
User Name
Android
Application
Key: Carl
Shared
Preferences

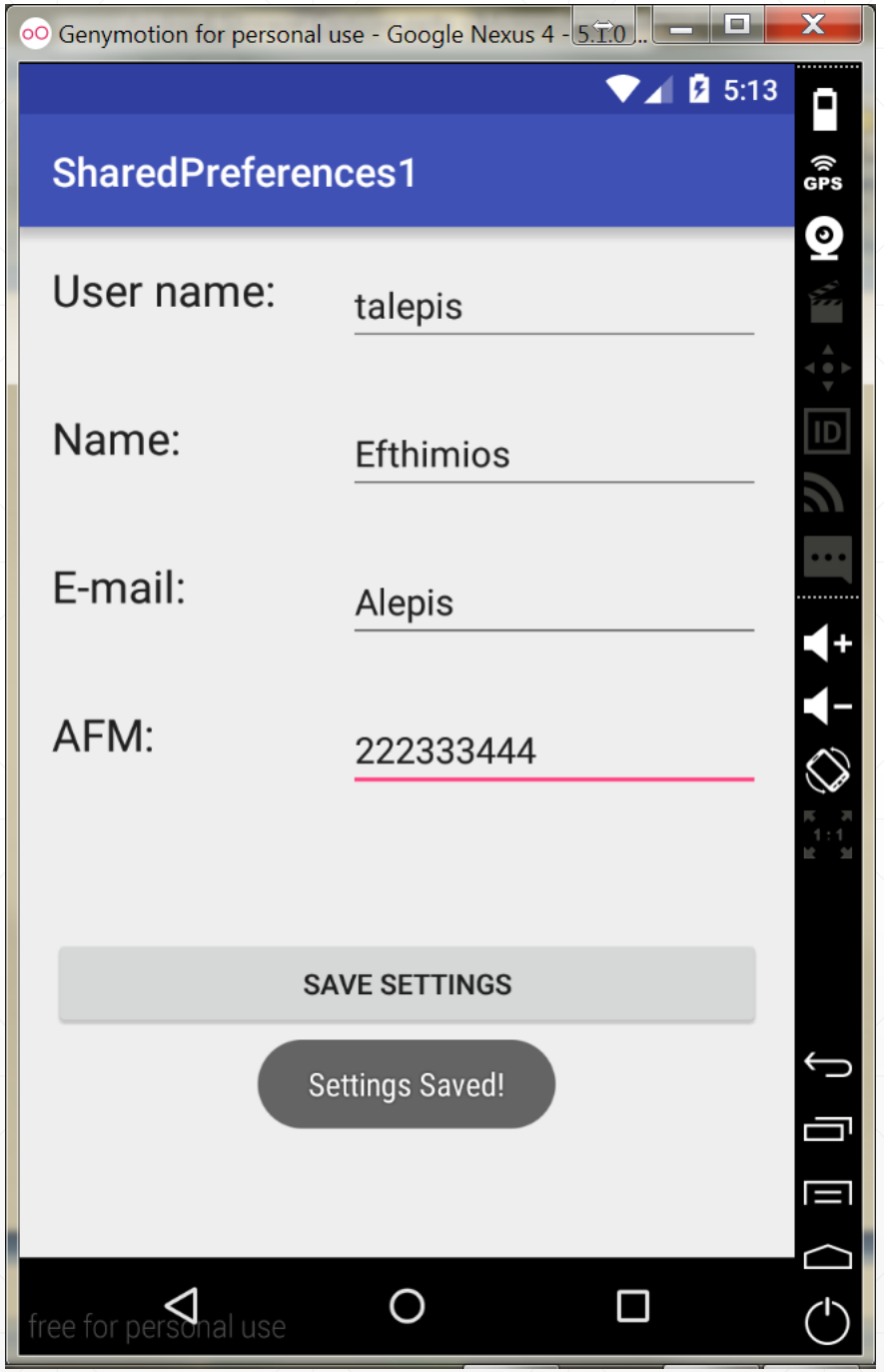
APK


Genymotion for personal use - Google Nexus 4 - 5.1.0
5:13
SharedPreferences1
Hello No name yet...
GO TO SETTINGS
free for personal use

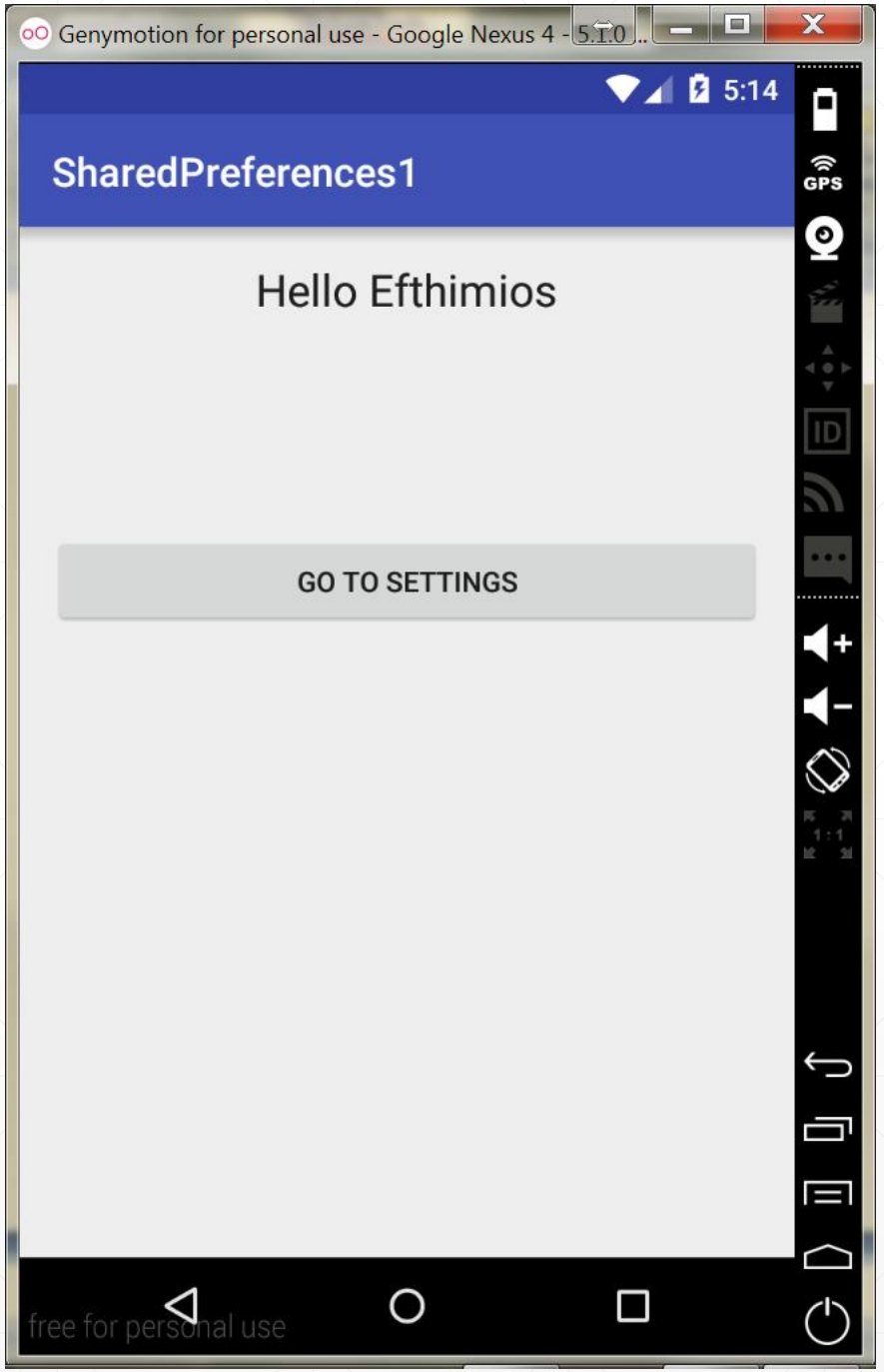
APK


Genymotion for personal use - Google Nexus 4 - 5.1.0
5:13
SharedPreferences1
User name:
Name:
E-mail:
AFM:
0
SAVE SETTINGS
free for personal use

APK


Genymotion for personal use - Google Nexus 4 - 5.1.0
5:13
SharedPreferences1
User name:
talepis
Name:
Efthimios
E-mail:
Alepis
AFM:
222333444
SAVE SETTINGS
Settings Saved!
free for personal use

APK


Genymotion for personal use - Google Nexus 4 - 5.1.0
5:14
SharedPreferences1
Hello Efthimios
GO TO SETTINGS
free for personal use