

## Identity Data Provider

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<b>1 Namespace Index</b>	<b>1</b>
1.1 Packages	1
<b>2 Hierarchical Index</b>	<b>3</b>
2.1 Class Hierarchy	3
<b>3 Class Index</b>	<b>5</b>
3.1 Class List	5
<b>4 Namespace Documentation</b>	<b>7</b>
4.1 Package com.wut.identity_data_provider	7
4.1.1 Detailed Description	7
<b>5 Class Documentation</b>	<b>9</b>
5.1 com.wut.identity_data_provider.activities.ActivityInput Class Reference	9
5.1.1 Detailed Description	10
5.1.2 Member Function Documentation	10
5.1.2.1 addAndSetUser()	10
5.1.2.2 backFromCalibration()	10
5.1.2.3 createNewPattern()	10
5.1.2.4 dispatchTouchEvent()	11
5.1.2.5 onAccuracyChanged()	11
5.1.2.6 onBackPressed()	11
5.1.2.7 onCreate()	11
5.1.2.8 onResume()	11
5.1.2.9 onSensorChanged()	11
5.1.2.10 patternLeft()	12
5.1.2.11 patternRight()	12
5.1.2.12 saveCalibration()	12
5.1.2.13 startInfoDialog()	13
5.1.2.14 startUserDialog()	13
5.1.2.15 switchMode()	13
5.1.2.16 updateActivityHeader()	13
5.2 com.wut.identity_data_provider.BuildConfig Class Reference	14
5.3 com.wut.identity_data_provider.data.DataDBHandler Class Reference	14
5.3.1 Detailed Description	15
5.3.2 Constructor & Destructor Documentation	15
5.3.2.1 DataDBHandler()	15
5.3.3 Member Function Documentation	15
5.3.3.1 addAndSetCalibration()	15
5.3.3.2 addAndSetConfigUser()	16
5.3.3.3 addAndSetNewPattern()	16
5.3.3.4 addDataEntry()	16
5.3.3.5 checkProgressAndSetBestCalibration()	17

5.3.3.6 completedTests()	17
5.3.3.7 completedTestsForCalibration()	17
5.3.3.8 getPatterns()	18
5.3.3.9 getReadyDataEntries()	18
5.3.3.10 getUsers()	18
5.3.3.11 setApplicationStatus()	18
5.3.3.12 setConfigPattern()	18
5.3.3.13 updateUploadedStatuses()	19
5.3.4 Member Data Documentation	19
5.3.4.1 mPatterns	19
5.3.4.2 mSettings	19
5.3.4.3 mUsers	19
5.3.4.4 SETTING_CALIBRATION	19
5.3.4.5 SETTING_PATTERN	19
5.3.4.6 SETTING_USER	20
5.3.4.7 SETTING_UUID	20
5.4 com.wut.identity_data_provider.data.DataDBHelper Class Reference	20
5.4.1 Detailed Description	20
5.4.2 Constructor & Destructor Documentation	20
5.4.2.1 DataDBHelper()	20
5.4.3 Member Function Documentation	21
5.4.3.1 onCreate()	21
5.4.3.2 onUpgrade()	21
5.4.4 Member Data Documentation	21
5.4.4.1 db	21
5.4.4.2 DB_NAME	22
5.5 com.wut.identity_data_provider.data.DataDBSchema Class Reference	22
5.5.1 Detailed Description	22
5.6 com.wut.identity_data_provider.data.DataProcessor Class Reference	22
5.6.1 Detailed Description	22
5.6.2 Member Function Documentation	22
5.6.2.1 compressString()	22
5.6.2.2 uploadData()	23
5.7 com.wut.identity_data_provider.dialogs.DialogInfo Class Reference	23
5.7.1 Detailed Description	23
5.7.2 Constructor & Destructor Documentation	24
5.7.2.1 DialogInfo()	24
5.7.3 Member Function Documentation	24
5.7.3.1 dismissDialog()	24
5.7.3.2 id()	24
5.7.3.3 startDialog()	24
5.7.3.4 toggleWelcome()	25

5.8 com.wut.identity_data_provider.dialogs.DialogLoading Class Reference	25
5.8.1 Detailed Description	25
5.8.2 Constructor & Destructor Documentation	25
5.8.2.1 DialogLoading()	25
5.8.3 Member Function Documentation	26
5.8.3.1 dismissDialog()	26
5.8.3.2 startDialog()	26
5.9 com.wut.identity_data_provider.dialogs.DialogUsers Class Reference	26
5.9.1 Detailed Description	26
5.9.2 Constructor & Destructor Documentation	26
5.9.2.1 DialogUsers()	26
5.9.3 Member Function Documentation	27
5.9.3.1 dismissDialog()	27
5.9.3.2 startDialog()	27
5.10 com.wut.identity_data_provider.views.ViewDrawPath Class Reference	27
5.10.1 Detailed Description	28
5.10.2 Constructor & Destructor Documentation	28
5.10.2.1 ViewDrawPath() [1/3]	28
5.10.2.2 ViewDrawPath() [2/3]	28
5.10.2.3 ViewDrawPath() [3/3]	29
5.10.3 Member Function Documentation	29
5.10.3.1 clearPoints()	29
5.10.3.2 draw()	29
5.10.3.3 onDraw()	29
5.10.3.4 resetPoints()	29
5.11 com.wut.identity_data_provider.views.ViewGridAdapter Class Reference	30
5.11.1 Detailed Description	30
5.11.2 Constructor & Destructor Documentation	30
5.11.2.1 ViewGridAdapter()	30
5.11.3 Member Function Documentation	31
5.11.3.1 calibrationSetting()	31
5.11.3.2 getAndClearInPasswd()	31
5.11.3.3 getCount()	31
5.11.3.4 getItem()	32
5.11.3.5 getItemId()	32
5.11.3.6 getSelected()	32
5.11.3.7 getView()	32
5.11.3.8 parsePattern()	33
5.11.3.9 verifyResult()	33



# Chapter 1

## Namespace Index

### 1.1 Packages

Here are the packages with brief descriptions (if available):

<a href="#">com.wut.identity_data_provider</a> . . . . .	7
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## Chapter 2

# Hierarchical Index

### 2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

com.wut.identity_data_provider.BuildConfig . . . . .	14
com.wut.identity_data_provider.data.DataDBSchema . . . . .	22
com.wut.identity_data_provider.data.DataProcessor . . . . .	22
com.wut.identity_data_provider.dialogs.DialogInfo . . . . .	23
com.wut.identity_data_provider.dialogs.DialogLoading . . . . .	25
com.wut.identity_data_provider.dialogs.DialogUsers . . . . .	26
Activity	
com.wut.identity_data_provider.activities.ActivityInput . . . . .	9
BaseAdapter	
com.wut.identity_data_provider.views.ViewGridAdapter . . . . .	30
SensorEventListener	
com.wut.identity_data_provider.activities.ActivityInput . . . . .	9
Serializable	
com.wut.identity_data_provider.data.DataDBHandler . . . . .	14
SQLiteOpenHelper	
com.wut.identity_data_provider.data.DataDBHelper . . . . .	20
View	
com.wut.identity_data_provider.views.ViewDrawPath . . . . .	27



## Chapter 3

# Class Index

### 3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

<a href="#">com.wut.identity_data_provider.activities.ActivityInput</a>	9
<a href="#">com.wut.identity_data_provider.BuildConfig</a>	14
<a href="#">com.wut.identity_data_provider.data.DataDBHandler</a>	14
<a href="#">com.wut.identity_data_provider.data.DataDBHelper</a>	20
<a href="#">com.wut.identity_data_provider.data.DataDBSchema</a>	22
<a href="#">com.wut.identity_data_provider.data.DataProcessor</a>	22
<a href="#">com.wut.identity_data_provider.dialogs.DialogInfo</a>	23
<a href="#">com.wut.identity_data_provider.dialogs.DialogLoading</a>	25
<a href="#">com.wut.identity_data_provider.dialogs.DialogUsers</a>	26
<a href="#">com.wut.identity_data_provider.views.ViewDrawPath</a>	27
<a href="#">com.wut.identity_data_provider.views.ViewGridAdapter</a>	30



## Chapter 4

# Namespace Documentation

### 4.1 Package com.wut.identity\_data\_provider

#### Classes

- class [BuildConfig](#)

#### 4.1.1 Detailed Description

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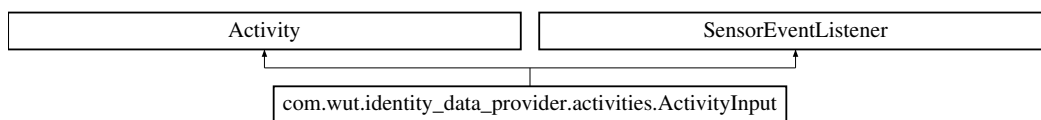


## Chapter 5

# Class Documentation

### 5.1 com.wut.identity\_data\_provider.activities.ActivityInput Class Reference

Inheritance diagram for com.wut.identity\_data\_provider.activities.ActivityInput:



#### Public Member Functions

- void [onSensorChanged](#) (SensorEvent event)
- void [onAccuracyChanged](#) (Sensor sensor, int i)
- boolean [dispatchTouchEvent](#) (MotionEvent ev)
- void [switchMode](#) (View view)
- void [backFromCalibration](#) (View view)
- void [saveCalibration](#) (View view)
- int [updateActivityHeader](#) ()
- void [patternLeft](#) (View view)
- void [patternRight](#) (View view)
- void [startUserDialog](#) (View view)
- void [startInfoDialog](#) (View view)
- void [addAndSetUser](#) (String user)
- void [onBackPressed](#) ()
- void [createNewPattern](#) (View vw)

#### Protected Member Functions

- void [onCreate](#) (Bundle savedInstanceState)
- void [onResume](#) ()

### 5.1.1 Detailed Description

Main and the only Activity class for Identity Data Provider.

### 5.1.2 Member Function Documentation

#### 5.1.2.1 addAndSetUser()

```
void com.wut.identity_data_provider.activities.ActivityInput.addAndSetUser (
    String user )
```

Method used after adding new user.

##### Parameters

<i>user</i>	String with new user's name.
-------------	------------------------------

#### 5.1.2.2 backFromCalibration()

```
void com.wut.identity_data_provider.activities.ActivityInput.backFromCalibration (
    View view )
```

Handle pressing built-in "back" button when in CALIBRATION mode.

##### Parameters

<i>view</i>	View that executes the method as an onClick method.
-------------	---

#### 5.1.2.3 createNewPattern()

```
void com.wut.identity_data_provider.activities.ActivityInput.createNewPattern (
    View vw )
```

Method used handling doubletaps on the pattern progress. Set up the screen for adding/switching patterns.

##### Parameters

<i>vw</i>	View that dispatched the event.
-----------	---------------------------------



#### 5.1.2.4 dispatchTouchEvent()

```
boolean com.wut.identity_data_provider.activities.ActivityInput.dispatchTouchEvent (
    MotionEvent ev )
```

This method catches and handles all the touch events within the application.

##### Parameters

<i>ev</i>	Event that caused touchscreen listener to execute this method.
-----------	--

##### Returns

Boolean describing whether the event was consumed properly.

#### 5.1.2.5 onAccuracyChanged()

```
void com.wut.identity_data_provider.activities.ActivityInput.onAccuracyChanged (
    Sensor sensor,
    int i )
```

Needs to be declared as a proper implementation of `SensorEventListener`.

#### 5.1.2.6 onBackPressed()

```
void com.wut.identity_data_provider.activities.ActivityInput.onBackPressed ( )
```

Method used for exiting the app - doubletap.

#### 5.1.2.7 onCreate()

```
void com.wut.identity_data_provider.activities.ActivityInput.onCreate (
    Bundle savedInstanceState ) [protected]
```

Creates all the initial settings required to perform the data provision tests. These are maintained within the SQLite Database, which is created during first application launch. Connection to the database is open until the [ActivityInput](#) is closed.

#### 5.1.2.8 onResume()

```
void com.wut.identity_data_provider.activities.ActivityInput.onResume ( ) [protected]
```

Restore sensor listeners in [onResume\(\)](#).

#### 5.1.2.9 onSensorChanged()

```
void com.wut.identity_data_provider.activities.ActivityInput.onSensorChanged (
    SensorEvent event )
```

Updates internal float arrays with the most recent sensor data.

**Parameters**

<i>event</i>	Event that caused listener to execute this method.
--------------	--

**5.1.2.10 patternLeft()**

```
void com.wut.identity_data_provider.activities.ActivityInput.patternLeft (
    View view )
```

Switch pattern to the previous one.

**Parameters**

<i>view</i>	View of the dispatched event.
-------------	-------------------------------

**5.1.2.11 patternRight()**

```
void com.wut.identity_data_provider.activities.ActivityInput.patternRight (
    View view )
```

Switch pattern to the next one.

**Parameters**

<i>view</i>	View of the dispatched event.
-------------	-------------------------------

**5.1.2.12 saveCalibration()**

```
void com.wut.identity_data_provider.activities.ActivityInput.saveCalibration (
    View view )
```

Handle pressing built-in "back" button when in CALIBRATION mode.

**Parameters**

<i>view</i>	View that executes the method as an onClick method.
-------------	---

#### 5.1.2.13 startInfoDialog()

```
void com.wut.identity_data_provider.activities.ActivityInput.startInfoDialog (
    View view )
```

Method for opening an information dialog.

##### Parameters

<i>view</i>	View of the dispatched event.
-------------	-------------------------------

#### 5.1.2.14 startUserDialog()

```
void com.wut.identity_data_provider.activities.ActivityInput.startUserDialog (
    View view )
```

Method for opening a dialog for switching between/adding new user.

##### Parameters

<i>view</i>	View of the dispatched event.
-------------	-------------------------------

#### 5.1.2.15 switchMode()

```
void com.wut.identity_data_provider.activities.ActivityInput.switchMode (
    View view )
```

Short method for executing switch as onClick method.

##### Parameters

<i>view</i>	View that executes the method as an onClick method.
-------------	---

#### 5.1.2.16 updateActivityHeader()

```
int com.wut.identity_data_provider.activities.ActivityInput.updateActivityHeader ( )
```

Method for updating the application header based on currently selected settings.

**Returns**

Integer with currently completed pattern tests.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/activities/ActivityInput.java ↩

## 5.2 com.wut.identity\_data\_provider.BuildConfig Class Reference

### Static Public Attributes

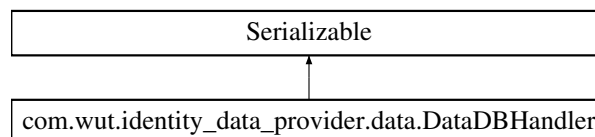
- static final boolean **DEBUG** = Boolean.parseBoolean("true")
- static final String **APPLICATION\_ID** = "com.wut.identity\_data\_provider"
- static final String **BUILD\_TYPE** = "debug"
- static final int **VERSION\_CODE** = 1
- static final String **VERSION\_NAME** = "1.0"

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/build/generated/source/buildConfig/debug/com/wut/identity\_data\_provider/BuildConfig.java ↩

## 5.3 com.wut.identity\_data\_provider.data.DataDBHandler Class Reference

Inheritance diagram for com.wut.identity\_data\_provider.data.DataDBHandler:



### Public Member Functions

- [DataDBHandler](#) (Context ctx)
- void [setApplicationStatus](#) ()
- void [addAndSetCalibration](#) (String newCalibration)
- void [getUsers](#) ()
- void [addAndSetConfigUser](#) (String user)
- void [getPatterns](#) ()
- void [setConfigPattern](#) (int idx)
- int [completedTests](#) ()
- void [addDataEntry](#) (String dataEntry)
- int [checkProgressAndSetBestCalibration](#) (boolean set)
- int [completedTestsForCalibration](#) (String calibrationOption)
- void [addAndSetNewPattern](#) (ArrayList< Integer > pattern)

## Static Public Member Functions

- static HashMap< Integer, String > [getReadyDataEntries](#) ()
- static void [updateUploadedStatuses](#) (String ID)

## Public Attributes

- final Map< String, String > [mSettings](#)
- ArrayList< String > [mPatterns](#)
- ArrayList< String > [mUsers](#)

## Static Public Attributes

- static final String [SETTING\\_CALIBRATION](#) = "CALIBRATION"
- static final String [SETTING\\_UUID](#) = "UUID"
- static final String [SETTING\\_USER](#) = "USER"
- static final String [SETTING\\_PATTERN](#) = "PATTERN"

### 5.3.1 Detailed Description

Class used to handle connection with SQLite and store app settings and configuration.

### 5.3.2 Constructor & Destructor Documentation

#### 5.3.2.1 DataDBHandler()

```
com.wut.identity_data_provider.data.DataDBHandler.DataDBHandler (
    Context ctx )
```

Constructor for DB Handler, setting up DB handler, settings and configuration.

#### Parameters

<i>ctx</i>	Context of the application.
------------	-----------------------------

### 5.3.3 Member Function Documentation

#### 5.3.3.1 addAndSetCalibration()

```
void com.wut.identity_data_provider.data.DataDBHandler.addAndSetCalibration (
    String newCalibration )
```

Set the calibration setting and add it to the DB.

#### Parameters

<i>newCalibration</i>	String storing the calibration height.
-----------------------	--

### 5.3.3.2 addAndSetConfigUser()

```
void com.wut.identity_data_provider.data.DataDBHandler.addAndSetConfigUser (
    String user )
```

Add new user to DB and set it as the current one.

#### Parameters

<i>user</i>	the user
-------------	----------

### 5.3.3.3 addAndSetNewPattern()

```
void com.wut.identity_data_provider.data.DataDBHandler.addAndSetNewPattern (
    ArrayList< Integer > pattern )
```

Adds new pattern to the DB for later availability and then sets it up as the currently selected option.

#### Parameters

<i>pattern</i>	Array of integers describing pattern order.
----------------	---

### 5.3.3.4 addDataEntry()

```
void com.wut.identity_data_provider.data.DataDBHandler.addDataEntry (
    String dataEntry )
```

Method used for saving data entry to DB.

#### Parameters

<i>dataEntry</i>	String containing compressed JSON with entry data.
------------------	--

#### 5.3.3.5 checkProgressAndSetBestCalibration()

```
int com.wut.identity_data_provider.data.DataDBHandler.checkProgressAndSetBestCalibration (
    boolean set )
```

Select the calibration method which has completed the basic tests and has the most of them.

##### Parameters

<i>set</i>	Only set the calibration if the flag is set to true. Otherwise ignore it.
------------	---

##### Returns

Returns the calibration setting with the most data entries.

#### 5.3.3.6 completedTests()

```
int com.wut.identity_data_provider.data.DataDBHandler.completedTests ( )
```

Return the number of completed tests.

##### Returns

Returns integer containing number of completed tests for the currently selected setting.

#### 5.3.3.7 completedTestsForCalibration()

```
int com.wut.identity_data_provider.data.DataDBHandler.completedTestsForCalibration (
    String calibrationOption )
```

Returns the number of given entries of data for given calibration.

##### Parameters

<i>calibrationOption</i>	Given calibration option.
--------------------------	---------------------------

##### Returns

Returns number of given entries for the option.

#### 5.3.3.8 getPatterns()

```
void com.wut.identity_data_provider.data.DataDBHandler.getPatterns ( )
```

Set the list of all available patterns from DB.

#### 5.3.3.9 getReadyDataEntries()

```
static HashMap< Integer, String > com.wut.identity_data_provider.data.DataDBHandler.getReadyDataEntries ( ) [static]
```

Returns entries ready to be sent to Cloud DB.

##### Returns

Return a hashmap of IDs and their respective compressed data entries - only the ones that have not been sent yet and were already completed.

#### 5.3.3.10 getUsers()

```
void com.wut.identity_data_provider.data.DataDBHandler.getUsers ( )
```

Set the list of all users from DB.

#### 5.3.3.11 setApplicationStatus()

```
void com.wut.identity_data_provider.data.DataDBHandler.setApplicationStatus ( )
```

Set the last saved status of the application, stored in the SQLite DB.

#### 5.3.3.12 setConfigPattern()

```
void com.wut.identity_data_provider.data.DataDBHandler.setConfigPattern (
    int idx )
```

Set the currently selected pattern and save it as the configuration setting.

##### Parameters

<i>idx</i>	Index of the selected pattern within the configuration list.
------------	--



### 5.3.3.13 updateUploadedStatuses()

```
static void com.wut.identity_data_provider.data.DataDBHandler.updateUploadedStatuses (
    String ID ) [static]
```

Updates the status of a single data entry.

#### Parameters

<i>ID</i>	ID of data entry to update as successfully uploaded.
-----------	--

## 5.3.4 Member Data Documentation

### 5.3.4.1 mPatterns

```
ArrayList<String> com.wut.identity_data_provider.data.DataDBHandler.mPatterns
```

The M patterns.

### 5.3.4.2 mSettings

```
final Map<String,String> com.wut.identity_data_provider.data.DataDBHandler.mSettings
```

The M settings.

### 5.3.4.3 mUsers

```
ArrayList<String> com.wut.identity_data_provider.data.DataDBHandler.mUsers
```

The M users.

### 5.3.4.4 SETTING\_CALIBRATION

```
final String com.wut.identity_data_provider.data.DataDBHandler.SETTING_CALIBRATION = "CALIBRATION"
[static]
```

The constant SETTING\_CALIBRATION.

### 5.3.4.5 SETTING\_PATTERN

```
final String com.wut.identity_data_provider.data.DataDBHandler.SETTING_PATTERN = "PATTERN"
[static]
```

The constant SETTING\_PATTERN.

#### 5.3.4.6 SETTING\_USER

```
final String com.wut.identity_data_provider.data.DataDBHandler.SETTING_USER = "USER" [static]
```

The constant SETTING\_USER.

#### 5.3.4.7 SETTING\_UUID

```
final String com.wut.identity_data_provider.data.DataDBHandler.SETTING_UUID = "UUID" [static]
```

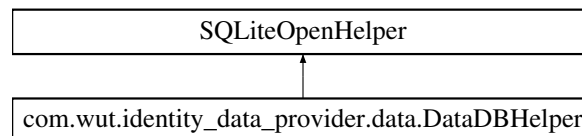
The constant SETTING\_UUID.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/data/DataDBHandler.java

## 5.4 com.wut.identity\_data\_provider.data.DataDBHelper Class Reference

Inheritance diagram for com.wut.identity\_data\_provider.data.DataDBHelper:



### Public Member Functions

- [DataDBHelper](#) (Context context)
- void [onCreate](#) (SQLiteDatabase db)
- void [onUpgrade](#) (SQLiteDatabase db, int oldVersion, int newVersion)

### Public Attributes

- final SQLiteDatabase [db](#)

### Static Public Attributes

- static final String [DB\\_NAME](#) = "identity\_data.db"

#### 5.4.1 Detailed Description

Class used to manage the SQLite DB - set it up, upgrade etc.

#### 5.4.2 Constructor & Destructor Documentation

##### 5.4.2.1 DataDBHelper()

```
com.wut.identity_data_provider.data.DataDBHelper.DataDBHelper (
    Context context )
```

Constructor for DB Helper, setting up DB connection and update UUID - matters only once, but requires context.

## Parameters

<i>context</i>	Context of the application.
----------------	-----------------------------

## 5.4.3 Member Function Documentation

### 5.4.3.1 onCreate()

```
void com.wut.identity_data_provider.data.DataDBHelper.onCreate (
    SQLiteDatabase db )
```

Create method for the creation of DB after 1st launch.

## Parameters

<i>db</i>	Handle to the DB.
-----------	-------------------

### 5.4.3.2 onUpgrade()

```
void com.wut.identity_data_provider.data.DataDBHelper.onUpgrade (
    SQLiteDatabase db,
    int oldVersion,
    int newVersion )
```

Create method for performing upgrades to DB.

## Parameters

<i>db</i>	Handle to the DB.
<i>oldVersion</i>	Integer describing old version number.
<i>newVersion</i>	Integer describing new version number.

## 5.4.4 Member Data Documentation

### 5.4.4.1 db

```
final SQLiteDatabase com.wut.identity_data_provider.data.DataDBHelper.db
```

The Db.

#### 5.4.4.2 DB\_NAME

```
final String com.wut.identity_data_provider.data.DataDBHelper.DB_NAME = "identity_data.db"  
[static]
```

The constant DB\_NAME.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_↔  
provider/data/DataDBHelper.java

## 5.5 com.wut.identity\_data\_provider.data.DataDBSchema Class Reference

### Classes

- class **Calibration**
- class **Config**
- class **DataEntry**
- class **Pattern**
- class **User**

#### 5.5.1 Detailed Description

Helper class used for storing DDLs for DB schema creation. Each inner class representing different table.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_↔  
provider/data/DataDBSchema.java

## 5.6 com.wut.identity\_data\_provider.data.DataProcessor Class Reference

### Static Public Member Functions

- static String [compressString](#) (String dataToCompress) throws IOException
- static void [uploadData](#) (Context context)

#### 5.6.1 Detailed Description

Class used for data processing - compressing the data and sending it to webhook in Azure.

#### 5.6.2 Member Function Documentation

##### 5.6.2.1 compressString()

```
static String com.wut.identity_data_provider.data.DataProcessor.compressString (  
    String dataToCompress ) throws IOException [static]
```

Method used to compress String data.

## Parameters

<i>dataToCompress</i>	String that needs to be compressed.
-----------------------	-------------------------------------

## Returns

String compressed data in form of an encoded string.

## Exceptions

<i>IOException</i>	the io exception
--------------------	------------------

## 5.6.2.2 uploadData()

```
static void com.wut.identity_data_provider.data.DataProcessor.uploadData (
    Context context ) [static]
```

Method used to send the data entries in an HTTP POST request message.

## Parameters

<i>context</i>	Context provided to the method to get secret API key and to get the API URL.
----------------	--

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/data/DataProcessor.java

## 5.7 com.wut.identity\_data\_provider.dialogs.DialogInfo Class Reference

## Public Member Functions

- [DialogInfo](#) (Activity activity)
- void [startDialog](#) ()
- void [dismissDialog](#) ()
- void [toggleWelcome](#) (View v)

## Static Public Member Functions

- static synchronized String [id](#) (Context context)

## 5.7.1 Detailed Description

Dialog class for displaying all the information about the application - usage, instructions etc.

## 5.7.2 Constructor & Destructor Documentation

### 5.7.2.1 DialogInfo()

```
com.wut.identity_data_provider.dialogs.DialogInfo.DialogInfo (
    Activity activity )
```

Dialog constructor.

#### Parameters

<i>activity</i>	Provides activity class for the main activity on which the dialog is being displayed.
-----------------	---

## 5.7.3 Member Function Documentation

### 5.7.3.1 dismissDialog()

```
void com.wut.identity_data_provider.dialogs.DialogInfo.dismissDialog ( )
```

Dialog dismissal method.

### 5.7.3.2 id()

```
static synchronized String com.wut.identity_data_provider.dialogs.DialogInfo.id (
    Context context ) [static]
```

Method used to extract the UUID of the user/application instance.

#### Parameters

<i>context</i>	Context used to get the shared preferences.
----------------	---

#### Returns

the string

### 5.7.3.3 startDialog()

```
void com.wut.identity_data_provider.dialogs.DialogInfo.startDialog ( )
```

Method for starting the dialog, setting up the submenu options.

#### 5.7.3.4 toggleWelcome()

```
void com.wut.identity_data_provider.dialogs.DialogInfo.toggleWelcome (
    View v )
```

Method used to toggle the submenus' header strings - arrows.

##### Parameters

<i>v</i>	View of the element that has to be toggled.
----------	---

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/dialogs/DialogInfo.java

## 5.8 com.wut.identity\_data\_provider.dialogs.DialogLoading Class Reference

### Public Member Functions

- [DialogLoading](#) (Activity activity)
- void [startDialog](#) ()
- void [dismissDialog](#) ()

#### 5.8.1 Detailed Description

Class used as a loading dialog so the application has some time to initialize.

#### 5.8.2 Constructor & Destructor Documentation

##### 5.8.2.1 DialogLoading()

```
com.wut.identity_data_provider.dialogs.DialogLoading.DialogLoading (
    Activity activity )
```

Dialog constructor.

##### Parameters

<i>activity</i>	Provides activity class for the main activity on which the dialog is being displayed.
-----------------	---

### 5.8.3 Member Function Documentation

#### 5.8.3.1 dismissDialog()

```
void com.wut.identity_data_provider.dialogs.DialogLoading.dismissDialog ( )
```

Dialog dismissal method.

#### 5.8.3.2 startDialog()

```
void com.wut.identity_data_provider.dialogs.DialogLoading.startDialog ( )
```

Method for starting the dialog.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/dialogs/DialogLoading.java

## 5.9 com.wut.identity\_data\_provider.dialogs.DialogUsers Class Reference

### Public Member Functions

- [DialogUsers](#) ([ActivityInput](#) activity)
- void [startDialog](#) (ArrayList< String > users)
- void [dismissDialog](#) ()

#### 5.9.1 Detailed Description

Class used for displaying a dialog of available users, and allowing to add new ones.

#### 5.9.2 Constructor & Destructor Documentation

##### 5.9.2.1 DialogUsers()

```
com.wut.identity_data_provider.dialogs.DialogUsers.DialogUsers (
    ActivityInput activity )
```

Dialog constructor.



## Parameters

<i>activity</i>	Provides activity class for the main activity on which the dialog is being displayed.
-----------------	---

### 5.9.3 Member Function Documentation

#### 5.9.3.1 dismissDialog()

```
void com.wut.identity_data_provider.dialogs.DialogUsers.dismissDialog ( )
```

Dialog dismissal method.

#### 5.9.3.2 startDialog()

```
void com.wut.identity_data_provider.dialogs.DialogUsers.startDialog (
    ArrayList< String > users )
```

Method for starting the dialog amd setting its contents.

## Parameters

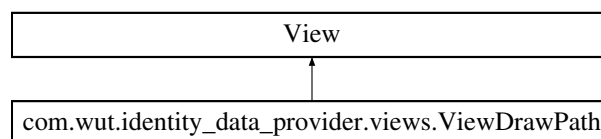
<i>users</i>	the users
--------------	-----------

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/dialogs/DialogUsers.java

## 5.10 com.wut.identity\_data\_provider.views.ViewDrawPath Class Reference

Inheritance diagram for com.wut.identity\_data\_provider.views.ViewDrawPath:



## Public Member Functions

- [ViewDrawPath](#) (Context context)
- [ViewDrawPath](#) (Context context, @Nullable AttributeSet attrs)
- [ViewDrawPath](#) (Context context, @Nullable AttributeSet attrs, int defStyleAttr)
- void [onDraw](#) (Canvas canvas)
- void [resetPoints](#) (List< PointF > pointFS)
- void [clearPoints](#) ()
- void [draw](#) ()

### 5.10.1 Detailed Description

Class used for displaying the pattern lines while user is drawing.

### 5.10.2 Constructor & Destructor Documentation

#### 5.10.2.1 ViewDrawPath() [1/3]

```
com.wut.identity_data_provider.views.ViewDrawPath.ViewDrawPath (
    Context context )
```

Mandatory constructors for View.

##### Parameters

<i>context</i>	the context
----------------	-------------

#### 5.10.2.2 ViewDrawPath() [2/3]

```
com.wut.identity_data_provider.views.ViewDrawPath.ViewDrawPath (
    Context context,
    @Nullable AttributeSet attrs )
```

Instantiates a new View draw path.

##### Parameters

<i>context</i>	the context
<i>attrs</i>	the attrs

### 5.10.2.3 ViewDrawPath() [3/3]

```
com.wut.identity_data_provider.views.ViewDrawPath.ViewDrawPath (
    Context context,
    @Nullable AttributeSet attrs,
    int defStyleAttr )
```

Instantiates a new View draw path.

#### Parameters

<i>context</i>	the context
<i>attrs</i>	the attrs
<i>defStyleAttr</i>	the def style attr

## 5.10.3 Member Function Documentation

### 5.10.3.1 clearPoints()

```
void com.wut.identity_data_provider.views.ViewDrawPath.clearPoints ( )
```

Method used for clearing the array with points to draw.

### 5.10.3.2 draw()

```
void com.wut.identity_data_provider.views.ViewDrawPath.draw ( )
```

Method used to invoke drawing.

### 5.10.3.3 onDraw()

```
void com.wut.identity_data_provider.views.ViewDrawPath.onDraw (
    Canvas canvas )
```

If more than one point is currently available then draw all lines between the points.

#### Parameters

<i>canvas</i>	Canvas for drawing the lines.
---------------	-------------------------------

### 5.10.3.4 resetPoints()

```
void com.wut.identity_data_provider.views.ViewDrawPath.resetPoints ( )
```

```
List< PointF > pointFS )
```

Reset the point array with a new one.

#### Parameters

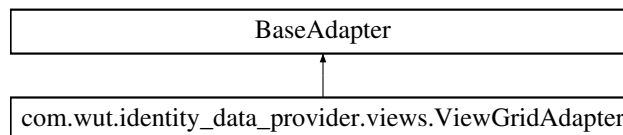
<i>pointFS</i>	Array of all selected points + additional point of current fingertip position.
----------------	--

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/views/ViewDrawPath.java

## 5.11 com.wut.identity\_data\_provider.views.ViewGridAdapter Class Reference

Inheritance diagram for com.wut.identity\_data\_provider.views.ViewGridAdapter:



### Public Member Functions

- [ViewGridAdapter](#) (Context applicationContext, int width, String pattern)
- int [getCount](#) ()
- Object [getItem](#) (int position)
- long [getItemId](#) (int i)
- ArrayList< Integer > [parsePattern](#) (String pattern)
- JSONObject [calibrationSetting](#) () throws JSONException
- boolean [verifyResult](#) ()
- ArrayList< Integer > [getAndClearInPasswd](#) ()
- List< PointF > [getSelected](#) (float top)
- View [getView](#) (final int pointer, View view, ViewGroup viewGroup)

#### 5.11.1 Detailed Description

Class responsible for managing the grid of points that user selects to perform the pattern tests.

#### 5.11.2 Constructor & Destructor Documentation

##### 5.11.2.1 ViewGridAdapter()

```
com.wut.identity_data_provider.views.ViewGridAdapter.ViewGridAdapter (
    Context applicationContext,
    int width,
    String pattern )
```

Grid adapter constructor.

## Parameters

<i>applicationContext</i>	Context of the application.
<i>width</i>	Calculated width of a single cell in a grid.
<i>pattern</i>	Currently selected pattern - in a String format.

### 5.11.3 Member Function Documentation

#### 5.11.3.1 calibrationSetting()

`JSONObject com.wut.identity_data_provider.views.ViewGridAdapter.calibrationSetting ( )` throws `JSONException`

Method for getting a JSON object for button positions.

## Returns

Returns a JSON object with button border positions.

## Exceptions

<i>JSONException</i>	the json exception
----------------------	--------------------

#### 5.11.3.2 getAndClearInPasswd()

`ArrayList< Integer > com.wut.identity_data_provider.views.ViewGridAdapter.getAndClearInPasswd ( )`

Copies the currently provided pattern and clears it.

## Returns

Returns an array of integers describing the provided pattern.

#### 5.11.3.3 getCount()

`int com.wut.identity_data_provider.views.ViewGridAdapter.getCount ( )`

Mandatory method - grid is always 3x3.

#### 5.11.3.4 getItem()

```
Object com.wut.identity_data_provider.views.ViewGridAdapter.getItem (
    int position )
```

Mandatory method - returns a radiobutton located in a grid under selected position.

#### 5.11.3.5 getItemId()

```
long com.wut.identity_data_provider.views.ViewGridAdapter.getItemId (
    int i )
```

Mandatory method - not used, always returns 0.

#### 5.11.3.6 getSelected()

```
List< PointF > com.wut.identity_data_provider.views.ViewGridAdapter.getSelected (
    float top )
```

Returns a list of points located on the screen for the drawn pattern.

##### Parameters

<i>top</i>	the top
------------	---------

##### Returns

Returns an array of points located at drawn pattern points.

#### 5.11.3.7 getView()

```
View com.wut.identity_data_provider.views.ViewGridAdapter.getView (
    final int pointer,
    View view,
    ViewGroup viewGroup )
```

Sets up the grid in correct position/calibration with square sizes.

##### Parameters

<i>pointer</i>	Id of the cell to set up.
<i>view</i>	View of the singular cell within the grid.
<i>viewGroup</i>	Not used.

**Returns**

Returns a singular cell in the grid.

**5.11.3.8 parsePattern()**

```
ArrayList< Integer > com.wut.identity_data_provider.views.ViewGridAdapter.parsePattern (
    String pattern )
```

Method used for parsing pattern saved in String format to an array of ID integers.

**Parameters**

<i>pattern</i>	String describing a selected pattern.
----------------	---------------------------------------

**Returns**

Returns array of integers of radiobutton IDs making a pattern.

**5.11.3.9 verifyResult()**

```
boolean com.wut.identity_data_provider.views.ViewGridAdapter.verifyResult ( )
```

Check if the provided pattern is correct.

**Returns**

Returns true if the drawn pattern was correct and clears it. Also handles drawing new patterns. New pattern has to be at least 4 points long.

The documentation for this class was generated from the following file:

- C:/Users/radek/AndroidStudioProjects/Identity-Data-Provider/app/src/main/java/com/wut/identity\_data\_provider/views/ViewGridAdapter.java ↩





# Index

addAndSetCalibration  
    com.wut.identity\_data\_provider.data.DataDBHandler, 15

addAndSetConfigUser  
    com.wut.identity\_data\_provider.data.DataDBHandler, 16

addAndSetNewPattern  
    com.wut.identity\_data\_provider.data.DataDBHandler, 16

addAndSetUser  
    com.wut.identity\_data\_provider.activities.ActivityInput, 10

addDataEntry  
    com.wut.identity\_data\_provider.data.DataDBHandler, 16

backFromCalibration  
    com.wut.identity\_data\_provider.activities.ActivityInput, 10

calibrationSetting  
    com.wut.identity\_data\_provider.views.ViewGridAdapter, 31

checkProgressAndSetBestCalibration  
    com.wut.identity\_data\_provider.data.DataDBHandler, 16

clearPoints  
    com.wut.identity\_data\_provider.views.ViewDrawPath, 29

com.wut.identity\_data\_provider, 7

com.wut.identity\_data\_provider.activities.ActivityInput, 9

    addAndSetUser, 10

    backFromCalibration, 10

    createNewPattern, 10

    dispatchTouchEvent, 10

    onAccuracyChanged, 11

    onBackPressed, 11

    onCreate, 11

    onResume, 11

    onSensorChanged, 11

    patternLeft, 12

    patternRight, 12

    saveCalibration, 12

    startInfoDialog, 12

    startUserDialog, 13

    switchMode, 13

    updateActivityHeader, 13

com.wut.identity\_data\_provider.BuildConfig, 14

com.wut.identity\_data\_provider.data.DataDBHandler, 14

    addAndSetCalibration, 15

    addAndSetConfigUser, 16

    addAndSetNewPattern, 16

    addDataEntry, 16

    checkProgressAndSetBestCalibration, 16

    completedTests, 17

    completedTestsForCalibration, 17

    DataDBHandler, 15

    getPatterns, 17

    getReadyDataEntries, 18

    getUsers, 18

    mPatterns, 19

    mSettings, 19

    mUsers, 19

    setApplicationStatus, 18

    setConfigPattern, 18

    SETTING\_CALIBRATION, 19

    SETTING\_PATTERN, 19

    SETTING\_USER, 19

    SETTING\_UUID, 20

    updateUploadedStatuses, 18

com.wut.identity\_data\_provider.data.DataDBHelper, 20

    DataDBHelper, 20

    db, 21

    DB\_NAME, 21

    onCreate, 21

    onUpgrade, 21

com.wut.identity\_data\_provider.data.DataDBSchema, 22

com.wut.identity\_data\_provider.data.DataProcessor, 22

    compressString, 22

    uploadData, 23

com.wut.identity\_data\_provider.dialogs.DialogInfo, 23

    DialogInfo, 24

    dismissDialog, 24

    id, 24

    startDialog, 24

    toggleWelcome, 24

com.wut.identity\_data\_provider.dialogs.DialogLoading, 25

    DialogLoading, 25

    dismissDialog, 26

    startDialog, 26

com.wut.identity\_data\_provider.dialogs.DialogUsers, 26

    DialogUsers, 26

    dismissDialog, 27

    startDialog, 27

com.wut.identity\_data\_provider.views.ViewDrawPath, 27

- clearPoints, 29
- draw, 29
- onDraw, 29
- resetPoints, 29
- ViewDrawPath, 28
- com.wut.identity\_data\_provider.views.ViewGridAdapter, 30
  - calibrationSetting, 31
  - getAndClearInPasswd, 31
  - getCount, 31
  - getItem, 31
  - getItemId, 32
  - getSelected, 32
  - getView, 32
  - parsePattern, 33
  - verifyResult, 33
  - ViewGridAdapter, 30
- completedTests
  - com.wut.identity\_data\_provider.data.DataDBHandler, 17
- completedTestsForCalibration
  - com.wut.identity\_data\_provider.data.DataDBHandler, 17
- compressString
  - com.wut.identity\_data\_provider.data.DataProcessor, 22
- createNewPattern
  - com.wut.identity\_data\_provider.activities.ActivityInput, 10
- DataDBHandler
  - com.wut.identity\_data\_provider.data.DataDBHandler, 15
- DataDBHelper
  - com.wut.identity\_data\_provider.data.DataDBHelper, 20
- db
  - com.wut.identity\_data\_provider.data.DataDBHelper, 21
- DB\_NAME
  - com.wut.identity\_data\_provider.data.DataDBHelper, 21
- DialogInfo
  - com.wut.identity\_data\_provider.dialogs.DialogInfo, 24
- DialogLoading
  - com.wut.identity\_data\_provider.dialogs.DialogLoading, 25
- DialogUsers
  - com.wut.identity\_data\_provider.dialogs.DialogUsers, 26
- dismissDialog
  - com.wut.identity\_data\_provider.dialogs.DialogInfo, 24
  - com.wut.identity\_data\_provider.dialogs.DialogLoading, 26
  - com.wut.identity\_data\_provider.dialogs.DialogUsers, 27
- dispatchTouchEvent
  - com.wut.identity\_data\_provider.activities.ActivityInput, 10
- draw
  - com.wut.identity\_data\_provider.views.ViewDrawPath, 29
- getAndClearInPasswd
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 31
- getCount
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 31
- getItem
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 31
- getItemId
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 32
- getPatterns
  - com.wut.identity\_data\_provider.data.DataDBHandler, 17
- getReadyDataEntries
  - com.wut.identity\_data\_provider.data.DataDBHandler, 18
- getSelected
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 32
- getUsers
  - com.wut.identity\_data\_provider.data.DataDBHandler, 18
- getView
  - com.wut.identity\_data\_provider.views.ViewGridAdapter, 32
- id
  - com.wut.identity\_data\_provider.dialogs.DialogInfo, 24
- mPatterns
  - com.wut.identity\_data\_provider.data.DataDBHandler, 19
- mSettings
  - com.wut.identity\_data\_provider.data.DataDBHandler, 19
- mUsers
  - com.wut.identity\_data\_provider.data.DataDBHandler, 19
- onAccuracyChanged
  - com.wut.identity\_data\_provider.activities.ActivityInput, 11
- onBackPressed
  - com.wut.identity\_data\_provider.activities.ActivityInput, 11
- onCreate
  - com.wut.identity\_data\_provider.activities.ActivityInput, 11
  - com.wut.identity\_data\_provider.data.DataDBHelper, 21

onDraw  
     com.wut.identity\_data\_provider.views.ViewDrawPath, 13  
     29  
 onResume  
     com.wut.identity\_data\_provider.activities.ActivityInput, 13  
     11  
 onSensorChanged  
     com.wut.identity\_data\_provider.activities.ActivityInput, 24  
     11  
 onUpgrade  
     com.wut.identity\_data\_provider.data.DataDBHelper, 13  
     21  
 parsePattern  
     com.wut.identity\_data\_provider.views.ViewGridAdapter, 18  
     33  
 patternLeft  
     com.wut.identity\_data\_provider.activities.ActivityInput, 23  
     12  
 patternRight  
     com.wut.identity\_data\_provider.activities.ActivityInput, 33  
     12  
 resetPoints  
     com.wut.identity\_data\_provider.views.ViewDrawPath, 28  
     29  
 saveCalibration  
     com.wut.identity\_data\_provider.activities.ActivityInput, 30  
     12  
 setApplicationStatus  
     com.wut.identity\_data\_provider.data.DataDBHandler, 18  
     18  
 setConfigPattern  
     com.wut.identity\_data\_provider.data.DataDBHandler, 18  
     18  
 SETTING\_CALIBRATION  
     com.wut.identity\_data\_provider.data.DataDBHandler, 19  
     19  
 SETTING\_PATTERN  
     com.wut.identity\_data\_provider.data.DataDBHandler, 19  
     19  
 SETTING\_USER  
     com.wut.identity\_data\_provider.data.DataDBHandler, 19  
     19  
 SETTING\_UUID  
     com.wut.identity\_data\_provider.data.DataDBHandler, 20  
     20  
 startDialog  
     com.wut.identity\_data\_provider.dialogs.DialogInfo, 24  
     24  
     com.wut.identity\_data\_provider.dialogs.DialogLoading, 26  
     26  
     com.wut.identity\_data\_provider.dialogs.DialogUsers, 27  
     27  
 startInfoDialog  
     com.wut.identity\_data\_provider.activities.ActivityInput, 12  
     12  
 startUserDialog