ultramirinc.champs_mood.fragments

Class ProfileFragment

java.lang.Object
    android.support.v4.app.Fragment
        ultramirinc.champs_mood.fragments.ProfileFragment

All Implemented Interfaces:

android.content.ComponentCallbacks, android.view.View.OnClickListener, android.view.View.OnCreateContextMenuListener, android.view.View.OnTouchListener, com.google.android.gms.common.api.GoogleApiClient.ConnectionCallbacks, com.google.android.gms.common.api.GoogleApiClient.OnConnectionFailedListener, com.google.android.gms.location.LocationListener, com.google.android.gms.maps.OnMapReadyCallback, java.util.Observer

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public class **ProfileFragment**
extends android.support.v4.app.Fragment
implements com.google.android.gms.maps.OnMapReadyCallback, com.google.android.gms.common.api.GoogleApiClient.ConnectionCallbacks, java.util.C

, com.google.android.gms.common.api.GoogleApiClient.OnConnectionFailedListener, android.view.View.OnClickListener, android.view.View.OnTouchListener, com.google.android.gms.location.LocationListener

Created by Etienne Berube on 2017-03-23. This will be the user's profile. He will be able to change his mood, location and floor from this page.

Nested Class Summary

Nested classes/interfaces inherited from class android.support.v4.app.Fragment
android.support.v4.app.Fragment.InstantiationException, android.support.v4.app.Fragment.SavedState

Field Summary

Fields

Modifier and Type	Field and Description
private com.google.android.gms.location.LocationSettingsRequest.Builder	**builder** Contains the a builder to change user's device GPS state
private android.content.Context	**context** Contains the context from the activity
private boolean	**mapIsReady** If the map is ready
private com.google.android.gms.common.api.GoogleApiClient	**mGoogleApiClient** Contains Google Api Client
private android.widget.ImageButton	**mGpsUpdate** Contains the button for the GPS
private android.location.Location	**mLastLocation** Contains the last known location user
private java.lang.String	**mLatitudeText** A String version of the user's las latitude
private com.google.android.gms.location.LocationRequest	**mLocationRequest** Contains the location request in get updates form the user's devi
private java.lang.String	**mLongitudeText** A String version of the user's las longitude
private com.google.android.gms.maps.GoogleMap	**mMap** Contains map for fragment
private static int	**MY_PERMISSION_ACCESS_FINE** Constant for the permission of Location
private com.google.android.gms.common.api.PendingResult<com.google.android.gms.location.LocationSettingsResult>	**result** Contains the result of the permi validity

private android.view.View	**view** Contains the fragments visual la

CAUSE_NETWORK_LOST, CAUSE_SERVICE_DISCONNECTED

Constructor Summary

Constructors

Constructor and Description
ProfileFragment()

Method Summary

All Methods **Static Methods** **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
private int	**adaptDayOfWeek**(int weekday) There's a mismatch between our original int values of weekdays with the java.utils.calendar integer values of weekdays.
java.lang.String	**breakCalculator**(**User** u, java.util.ArrayList<**Break**> friendBreaks) Calculates the time difference between two breaks.
private void	**checkBreakStatus**(**User** u) Gets the user's break status (time before a break, in break or no more breaks).
private boolean	**checkPermission**() Check if the application has the authorization to use the device's localisation.
void	**clearMap**() Clears the map.
private void	**createGoogleMapClient**() Creates a Google Map API Client in order to use Google's APIs.
private void	**createRequestLocation**() Creates the request for the location updates.
static long	**getDateDiff**(java.util.GregorianCalendar date1, java.util.GregorianCalendar date2, java.util.concurrent.TimeUnit timeUnit) Returns the time difference between two dates in milliseconds.
private void	**loadProfile**() Gets the user's information from the database.
void	**onAttach**(android.content.Context context) Gets called when the fragment gets attached to an activity.
void	**onClick**(android.view.View v) prevents the user to click on undesired elements.
void	**onConnected**(android.os.Bundle bundle) Enables the user to update his or her location and start the location updates from the user's device.
void	**onConnectionFailed**(com.google.android.gms.common.ConnectionResult connectionResult) Handles the event where the connection to the Google API Client fails.
void	**onConnectionSuspended**(int i) Stops the location updates if the connection to the Google API Client is lost.
android.view.View	**onCreateView**(android.view.LayoutInflater inflater, android.view.ViewGroup container, android.os.Bundle savedInstanceState) Inflates the fragment's visual layout.
void	**onDestroyView**() Destroys the map when the fragment stops in order to prevent re-inflation of the view.
void	**onLocationChanged**(android.location.Location location) Handles the event where the user's location changes.
void	**onMapReady**(com.google.android.gms.maps.GoogleMap googleMap) Sets the map when it is ready to be used (location, zoom, markers).
void	**onPause**() Stops the location updates from the user's device and disconnect the Google API client.

void	**onRequestPermissionsResult**(int requestCode, java.lang.String[] permissions, int[] grantResults) Handles the result of the the permission request.
void	**onResume**() Reconnects to the Google API Client (if needed) and start the location updates from the user's device.
void	**onStart**() Create or connect to a Google Api Client (if needed) and start location updates from the device when the fragment starts.
void	**onStop**() Stops the location updates from the device when the fragment stops.
boolean	**onTouch**(android.view.View v, android.view.MotionEvent event) Prevents the user to swipe undesired elements.
void	**printLocation**() Prints user's location.
private void	**requestPermission**(java.lang.String permissionName, int permissionRequestCode) Requests a permission to a given aspect to the user.
private void	**setMood**(java.lang.String mood) Changes the user's Mood in the database.
void	**setUserAndPaintProfile**(User u) Changes the layout according to the user's information.
void	**startLocationUpdates**() Start the location updates.
protected void	**stopLocationUpdates**() Stop the location updates.
void	**update**(java.util.Observable o, java.lang.Object arg) Updates the user's information when a field is changed in the database.
void	**updateLocation**() Update the user's location on the map and in the database.

Methods inherited from class android.support.v4.app.Fragment

dump, equals, getActivity, getAllowEnterTransitionOverlap, getAllowReturnTransitionOverlap, getArguments, getChildFragmentManager, getContext, getEnterTransition, getExitTransition, getFragmentManager, getHost, getId, getLayoutInflater, getLoaderManager, getParentFragment, getReenterTransition, getResources, getRetainInstance, getReturnTransition, getSharedElementEnterTransition, getSharedElementReturnTransition, getString, getString, getTag, getTargetFragment, getTargetRequestCode, getText, getUserVisibleHint, getView, hashCode, hasOptionsMenu, instantiate, instantiate, isAdded, isDetached, isHidden, isInLayout, isMenuVisible, isRemoving, isResumed, isVisible, onActivityCreated, onActivityResult, onAttach, onAttachFragment, onConfigurationChanged, onContextItemSelected, onCreate, onCreateAnimation, onCreateContextMenu, onCreateOptionsMenu, onDestroy, onDestroyOptionsMenu, onDetach, onHiddenChanged, onInflate, onInflate, onLowMemory, onMultiWindowModeChanged, onOptionsItemSelected, onOptionsMenuClosed, onPictureInPictureModeChanged, onPrepareOptionsMenu, onSaveInstanceState, onViewCreated, onViewStateRestored, postponeEnterTransition, registerForContextMenu, requestPermissions, setAllowEnterTransitionOverlap, setAllowReturnTransitionOverlap, setArguments, setEnterSharedElementCallback, setEnterTransition, setExitSharedElementCallback, setExitTransition, setHasOptionsMenu, setInitialSavedState, setMenuVisibility, setReenterTransition, setRetainInstance, setReturnTransition, setSharedElementEnterTransition, setSharedElementReturnTransition, setTargetFragment, setUserVisibleHint, shouldShowRequestPermissionRationale, startActivity, startActivity, startActivityForResult, startActivityForResult, startIntentSenderForResult, startPostponedEnterTransition, toString, unregisterForContextMenu

Methods inherited from class java.lang.Object

clone, finalize, getClass, notify, notifyAll, wait, wait, wait

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Field Detail

MY_PERMISSION_ACCESS_FINE_LOCATION

private static final int MY_PERMISSION_ACCESS_FINE_LOCATION

Constant for the permission of the Fine Location

See Also:
Constant Field Values

mMap

```
private com.google.android.gms.maps.GoogleMap mMap
```

Contains map for fragment

mGoogleApiClient

```
private com.google.android.gms.common.api.GoogleApiClient mGoogleApiClient
```

Contains Google Api Client

mLastLocation

```
private android.location.Location mLastLocation
```

Contains the last known location of the user

mLatitudeText

```
private java.lang.String mLatitudeText
```

A String version of the user's last known latitude

mLongitudeText

```
private java.lang.String mLongitudeText
```

A String version of the user's last known longitude

view

```
private android.view.View view
```

Contains the fragments visual layout

mGpsUpdate

```
private android.widget.ImageButton mGpsUpdate
```

Contains the button for the GPS update

mLocationRequest

```
private com.google.android.gms.location.LocationRequest mLocationRequest
```

Contains the location request in order to get updates form the user's device

context

```
private android.content.Context context
```

Contains the context from the attached activity

builder

```
private com.google.android.gms.location.LocationSettingsRequest.Builder builder
```

Contains the a builder to change the user's device GPS state

result

```
private com.google.android.gms.common.api.PendingResult<com.google.android.gms.location.LocationSettingsResult> result
```

Contains the result of the permission validity

mapIsReady

```
private boolean mapIsReady
```

If the map is ready

Constructor Detail

ProfileFragment

```
public ProfileFragment()
```

Method Detail

onAttach

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

Gets called when the fragment gets attached to an activity. This method gets the context.

Overrides:
onAttach in class android.support.v4.app.Fragment

onCreateView

```
public android.view.View onCreateView(android.view.LayoutInflater inflater,
                                      android.view.ViewGroup container,
                                      android.os.Bundle savedInstanceState)
```

Inflates the fragment's visual layout.

Overrides:
onCreateView in class android.support.v4.app.Fragment

update

```
public void update(java.util.Observable o,
                   java.lang.Object arg)
```

Updates the user's information when a field is changed in the database.

Specified by:
update in interface java.util.Observer

setMood

```
private void setMood(java.lang.String mood)
```

Changes the user's Mood in the database.

loadProfile

```
private void loadProfile()
```

Gets the user's information from the database.

setUserAndPaintProfile

```
public void setUserAndPaintProfile(User u)
```

Changes the layout according to the user's information.

onStart

```
public void onStart()
```

Create or connect to a Google Api Client (if needed) and start location updates from the device when the fragment starts.

Overrides:
onStart in class android.support.v4.app.Fragment

onStop

```
public void onStop()
```

Stops the location updates from the device when the fragment stops.

Overrides:
onStop in class android.support.v4.app.Fragment

onResume

public void onResume()

Reconnects to the Google API Client (if needed) and start the location updates from the user's device.

Overrides:
onResume in class android.support.v4.app.Fragment

onPause

public void onPause()

Stops the location updates from the user's device and disconnect the Google API client.

Overrides:
onPause in class android.support.v4.app.Fragment

onConnected

public void onConnected(@Nullable
                        android.os.Bundle bundle)

Enables the user to update his or her location and start the location updates from the user's device.

Specified by:
onConnected in interface com.google.android.gms.common.api.GoogleApiClient.ConnectionCallbacks

createGoogleMapClient

private void createGoogleMapClient()

Creates a Google Map API Client in order to use Google's APIs.

createRequestLocation

private void createRequestLocation()

Creates the request for the location updates.

onMapReady

public void onMapReady(com.google.android.gms.maps.GoogleMap googleMap)

Sets the map when it is ready to be used (location, zoom, markers).

Specified by:
onMapReady in interface com.google.android.gms.maps.OnMapReadyCallback

checkPermission

private boolean checkPermission()

Check if the application has the authorization to use the device's localisation.

onConnectionSuspended

public void onConnectionSuspended(int i)

Stops the location updates if the connection to the Google API Client is lost.

Specified by:
onConnectionSuspended in interface com.google.android.gms.common.api.GoogleApiClient.ConnectionCallbacks

onConnectionFailed

```
public void onConnectionFailed(@NonNull
                               com.google.android.gms.common.ConnectionResult connectionResult)
```

Handles the event where the connection to the Google API Client fails.

Specified by:
```
onConnectionFailed in interface com.google.android.gms.common.api.GoogleApiClient.OnConnectionFailedListener
```

startLocationUpdates

```
public void startLocationUpdates()
```

Start the location updates.

stopLocationUpdates

```
protected void stopLocationUpdates()
```

Stop the location updates.

onDestroyView

```
public void onDestroyView()
```

Destroys the map when the fragment stops in order to prevent re-inflation of the view.

Overrides:
```
onDestroyView in class android.support.v4.app.Fragment
```

onClick

```
public void onClick(android.view.View v)
```

prevents the user to click on undesired elements.

Specified by:
```
onClick in interface android.view.View.OnClickListener
```

onTouch

```
public boolean onTouch(android.view.View v,
                       android.view.MotionEvent event)
```

Prevents the user to swipe undesired elements.

Specified by:
```
onTouch in interface android.view.View.OnTouchListener
```

onLocationChanged

```
public void onLocationChanged(android.location.Location location)
```

Handles the event where the user's location changes.

Specified by:
```
onLocationChanged in interface com.google.android.gms.location.LocationListener
```

updateLocation

```
public void updateLocation()
```

Update the user's location on the map and in the database.

requestPermission

```
private void requestPermission(java.lang.String permissionName,
                               int permissionRequestCode)
```

Requests a permission to a given aspect to the user.

onRequestPermissionsResult
```

```
public void onRequestPermissionsResult(int requestCode,
                                       java.lang.String[] permissions,
                                       int[] grantResults)
```

Handles the result of the the permission request.

Overrides:

`onRequestPermissionsResult` in class `android.support.v4.app.Fragment`

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clearMap

```
public void clearMap()
```

Clears the map.

---

getDateDiff

```
public static long getDateDiff(java.util.GregorianCalendar date1,
                               java.util.GregorianCalendar date2,
                               java.util.concurrent.TimeUnit timeUnit)
```

Returns the time difference between two dates in milliseconds.

---

checkBreakStatus

```
private void checkBreakStatus(User u)
```

Gets the user's break status (time before a break, in break or no more breaks).

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breakCalculator

```
public java.lang.String breakCalculator(User u,
                                        java.util.ArrayList<Break> friendBreaks)
```

Calculates the time difference between two breaks.

---

adaptDayOfWeek

```
private int adaptDayOfWeek(int weekday)
```

There's a mismatch between our original int values of weekdays with the java.utils.calendar integer values of weekdays.

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printLocation

```
public void printLocation()
```

Prints user's location.