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Class Auth

< Fields > < Constructors > < Methods >

public class **Auth** extends java.lang.Object

Class for handling authentication This class is used for validating user credentials with the NHS server. This class is also used for saving, retrieving and deleting users credentials.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_accountPassword

private java.lang.String _accountPassword

accountUsername

private java.lang.String _accountUsername

Constructors

Auth

```
public Auth()
```

Methods

getSavedPassword

public static java.lang.String getSavedPassword(android.content.Context
context)

Gets the password saved within preferences

Parameters:

context - the context of the activity

Returns:

the saved password

getSavedUsername

public static java.lang.String getSavedUsername(android.content.Context
context)

Gets the username saved within preferences

Parameters:

context - the context of the activity

Returns:

the saved username

isLogged

public static boolean isLogged(android.content.Context context)

Checks if the user is currently logged in

Parameters:

context - the context of the activity

Returns:

true if the user is logged in, false otherwise

isValid

public java.lang.Boolean isValid(android.content.Context context)

Checks if the credentials set are correct. Returns true if correct, false if incorrect and null if there was a connection error

Returns:

the result of the validation check

logout

```
public static void logout(android.content.Context context)
```

Logs the user out by deleting there saved username and password

Parameters:

context - the context of the activity

prepareUrl

Prepares a URL from the XML customisation file to contain the user username and password

Parameters:

```
url - the url to prepare
username - the user username
password - the user password
```

Returns:

the prepared url

saveCredentials

```
public void saveCredentials(android.content.Context context)
```

Saves the credentials of the user into Preferences.

Parameters:

context - the context of the activity

setCredentials

Sets the credentials to be used for authenticating

Parameters:

```
username - of the user. password - of the user.
```

Class BrowseDrugsActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

< Fields > < Constructors > < Methods >

public class **BrowseDrugsActivity** extends <u>LoggedInActivity</u>

Activity for browsing drugs This activity is used to display a list of all drugs within the database. The user can search for drugs by entering a string. Once the user has found a drug, they can click it, which will open a ViewDrugActivity.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

EXTRA_DRUG_ID

public static final java.lang.String EXTRA_DRUG_ID

EXTRA INDEX NAME

public static final java.lang.String EXTRA_INDEX_NAME

db

DatabaseHelper _db

_listAdapter

android.widget.ArrayAdapter _listAdapter

Constructors

BrowseDrugsActivity

public BrowseDrugsActivity()

Methods

onCreate

protected void **onCreate**(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

poplateDrugsListView

private void poplateDrugsListView()

Populates the ListView with the drug indexes and adds on click listeners for the items.

startTextChangedListener

private void startTextChangedListener()

Adds a listener to the search box, so that when the search text changes the results are filtered

Class CalcDrugSelectActivity

```
+--android.content.Context

+--android.content.ContextWrapper

+--android.view.ContextThemeWrapper

+--android.app.Activity

+--CommonActivity

+--LoggedInActivity

+--com.fewstera.injectablemedicinesguide.CalcDrugSelect
```

All Implemented Interfaces:

java.lang.Object

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

< Fields > < Constructors > < Methods >

public class **CalcDrugSelectActivity** extends <u>LoggedInActivity</u>

Activity for selecting which drug to calculate dosgae for This activity is used to display a list of all drugs which have a calculator within the database. The user can search for drugs by entering a string. Once the user has found a drug, they can click it, which will open the calculator activity.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_db

<u>DatabaseHelper</u> _db

_listAdapter

android.widget.ArrayAdapter _listAdapter

Constructors

CalcDrugSelectActivity

public CalcDrugSelectActivity()

Methods

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

poplateDrugsListView

private void poplateDrugsListView()

Populates the ListView with the drug indexes and adds on click listeners for the items.

startTextChangedListener

private void startTextChangedListener()

Adds a listener to the search box, so that when the search text changes the results are filtered

Class CalculateActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback, android.widget.AdapterView.OnItemSelectedListener

< Fields > < Constructors > < Methods >

public class CalculateActivity

extends LoggedInActivity

implements android.widget.AdapterView.OnItemSelectedListener

Class for handling and displaying the calculate activity

This class is used to layout the calculate values and to send the calculation to the calculate class to validate and calculate.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fie<u>lds</u>

_calcType

private int _calcType

calculator

Calculator

_calculatorInfo

DrugCalculatorInfo
_calculatorInfo

db

DatabaseHelper _db

_drug

Drug _drug

_twoDp

private final java.text.DecimalFormat _twoDp

Constructors

CalculateActivity

public CalculateActivity()

Methods

calculateClick

public void calculateClick(android.view.View view)

This method is classed when the user clicks the calculate button. It gathers all information and sends it to the calculate object for validation. After validation the user will either be displayed with an error, warning or the successful calculation.

Parameters:

view - the view of the button pressed.

displayToast

private void displayToast(java.lang.String message)

Displays a message to the user in a Toast

Parameters:

message - the message to display

getDosCalcHtml

private java.lang.String getDosCalcHtml(double val)

Returns the HTML for displaying the calculations for dose from infusion rate. The HTML produces 2 equations (explaining the calculation used) and then answer.

Parameters:

val - the answer to the calculation

getDoubleFromEditText

private double getDoubleFromEditText(int editTextId)

Returns a double from a EditTExt

Parameters:

editTextId - the id of the EditText

Returns:

the duoble value of the EditText or -1 if not a number

getIRCalcHtml

private java.lang.String getIRCalcHtml(double val)

Returns the HTML for displaying the calculations for infusion rate from dose. The HTML produces 2 equations (explaining the calculation used) and then answer.

Parameters:

val - the answer to the calculation

loadCalcTypeSpinner

private void loadCalcTypeSpinner()

Loads the available calculation types from the strings array a populates the drop down list.

loadHeaderText

private void loadHeaderText()

Loads the appropriate text into the header labels.

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

onItemSelected

This method is called when the user changes the selected calcualtion type within the drop down menu

Parameters:

adapterView - the adapter view of the spinner view - the view of the selected item pos - the position of selected item id - the id of the selected item

onNothingSelected

public void onNothingSelected(android.widget.AdapterView adapterView)

This should never be called, as the spinner should never be hidden, but is required for the implementation of OnItemSelectedListener

Parameters:

adapterView - the adapted view of the spinner

onOptionsItemSelected

public boolean onOptionsItemSelected(android.view.MenuItem item)

Overrides:

onOptionsItemSelected in class LoggedInActivity

setupUI

private void setupUI()

showRequiredValues

private void showRequiredValues()

Hides and shows the patient weight and time required labels and inputs where needed.

showTime

private void showTime()

Shows the time label and input

showWeight

private void showWeight()

Shows the patient weight label and input

submitCalculation

private void submitCalculation()

This method retrieves the value of the calculation and displays the results, along with an explanation of the calculation to the user via a web view.

toggleDose

private void toggleDose(boolean show)

Shows and hides the dose input and labels where needed

toggleInfusionRate

private void toggleInfusionRate(boolean show)

Shows and hides the infusion rate input and labels where needed

updateCalculationtype

private void updateCalculationtype()

This method hides and shows the infusion rate and dose when the user changes the calculation type

validateAndSubmit

private void validateAndSubmit()

Validates all the entered information and alerts the user of any error / warnings

warnAboutWeight

private void warnAboutWeight()

Shows the user with a warning regarding the weight they have entered within a dialog. This is called when the weight seems incorrect (To low or to high)

Class Calculator

```
< Fields > < Constructors > < Methods >
```

public class **Calculator** extends java.lang.Object

Class for validating and performing dose and infusion rate calculations

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

ERROR_CONCENTRATION

public static final int ERROR_CONCENTRATION

ERROR_DOSE

public static final int ERROR_DOSE

ERROR IR

public static final int ERROR_IR

ERROR_TIME

public static final int ERROR_TIME

ERROR_WEIGHT

public static final int ERROR_WEIGHT

SUCCESS

public static final int SUCCESS

TYPE_DOSE_FROM_IR

public static final int TYPE DOSE FROM IR

TYPE_IR_FROM_DOSE

public static final int TYPE_IR_FROM_DOSE

TYPE_NOTHING_SELECTED

public static final int TYPE_NOTHING_SELECTED

WARN_WEIGHT

_calculationType

private int _calculationType

calculatorInfo

private DrugCalculatorInfo _calculatorInfo

concentration

private double _concentration

_dose

private double _dose

infusionRate

private double _infusionRate

_time

private double _time

_weight

private double _weight

Constructors

Calculator

public Calculator(<u>DrugCalculatorInfo</u> calculatorInfo)

Calculator constructor

Parameters:

calculatorInfo - the DrugCalculatorInfo of the drug this calulator if for.

Methods

calculate

public double calculate()

Perform the calculations for calculation type selected

Returns:

the value to the calculation.

calculateDose

private double calculateDose(double factor)

Calculates the dose from infusion rate

Parameters:

factor - the factor of the calculation

Returns:

the value of the calculation

calculateInfusionRate

private double calculateInfusionRate(double factor)

Calculates the infusion rate from dosage

Parameters:

factor - the factor of the calculation

Returns:

the value of the calculation

getConcentration

public double getConcentration()

Gets the concentration value

Returns:

the concentration value

getDose

```
public double getDose()
```

Get the dose

Returns:

the dose

getInfusionRate

```
public double getInfusionRate()
```

Get the infusion rate

Returns:

the infusion rate

getTime

```
public double getTime()
```

Get the time

Returns:

the time in minutes

getType

```
public int getType()
```

Gets the type of the calculation value

Returns:

the calculation type

getWeight

```
public double getWeight()
```

Get the weight of the patient in kg

Returns:

the weight in kg

isConcentrationValid

private boolean isConcentrationValid()

Checks if the concentration entered is valid (greater than 0)

Returns:

if concentration is valid

isDoseValid

```
private boolean isDoseValid()
```

Checks if the dose entered is valid (greater than 0)

Returns:

if dose is valid

isIRValid

```
private boolean isIRValid()
```

Checks if the infusion rate entered is valid (greater than 0)

Returns:

if infusion rate is valid

isTimeValid

```
private boolean isTimeValid()
```

Checks if the time entered is greater than 0

Returns:

if time is valid

isWeightValid

```
private boolean isWeightValid()
```

Checks if the weight entered if valid (greater than 0)

Returns:

if weight is valid

setConcentration

public void setConcentration(double concentration)

Sets the user entered concentration value of the drug

Parameters:

concentration - the concentration value

setDose

public void setDose(double dose)

Sets the user entered dose value

Parameters:

dose - the dose value

setInfusionRate

public void setInfusionRate(double infusionRate)

Sets the user entered infusion rate value

Parameters:

infusionRate - the dose value

setTime

public void setTime(double time)

Sets the time

Parameters:

time - the time value in minutes

setType

public void setType(int calculationType)

Set the type of the calculation

Parameters:

calculationType - the type

setWeight

public void setWeight(double weight)

Sets the user entered patient weight in kg

Parameters:

weight - the weight of the patient in kg

validate

public int validate(boolean skipWarnings)

Validates all the information required to perform the calculation.

Parameters:

skipWarnings - wether to skip any warnings about the data entered

Returns:

SUCCESS if validation is successful and the ERROR/WARN code otherwise.

warnWeight

private boolean warnWeight()

Checks if the weight seems incorrect (if we should warn user)

Returns:

if weight seems invalid

Class CommonActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

Direct Known Subclasses:

DownloadDataActivity, LoggedInActivity, LoginActivity

```
< Constructors > < Methods >
```

public class **CommonActivity** extends android.app.Activity

Class for an activity where the user is logged in This class enables the menu for all activity's where the user is logged in.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Constructors

CommonActivity

```
public CommonActivity()
```

Methods

displayAbout

```
protected void displayAbout()
```

Displays the About dialog

onCreateOptionsMenu

public boolean onCreateOptionsMenu(android.view.Menu menu)

Overrides:

onCreateOptionsMenu in class android.app.Activity

onOptionsItemSelected

public boolean onOptionsItemSelected(android.view.MenuItem item)

Determines which menu item has been clicked and performs appropriate action **Overrides:**

onOptionsItemSelected in class android.app.Activity

Class DownloadDataActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

```
< Fields > < Constructors > < Methods >
```

public class **DownloadDataActivity** extends <u>CommonActivity</u>

Class for handling and displaying the progress of the download of data from the application. This class is used to show the user progress information whilst the database data is being downloaded. This class also enables error handling when data download fails, allow the user to cancel or retry.

Author:

Aidan Wynne Fewster

Version:

Fields

CALCS_FAIL

private final int CALCS_FAIL

DRUG_FAIL

private final int DRUG_FAIL

INDEX_FAIL

private final int INDEX_FAIL

_dataProgress

DataProgress _dataProgress

_db

DatabaseHelper _db

_drugCount

int _drugCount

_drugDataLinks

java.util.HashMap _drugDataLinks

_password

private java.lang.String _password

_progressBar

android.widget.ProgressBar _progressBar

_progressText

android.widget.TextView _progressText

_spiceManager

private com.octo.android.robospice.SpiceManager _spiceManager

_testing

boolean _testing

toast

android.widget.Toast _toast

_username

private java.lang.String _username

Constructors

DownloadDataActivity

public DownloadDataActivity()

Methods

beforeDownloadStart

private void beforeDownloadStart()

This method resets the database ready for the new data. Inits variables and encodes the users username and password

checklfFinished

private void checkIfFinished()

Checks if all downloads have finished, if they have open the MainActivity

invalidLogin

private void invalidLogin()

Alerts the user that their credentials are incorrect and logs them out.

logout

private void logout()

Logs the users out and returns them to login screen

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

onCreateOptionsMenu

public boolean onCreateOptionsMenu(android.view.Menu menu)

Overrides:

onCreateOptionsMenu in class CommonActivity

onDownloadFail

private void onDownloadFail(int type)

This method is called when a request has failed. It will let the user know what has failed and give them the option to try download them sections again

Parameters:

type - which request type has failed

onOptionsItemSelected

public boolean onOptionsItemSelected(android.view.MenuItem item)

Overrides:

onOptionsItemSelected in class CommonActivity

onStart

protected void onStart()

Called when the activity resumes (E.g. when the user comes back into the application) This method resumes all request listeners and updates progress, so that the progress displays progress made whilst in the background.

Overrides:

onStart in class android.app.Activity

onStop

protected void onStop()

Called when the activity stops (E.g. when the user presses the home button)

Overrides:

onStop in class android.app.Activity

populateDrugDataLinks

private void populateDrugDataLinks()

Populates the drugDataLinks attribute to contain the list of API urls for downloading drug information's

showMessage

private void showMessage(java.lang.String message)

Displays the provided message in a Toast

Parameters:

message - the message to display

startCalcInfoDownload

private void startCalcInfoDownload()

Starts the request to download the calculator informations

startDrugDataDownload

Starts the request to download drug information's from the API link provided

Parameters:

tag - the tag of the link, user for tracking progress link - the api link to donwload

startDrugDataDownloads

private void startDrugDataDownloads()

Starts the download for all drugs and drug informations

startIndexDownload

private void startIndexDownload()

Starts the requests to download the drug indexes

updateCompletePrefs

private void updateCompletePrefs()

Sets the date of the last update to todays date.

updateDownloadDrugProgress

private void updateDownloadDrugProgress()

Updates the progress whilst drugs download

Class

DownloadDataActivity.calcsDownloadRequestL

All Implemented Interfaces:

com.octo.android.robospice.request.listener.PendingRequestListener, com.octo.android.robospice.request.listener.RequestListener

< Constructors > < Methods >

private final class **DownloadDataActivity.calcsDownloadRequestListener** extends java.lang.Object implements com.octo.android.robospice.request.listener.PendingRequestListener,

com.octo.android.robospice.request.listener.RequestListener

Drug calculator information request listener Methods within this class are called when the the calculator download completes or fails.

Constructors

DownloadDataActivity.calcsDownloadRequestListener

public DownloadDataActivity.calcsDownloadRequestListener()

Methods

onRequestFailure

public void
onRequestFailure(com.octo.android.robospice.persistence.exception.SpiceException
spiceException)

If the request failed, ask the user whether they'd like to try again

onRequestNotFound

public void onRequestNotFound()

onRequestSuccess

public void onRequestSuccess(java.lang.Void indexNo)

Once complete, begin downloading the drug informations.

Class DownloadDataActivity.drugsDownloadRequestL

All Implemented Interfaces:

com.octo.android.robospice.request.listener.PendingRequestListener, com.octo.android.robospice.request.listener.RequestListener

```
< Fields > < Constructors > < Methods >
```

private final class **DownloadDataActivity.drugsDownloadRequestListener** extends java.lang.Object implements com.octo.android.robospice.request.listener.PendingRequestListener, com.octo.android.robospice.request.listener.RequestListener

Drug information request listener Methods within this class are called when a drugs list download completes or fails.

Fields

_tag

private java.lang.String _tag

Constructors

DownloadDataActivity.drugsDownloadRequestListener

public DownloadDataActivity.drugsDownloadRequestListener(java.lang.String tag)

Constructor which allows us to keep track of which link is in progress.

Parameters:

tag - the tag of the link for this listener

Methods

onRequestFailure

public void

 $\begin{tabular}{l} on Request Failure (\verb|com.octo.android.robospice.persistence.exception.Spice Exception spice Exception) \end{tabular}$

If the request failed, ask the user whether they'd like to try agian

onRequestNotFound

public void onRequestNotFound()

onRequestSuccess

public void

onRequestSuccess(com.fewstera.injectablemedicinesguide.models.Drug[] drugs)

If the request failed, ask the user whether they'd like to try agian

Class

DownloadDataActivity.indexDownloadRequestL

```
java.lang.Object
```

+--com.fewstera.injectablemedicinesguide.DownloadDataActivity.indexDownloadRequ

All Implemented Interfaces:

com.octo.android.robospice.request.listener.PendingRequestListener, com.octo.android.robospice.request.listener.RequestListener

< Constructors > < Methods >

private final class **DownloadDataActivity.indexDownloadRequestListener** extends java.lang.Object

implements com.octo.android.robospice.request.listener.PendingRequestListener, com.octo.android.robospice.request.listener.RequestListener

Index download request listener Methods within this class are called when the index download completes or fails.

Constructors

DownloadDataActivity.indexDownloadRequestListener

public DownloadDataActivity.indexDownloadRequestListener()

Methods

onRequestFailure

public void
onRequestFailure(com.octo.android.robospice.persistence.exception.SpiceException
spiceException)

If the request failed, ask the user whether they'd like to try again

onRequestNotFound

public void onRequestNotFound()

onRequestSuccess

public void onRequestSuccess(java.lang.Integer indexNo)

When the request has finished, check that a login error did not occur. If not begin downloading the calculator information

Class LoggedInActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

Direct Known Subclasses:

BrowseDrugsActivity, CalcDrugSelectActivity, CalculateActivity, MainActivity, ViewDrugActivity

< Constructors > < Methods >

public class **LoggedInActivity** extends CommonActivity

Class for an activity where the user is logged in This class enables the menu for all activity's where the user is logged in.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Constructors

LoggedInActivity

public LoggedInActivity()

Methods

onCreateOptionsMenu

public boolean onCreateOptionsMenu(android.view.Menu menu)

Overrides:

onCreateOptionsMenu in class CommonActivity

onOptionsItemSelected

public boolean onOptionsItemSelected(android.view.MenuItem item)

Determines which menu item has been clicked and performs appropriate action

onOptionsItemSelected in class CommonActivity

Class LoginActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

< Fields > < Constructors > < Methods >

public class **LoginActivity** extends **CommonActivity**

Activity for logging in This activity is used to allow the user to enter their NHS credentials, which logs them into the system.

Author:

Aidan Wynne Fewster

Version:

Fields

_auth

private Auth _auth

_loginButton

private android.widget.Button _loginButton

_password

private java.lang.String _password

username

private java.lang.String _username

Constructors

LoginActivity

public LoginActivity()

Methods

connectionError

public void connectionError()

Called when the ValidateLoginTask returns connection error

loginClick

public void loginClick(android.view.View view)

Called when the login button is press

Parameters:

view - of the login button

loginComplete

```
public void loginComplete()
```

Called when the ValidateLoginTask returns connection error

loginFailed

```
public void loginFailed()
```

Called when the ValidateLoginTask fails (invalid password)

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

Class LoginActivity.ValidateLoginTask

< Constructors > < Methods >

private class **LoginActivity.ValidateLoginTask** extends android.os.AsyncTask

InnerClass for validating the users login credentials, called in an AsyncTask to keep the process off the UI thread.

Constructors

LoginActivity.ValidateLoginTask

private LoginActivity.ValidateLoginTask()

Methods

dolnBackground

protected java.lang.Boolean doInBackground(java.lang.Void[] p)

Overrides:

doInBackground in class android.os.AsyncTask

onPostExecute

protected void onPostExecute(java.lang.Boolean isValid)

Overrides:

onPostExecute in class android.os.AsyncTask

Class MainActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

public class **MainActivity** extends <u>LoggedInActivity</u>

Main activity of the system This is the first activity the user see upon opening the application (provided they've previously logged in). This activity allows user to upload the database ad navigate to other section of the application

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

DEBUG_NAME

public static final java.lang.String DEBUG_NAME

EXTRA_DRUG_ID

public static final java.lang.String EXTRA_DRUG_ID

EXTRA_TEST

public static final java.lang.String EXTRA_TEST

Constructors

MainActivity

public MainActivity()

Methods

aboutClick

public void aboutClick(android.view.View view)

When the about button is clicked

Parameters:

view - of the button

calculatorClick

public void calculatorClick(android.view.View view)

When the calculator button is clicked

Parameters:

view - of the button

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

updateClick

public void updateClick(android.view.View view)

When the update button is clicked

viewDrugsClick

public void viewDrugsClick(android.view.View view)

When the view drugs button is clicked

Parameters:

view - of the button

Class Preferences

< Fields > < Constructors > < Methods >

public class **Preferences** extends java.lang.Object

Preferences class for the application This is class is responsible for interacting with the phones PreferenceManager. This is used to store data locally for the user.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

DOWNLOAD_COMPLETE

public static final java.lang.String DOWNLOAD_COMPLETE

PASSWORD KEY

public static final java.lang.String PASSWORD_KEY

UPDATE_DATE_KEY

public static final java.lang.String UPDATE_DATE_KEY

USERNAME_KEY

public static final java.lang.String USERNAME_KEY

Constructors

Preferences

public Preferences()

Methods

delete

Deletes a given key from the prefences

Parameters:

context - the application context key - the key

getDownloadComplete

public static boolean getDownloadComplete(android.content.Context context)

Checks if the all data has been downloaded successfully

Parameters:

context - the application context

Returns:

the result of the check

getString

Retrieves the string for a given key

Parameters:

context - the application context key - the key

Returns:

the value of the key, or the fallback

getString

Retrieves the string for a given key

Parameters:

context - the application context key - the key fallback - if no value exists for that key, what to return

Returns:

the value of the key, or the fallback

setDownloadComplete

Sets the download complete preference

Parameters:

```
context - the application context value - if the download is complete (boolean)
```

setString

Sets a string value in preferences for a given key

Parameters:

```
context - the application context
key - the key
value - the value
```

Class SplashActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

```
< Fields > < Constructors > < Methods >
```

public class **SplashActivity** extends android.app.Activity

Splash activity of the application This is the activity responsible for displaying the splash screen when opening the application.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fi<u>elds</u>

WAIT TIME

private final int WAIT_TIME

Constructors

SplashActivity

public SplashActivity()

Methods

getActivityClass

private java.lang.Class getActivityClass()

Returns the class of the next activity to start. If the user isn't logged in then Login activity will be returned. If the user is logged in but the database isn't complete then the Download activity is returned. Otherwise the Main activity is returned.

Returns:

the class of the activity to open after splash screen.

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

startSplashScreenThread

private void startSplashScreenThread(java.lang.Class startActivityClass)

Makes the user wait *WAIT_TIME* milliseconds while displaying the splash screen, afterwards the activity passed in is launched.

Parameters:

startActivityClass - class of the activity to open after splash screen.

Class ViewDrugActivity

All Implemented Interfaces:

android.content.ComponentCallbacks2, android.view.KeyEvent.Callback, android.view.LayoutInflater.Factory2, android.view.View.OnCreateContextMenuListener, android.view.Window.Callback

< Fields > < Constructors > < Methods >

public class **ViewDrugActivity** extends <u>LoggedInActivity</u>

This class is an activity for displaying a drug and all its information. If a drug has a calculator, this will also allow the user to navigate to the calculator for that drug.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_db

DatabaseHelper _db

_drug

Drug _drug

Constructors

ViewDrugActivity

public ViewDrugActivity()

Methods

addDrugInformation

private void addDrugInformation(DrugInformation drugInfo)

Adds a DrugInformation to the view.

Parameters:

drugInfo - the DrugInformation to display

displayInfo

private void displayInfo(DrugInformation clickedDrugInfo)

Displays the HeaderHelper for the given DrugInformation within an AlertDialog

Parameters:

clickedDrugInfo - the DrugInformation thats been clicked

enableCalculator

private void enableCalculator()

Displays the calculator button if the drug has a calculator

loadDrugInformations

private void loadDrugInformations()

Display all DrugInformation's.

IoadDrugToView

private void loadDrugToView()

Retrieve all information regarding a drug and displays it to the user.

onCreate

protected void onCreate(android.os.Bundle savedInstanceState)

Overrides:

onCreate in class android.app.Activity

onDestroy

public void onDestroy()

Overrides:

onDestroy in class android.app.Activity

onInfoClicked

public void onInfoClicked(android.view.View view)

Called when the user clicks the info icon. This then displays help for the selected item

Parameters:

view - the buttons view

openCalcClick

public void openCalcClick(android.view.View view)

Called when the user clicks the calculator button

Parameters:

view - of the button

parseHtml

private java.lang.String parseHtml(java.lang.String html)

Parses HTML so that it's looks better on mobile devices.

Parameters:

html - the html to parse

Returns:

the parsed html

Class DataProgress

< Fields > < Constructors > < Methods >

public class **DataProgress** extends java.lang.Object

Singleton class for the data download progress This class is used for checking the progress of requests and for displaying errors within the data download activity. This is a singleton class, so only one object of this class can be instantiated.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_calcsDownloaded

private boolean _calcsDownloaded

calcsStarted

private boolean calcsStarted

_drugList

private java.util.ArrayList _drugList

_drugsDownload

private boolean _drugsDownload

finishedCount

_indexSize

private int _indexSize

_loginError

private boolean _loginError

_succeededTags

private java.util.ArrayList _succeededTags

instance

private static DataProgress instance

Constructors

DataProgress

protected DataProgress()

Prevents object being instantiated

Methods

addDrug

public void addDrug(Drug drug)

Adds a drug to drug list

Parameters:

drug - to add

addSucceededTag

public void addSucceededTag(java.lang.String tag)

Adds a tag that has succeeded to the list of complete tags. A tag is a reference to the an API url to download part of the drug data.

Parameters:

tag - the tag that succeeded to be downloaded

calcsHaveDownloaded

public void calcsHaveDownloaded()

Called when the calculator information has finished downloading

decreaseFinishedCountBy

public void decreaseFinishedCountBy(int x)

Decreases the amount of finished requests

Parameters:

x - the amount to decrease by

drugsCalcStarted

public void drugsCalcStarted()

Called when the calculations download had began

drugsDownloadHasStarted

public void drugsDownloadHasStarted()

Called when the drugs download had began

getDrugList

public java.util.ArrayList getDrugList()

Get list of all drugs that have been downloaded

Returns:

the list of rugs

getFinishedCount

public int getFinishedCount()

Gets the amount of finished requests

Returns:

the amount of requests

getIndexSize

public int getIndexSize()

Returns the size of the index

Returns:

the size of the index

getInstance

public static <u>DataProgress</u> getInstance()

Retrieves the current instance of the class, as this is a singleton

getSucceededTags

public java.util.ArrayList getSucceededTags()

Gets a list of all tags that have successfully been downloaded

Returns:

the list of succeeded tags

increaseFinishedCount

public void increaseFinishedCount()

Increase the amount of finished requests

isLoginError

public boolean isLoginError()

Check if a login error has occurred

Returns:

true if login error has occured, false otherwise

loginErrorOccurred

public void loginErrorOccurred()

Called when a login error has occurred

reset

public void reset()

Reset all statistics about download

setIndexSize

public void setIndexSize(int indexSize)

Sets the indexSize (The amount of drugs within the index)

Parameters:

indexSize - the size of the index

shouldDrugsListStart

public boolean shouldDrugsListStart()

Whether the drugs list download should begin downloading

Returns:

true if the drugs list download should begin, false otherwise

shouldStartCalcsDownload

public boolean shouldStartCalcsDownload()

Whether the calculator information should begin downloading

Returns:

true if the calculator download should begin, false otherwise

Class DownloadCalculationsRequest

All Implemented Interfaces:

java.lang.Comparable

```
< Fields > < Constructors > < Methods >
```

public class DownloadCalculationsRequest

extends com.octo.android.robospice.request.SpiceRequest

Class responsible for downloading the drug calculator information.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_calculatorRepeatTag

private java.lang.String _calculatorRepeatTag

_concentrationUnitsTag

private java.lang.String _concentrationUnitsTag

_dataProgress

_db

private <u>DatabaseHelper</u> _db

_doseUnitsTag

private java.lang.String _doseUnitsTag

_drugldTag

private java.lang.String _drugIdTag

_factorTag

private java.lang.String _factorTag

_infusionRateUnitsTag

private java.lang.String _infusionRateUnitsTag

_infusionRatelabelTag

private java.lang.String _infusionRatelabelTag

_password

private java.lang.String _password

_patientWeightReqTag

private java.lang.String _patientWeightReqTag

_timeReqTag

private java.lang.String _timeReqTag

_url

private java.lang.String _url

username

private java.lang.String _username

Constructors

DownloadCalculationsRequest

Methods

downloadAndSaveCalcs

Downloads and saves all calculator information's.

Throws:

java.lang.Exception -

getUrl

```
private final java.lang.String getUrl()
```

Get the URL of the calculations API

loadDataFromNetwork

public java.lang.Void loadDataFromNetwork()

Overrides:

loadDataFromNetwork in class com.octo.android.robospice.request.SpiceRequest

loadXMLValues

private void loadXMLValues(android.content.Context context)

This method loads the XML tag names and values from the dataDownload.xml resource file. The values are stored in private attributes, so they can be used throughout the object.

Parameters:

context - the application context

parseCalcInfoFromElement

private <u>DrugCalculatorInfo</u> parseCalcInfoFromElement(org.w3c.dom.Element calcElem)

throws

java.lang.Exception

Builds drug calculator information from the element

Parameters:

calcElem - the element of the DrugCalculation

Returns:

DrugCalculatorInfo containing the information

Throws:

java.lang.Exception -

Class DownloadDrugsRequest

All Implemented Interfaces:

java.lang.Comparable

```
< Fields > < Constructors > < Methods >
```

public class DownloadDrugsRequest

extends com.octo.android.robospice.request.SpiceRequest

Class responsible for downloading the drugs and all drug information's.

Author:

Aidan Wynne Fewster

Version:

1.0

Fields

_dataProgress

private DataProgress _dataProgress

_db

private <u>DatabaseHelper</u> _db

_drugldTag

private java.lang.String _drugIdTag

_drugInfoHeaderHelpTag

private java.lang.String _drugInfoHeaderHelpTag

_drugInfoHeaderTag

private java.lang.String _drugInfoHeaderTag

_drugInfoRepeatTag

private java.lang.String _drugInfoRepeatTag

_drugInfoTextTag

private java.lang.String _drugInfoTextTag

_drugNameValue

private java.lang.String _drugNameValue

_drugRepeatTag

_tag

private java.lang.String _tag

url

private java.lang.String _url

Constructors

DownloadDrugsRequest

Methods

addDrugInformationToDrug

Adds the information about the drug to the Drug passed in.

Parameters:

drug - the drug to add the information to headerText - the header text headerHelper - the header helper sectionText - the section text

Returns:

the drug with the added drug information

addSectionsDrugInfo

```
private <u>Drug</u> addSectionsDrugInfo(<u>Drug</u> drug, org.w3c.dom.Element sectionElement) throws java.lang.Exception
```

Retrieves drug information from the drugs section XML element and applies information to the drug.

Parameters:

drug - the drug to add the information to sectionElement - the XML element containing the drug information

Returns:

the drug with the added drug information

Throws:

java.lang.Exception -

fetchDrugs

Downloads the XML from the API from the provided URL.

Returns:

the list of Drugs that have been downloaded

Throws:

java.lang.Exception -

getUrl

```
private final java.lang.String getUrl()
```

Get the URL to download the drug data from

Returns:

the url

loadDataFromNetwork

```
public com.fewstera.injectablemedicinesguide.models.Drug[]
loadDataFromNetwork()
```

Overrides:

loadDataFromNetwork in class com.octo.android.robospice.request.SpiceRequest

loadXMLValues

private void loadXMLValues(android.content.Context context)

This method loads the XML tag names and values from the dataDownload.xml resource file. The values are stored in private attributes, so they can be used throughout the object.

Parameters:

context - the application context

parseDrugFromElement

Retrieves complete drug from the given drug element

Parameters:

drugElement - the XML element containing the drug details

Returns:

the Drug from the element

Throws:

java.lang.Exception -

Class DownloadIndexRequest

All Implemented Interfaces:

java.lang.Comparable

```
< Fields > < Constructors > < Methods >
```

public class **DownloadIndexRequest**

extends com.octo.android.robospice.request.SpiceRequest

Class responsible for downloading the drugs and all drug information's.

Author:

Aidan Wynne Fewster

Version:

Fields

_dataProgress

private DataProgress _dataProgress

_db

private <u>DatabaseHelper</u> _db

_drugldTag

private java.lang.String _drugIdTag

_indexNameTag

private java.lang.String _indexNameTag

_indexRepeatTag

private java.lang.String _indexRepeatTag

_loginErrorTag

private java.lang.String _loginErrorTag

_password

private java.lang.String _password

_uniquelds

private java.util.ArrayList _uniqueIds

url

_username

private java.lang.String _username

Constructors

DownloadIndexRequest

Methods

downloadAndSaveIndex

Downloads the drug index XML and populates the database with the information

Returns:

the number of unique indexes within the database

Throws:

java.lang.Exception -

getUrl

```
private final java.lang.String getUrl()
```

Get URL for the drug indexes XML API

Returns:

the url

loadDataFromNetwork

Begins the request, this is called by the robospice service, when it's ready.

Returns:

the number of unique indexes within the database

Overrides:

loadDataFromNetwork in class com.octo.android.robospice.request.SpiceRequest

Throws:

java.lang.Exception -

loadXMLValues

```
private void loadXMLValues(android.content.Context context)
```

This method loads the XML tag names and values from the dataDownload.xml resource file. The values are stored in private attributes, so they can be used throughout the object.

Parameters:

context - the application context

parseIndexFromElement

Retrieves drug index from the XML element

Parameters:

drugElement -

Returns:

the DrugIndex built from the XML elements.

Throws:

java.lang.Exception -

Class DownloadRequestListenerNotifier

All Implemented Interfaces:

com.octo.android.robospice.request.notifier.RequestListenerNotifier

< Fields > < Constructors > < Methods >

public class **DownloadRequestListenerNotifier**

extends java.lang.Object

implements com.octo.android.robospice.request.notifier.RequestListenerNotifier

Default implementation of RequestListenerNotifier. It will notify listeners on the ui thread. I had to copy all the code from the robospice DefaultRequestListenerNotifier class, as the parameters within that class are private, so inheritance could not be used to modify the behaviour of the class. All that I have added is that when Request finishes the results are added to the DataProgress singleton. Original source: https://github.com/stephanenicolas/robospice/blob/release/robospice-core-parent/robospice/src/main/java/com/o

Author:

Andrew Clark, Aidan Wynne Fewster

Version:

1.1

1.0

com.octo.android.robospice.request.notifier.DefaultRequestListenerNotifier

Fields

_dataProgress

private final DataProgress _dataProgress

handlerResponse

private final android.os. Handler handlerResponse

Constructors

DownloadRequestListenerNotifier

public DownloadRequestListenerNotifier()

Methods

clearNotificationsForRequest

public void

clearNotificationsForRequest(com.octo.android.robospice.request.CachedSpiceRequest
request,

java.util.Set listeners)

notifyListenersOfRequestAdded

public void

notifyListenersOfRequestAdded(com.octo.android.robospice.request.CachedSpiceRequest
request,

java.util.Set listeners)

notifyListenersOfRequestAggregated

public void

notifyListenersOfRequestAggregated(com.octo.android.robospice.request.CachedSpiceRe request,

java.util.Set listeners)

notifyListenersOfRequestCancellation

public void

notifyListenersOfRequestCancellation(com.octo.android.robospice.request.CachedSpice
request,

java.util.Set listeners)

notifyListenersOfRequestFailure

public void

notifyListenersOfRequestFailure(com.octo.android.robospice.request.CachedSpiceRequerequest.

notifyListenersOfRequestNotFound

notifyListenersOfRequestProgress

notifyListenersOfRequestSuccess

post

Class DownloadRequestListenerNotifier.NotFoundRur

```
java.lang.Object
```

+--com.fewstera.injectablemedicinesguide.dataDownload.DownloadRequestListenerNo

All Implemented Interfaces:

java.lang.Runnable

< Fields > < Constructors > < Methods >

private static class DownloadRequestListenerNotifier.NotFoundRunnable

Fields

listeners

private final java.util.Set listeners

Constructors

DownloadRequestListenerNotifier.NotFoundRunnable

public DownloadRequestListenerNotifier.NotFoundRunnable(java.util.Set listeners)

Methods

run

public void run()

Class DownloadRequestListenerNotifier.ProgressRun

All Implemented Interfaces:

java.lang.Runnable

```
< Fields > < Constructors > < Methods >
```

private static class **DownloadRequestListenerNotifier.ProgressRunnable** extends java.lang.Object implements java.lang.Runnable

Fields

listeners

private final java.util.Set listeners

progress

private final com.octo.android.robospice.request.listener.RequestProgress
progress

Constructors

DownloadRequestListenerNotifier.ProgressRunnable

public DownloadRequestListenerNotifier.ProgressRunnable(java.util.Set listeners, com.octo.android.robospice.request.listener.RequestProgress progress)

Methods

run

public void run()

Class DownloadRequestListenerNotifier.ResultRunnal

All Implemented Interfaces:

java.lang.Runnable

```
< Fields > < Constructors > < Methods >
```

private static class **DownloadRequestListenerNotifier.ResultRunnable** extends java.lang.Object implements java.lang.Runnable

Fields

listeners

private final java.util.Set listeners

result

private java.lang.Object result

spiceException

 $\verb|private com.octo.android.robospice.persistence.exception.SpiceException \\ spiceException \\$

Constructors

DownloadRequestListenerNotifier.ResultRunnable

DownloadRequestListenerNotifier.ResultRunnable

public DownloadRequestListenerNotifier.ResultRunnable(java.util.Set listeners, com.octo.android.robospice.persistence.exception.SpiceException spiceException)

Methods

run

public void run()

Class DownloadService

All Implemented Interfaces:

android.content.ComponentCallbacks2

< Constructors > < Methods >

public class DownloadService

extends com.octo.android.robospice.UncachedSpiceService

RobospiceService class for handling the download of data. This is an uncached service as the data is downloaded infrequently, so the cache will most likely have expired by the next time the request is made.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

com.octo.android.robospice.SpiceService

Constructors

DownloadService

public DownloadService()

Methods

createDefaultNotification

public android.app.Notification createDefaultNotification()

Returns the Notification to be used whilst the Service is running. This allows for a notification to be displayed within the notification center whilst download is in progress. Suppressing deprecation, as deprecated method have to be used for older device notifications

Returns:

the notification to display This code if very similar to the code within the SpiceService class as found here

https://github.com/stephanenicolas/robospice/blob/release/robospice-core-parent/robospice/src/m

Overrides:

createDefaultNotification in class com.octo.android.robospice.SpiceService

createRequestRequestListenerNotifier

protected com.octo.android.robospice.request.notifier.RequestListenerNotifier
createRequestRequestListenerNotifier()

Gets the request listener notifier

Returns:

the request listener notifier

Overrides:

createRequestRequestListenerNotifier in class com.octo.android.robospice.SpiceService

getThreadCount

public int getThreadCount()

Get the max amount of threads

Returns:

the max amount of threads

Overrides:

getThreadCount in class com.octo.android.robospice.SpiceService

Class DatabaseHelper

```
< Fields > < Constructors > < Methods >
```

public class DatabaseHelper

extends android.database.sqlite.SQLiteOpenHelper

Class for handling database interactions This class is used for managing the database. It allows for the selection, insertion and deletion of the database data.

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

CREATE_TABLE_DRUGS

private static final java.lang.String CREATE_TABLE_DRUGS

CREATE TABLE DRUG CALCS

private static final java.lang.String CREATE_TABLE_DRUG_CALCS

CREATE_TABLE_DRUG_INDEX

private static final java.lang.String CREATE_TABLE_DRUG_INDEX

CREATE_TABLE_DRUG_INFORMATIONS

private static final java.lang.String CREATE_TABLE_DRUG_INFORMATIONS

DATABASE_VERSION

F_KEY_DRUG_ID

private static final java.lang.String F_KEY_DRUG_ID

KEY_CONCENTRATION_UNITS

private static final java.lang.String KEY_CONCENTRATION_UNITS

KEY DOSE UNITS

private static final java.lang.String KEY_DOSE_UNITS

KEY_FACTOR

private static final java.lang.String KEY_FACTOR

KEY_HEADER_HELPER

private static final java.lang.String KEY_HEADER_HELPER

KEY HEADER TEXT

private static final java.lang.String KEY_HEADER_TEXT

KEY_ID

private static final java.lang.String KEY_ID

KEY_INDEX_NAME

private static final java.lang.String KEY_INDEX_NAME

KEY INFUSION LABEL

private static final java.lang.String KEY_INFUSION_LABEL

KEY_INFUSION_UNITS

private static final java.lang.String KEY_INFUSION_UNITS

KEY_NAME

private static final java.lang.String KEY_NAME

KEY_SECTION_TEXT

private static final java.lang.String KEY_SECTION_TEXT

KEY_TIME_REQ

private static final java.lang.String KEY_TIME_REQ

KEY_WEIGHT_REQ

private static final java.lang.String KEY_WEIGHT_REQ

TABLE DRUGS

private static final java.lang.String TABLE_DRUGS

TABLE_DRUG_CALCS

private static final java.lang.String TABLE_DRUG_CALCS

TABLE_DRUG_INDEXS

private static final java.lang.String TABLE_DRUG_INDEXS

TABLE DRUG INFOS

private static final java.lang.String TABLE_DRUG_INFOS

Constructors

DatabaseHelper

public DatabaseHelper(android.content.Context context)

DatabaseHelper

Methods

createDrug

public long createDrug(Drug drug)

Saves the given drug to the database, including its DrugInformation's

Parameters:

drug - the drug to save

Returns:

the id of the inserted row.

createDrugCalcInfo

public long createDrugCalcInfo(DrugCalculatorInfo)

Saves the given DrugCalculatorInfo to the database

Parameters:

drugCalculatorInfo - the information to save

Returns:

the id of the inserted DrugCalculatorInfo

createDrugIndex

public long createDrugIndex(DrugIndex index)

Saves the given drug index to the database

Parameters:

index - the index to save

Returns:

the id of the inserted index

createDrugInfo

Saves the given DrugInformation to the database

Parameters:

drugld - the id that the DrugInformation belongs to info - the DrugInformation to save

Returns:

the if of the inserted drug information

cursorToDrug

private <u>Drug</u> **cursorToDrug**(android.database.Cursor cursor)

Populates a drug from the database cursor

Parameters:

cursor - the cursor of the drug

Returns:

the populated drug

cursorToDrugCalculatorInfo

private <u>DrugCalculatorInfo</u> cursorToDrugCalculatorInfo(android.database.Cursor cursor)

Creates a DrugCalculatorInfo from the database cursor

Parameters:

cursor - the database cursor

Returns:

the populated DrugCalculatorInfo

cursorToDrugIndex

private DrugIndex (android.database.Cursor cursor)

Populates a DrugIndex with data from a database cursor

Parameters:

cursor - the database cursor

Returns:

the populated DrugIndex

cursorToDrugInfo

private <u>DrugInformation</u> cursorToDrugInfo(android.database.Cursor cursor)

Creates a DrugInfo from a database cursor

Parameters:

cursor - the database cursor

Returns:

the populated DrugInfo

getAllDrugIndexes

```
public java.util.List getAllDrugIndexes()
```

Retrieves all the DrugIndex's from the database.

Returns:

a list of all the DrugIndex's

getAllDrugsWithCalcs

```
public java.util.List getAllDrugsWithCalcs()
```

Retrieves a list of all Drugs with a calculator

Returns:

a list the Drugs with calculators

getDrugCalcInfoFromDrugId

public DrugCalculatorInfo getDrugCalcInfoFromDrugId(int id)

Retrieves the drugs calculator information for its id

Parameters:

id - the id of the Drug

Returns:

the DrugCalculatorInfo for that Drug

getDrugFromId

```
public Drug getDrugFromId(int id)
```

Retrieves a Drug from the database which has the specified id

Parameters:

id - the id of the drug to retrieve

Returns:

the drug

getDrugInformationsFromDrugId

```
public java.util.ArrayList getDrugInformationsFromDrugId(int id)
```

Gets a list of DrugInformations for the given drug id

Parameters:

id - the id of the Drug

Returns:

list of DrugInformation's

onCreate

```
public void onCreate(android.database.sqlite.SQLiteDatabase db)
```

Overrides:

onCreate in class android.database.sqlite.SQLiteOpenHelper

onUpgrade

Overrides:

onUpgrade in class android.database.sqlite.SQLiteOpenHelper

truncateAll

```
public void truncateAll()
```

truncateCalcs

public void truncateCalcs()

truncateIndexs

public void truncateIndexs()

Class Drug

All Implemented Interfaces:

java.lang.Comparable

```
< Fields > < Constructors > < Methods >
```

public class **Drug** extends java.lang.Object implements java.lang.Comparable

Class that represents the model of a Drug

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_calculatorInfo

private <u>DrugCalculatorInfo</u> _calculatorInfo

_drugInformations

private java.util.ArrayList _drugInformations

```
id
```

private int _id

name

private java.lang.String _name

Constructors

Drug

public Drug()

Methods

addDrugInformation

public void addDrugInformation(DrugInformation drugInfo)

Add new information to the drug

Parameters:

drugInfo - DrugInformation to add

compareTo

public int compareTo(Drug test)

Compares a drug to another drug

Parameters:

test - the drug to test against

Returns:

the result of the comparison

getCalculatorInfo

```
public <u>DrugCalculatorInfo</u> getCalculatorInfo(<u>DatabaseHelper</u> db)
```

Get the DrugCalculatorInfo for the drug

Parameters:

db - the database

Returns:

the DrugCalculatorInfo or null if there isn't any

getDrugInformations

```
public java.util.ArrayList getDrugInformations()
```

Get an ArrayList of all the drug information's

Returns:

the list of DrugInformation's

getDrugInformations

```
public java.util.ArrayList getDrugInformations(DatabaseHelper db)
```

Get an ArrayList of all the drug information's from the database

Parameters:

db - the database

Returns:

getId

```
public int getId()
```

Get id of the drug (drug-no)

Returns:

the id

getName

```
public java.lang.String getName()

Get drugs name

Returns:
    the name
```

setId

```
public void setId(int id)

Sets the drug's id

Parameters:

id - the id
```

setName

```
public void setName(java.lang.String name)
    Set drug name
    Parameters:
        name - the name
```

toString

Class DrugCalculatorInfo

< Fields > < Constructors > < Methods >

public class **DrugCalculatorInfo** extends java.lang.Object

Class that represents the model of a drugs calculator information

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_concentrationUnits

private java.lang.String _concentrationUnits

_doseUnits

private java.lang.String _doseUnits

_drugld

private int _drugId

_factor

private java.lang.Integer _factor

_infusionRateLabel

private java.lang.String _infusionRateLabel

infusionRateUnits

private java.lang.String _infusionRateUnits

_patientWeightRequired

_timeRequired

private boolean _timeRequired

Constructors

DrugCalculatorInfo

public DrugCalculatorInfo()

Methods

getConcentrationUnits

public java.lang.String getConcentrationUnits()

Gets the concentration units

Returns:

the concentration units

getDoseUnits

```
public java.lang.String getDoseUnits()
```

Gets the dose units

Returns:

the dose units

getDrugId

```
public int getDrugId()
```

Gets the ID of the drug this calculator belongs to

Returns:

the id

getFactor

```
public java.lang.Integer getFactor()
```

Gets the factor of the calculation

Returns:

the factor

getInfusionRateLabel

```
public java.lang.String getInfusionRateLabel()
```

Gets the infusion rate label

Returns:

the infusion rate label

getInfusionRateUnits

```
public java.lang.String getInfusionRateUnits()
```

Gets the infusion rate units

Returns:

the infusion rate units

isPatientWeightRequired

```
public boolean isPatientWeightRequired()
```

Checks if the patient weight is required for the calculation

Returns:

true if its needed, false otherwise

isTimeRequired

```
public boolean isTimeRequired()
```

Checks if the time is required for the calculation

Returns:

true if its needed, false otherwise

setConcentrationUnits

public void **setConcentrationUnits**(java.lang.String concentrationUnits)

Sets the concentration units

Parameters:

concentrationUnits - the concentration units

setDoseUnits

public void setDoseUnits(java.lang.String doseUnits)

Sets the dose units

Parameters:

doseUnits - the dose units

setDrugId

public void setDrugId(int drugId)

Sets the ID of the drug this calculator belongs to

Parameters:

drugld - the id

setFactor

public void setFactor(java.lang.Integer factor)

Sets the factor of the calculation

Parameters:

factor - the factor

setInfusionRateLabel

public void setInfusionRateLabel(java.lang.String infusionRateLabel)

Sets the infusion rate label

Parameters:

infusionRateLabel - the infusion rate label

setInfusionRateUnits

public void setInfusionRateUnits(java.lang.String infusionRateUnits)

Sets the infusion rate units

Parameters:

infusionRateUnits - the infusion rate units

setPatientWeightRequired

public void setPatientWeightRequired(boolean patientWeightRequired)

Sets if the patient weight is required for the calculation

Parameters:

patientWeightRequired - true if its needed, false otherwise

setTimeRequired

public void setTimeRequired(boolean timeRequired)

Sets if the time is required for the calculation

Parameters:

timeRequired - true if its needed, false otherwise

Class DrugIndex

```
< Fields > < Constructors > < Methods >
```

public class **DrugIndex** extends java.lang.Object

Class that represents the model of a DrugIndex

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_drugld

private int _drugId

_name

private java.lang.String _name

Constructors

DrugIndex

Methods

getDrugId

```
public int getDrugId()
```

Get the id of the drug that this Index belongs to

Returns:

the id

getName

```
public java.lang.String getName()
```

Get the name of this index

Returns:

the name

toString

public java.lang.String toString()

Converts the DrugIndex to string (used by ListAdapter)

Returns:

the drugs name

Overrides:

toString in class java.lang.Object

Class DrugInformation

```
< Fields > < Constructors > < Methods >
```

public class **DrugInformation** extends java.lang.Object

Class that represents the model of a piece of information a drug contains

Author:

Aidan Wynne Fewster

Version:

1.0

1.0

Fields

_headerHelper

```
private java.lang.String _headerHelper
```

_headerText

```
private java.lang.String _headerText
```

_sectionText

private java.lang.String _sectionText

Constructors

DrugInformation

Constructor used when creating from the database

Parameters:

 id - the drug id that this belongs to headerText - the header text headerHelper - the heading help sectionText - the context of the information

DrugInformation

Constructor used when first creating a drug information (When not stored within DB)

Parameters:

headerText - the header text headerHelper - the heading help sectionText - the context of the information

Methods

getHeaderHelper

```
public java.lang.String getHeaderHelper()
```

Gets the header help

Returns:

the heading help

getHeaderText

```
public java.lang.String getHeaderText()
```

Gets the header text

Returns:

the header text

getId

```
public int getId()
```

Gets the drug id

Returns:

the id

getSectionText

public java.lang.String getSectionText()

Gets the context of the information

Returns:

the information

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