toSharedPreferences Format Standardized

Example ID:

KRONOS_20191121_113347_331213432313791461.jpg

Contents

Please follow the exact same string, lowercase and uppercase

Key	Value	Value Type
title	{ title of the event }	String
location	{ location of event }	String
description	{ description of event}	String
fromDate	TUESDAY 23/11/2019	String
fromTime	01:27	String
toDate	TUESDAY 23/11/2019	String
toTime	01:27	String
reminder	true	boolean
imgPath	storage/emulated/0/android/data/com.example.kronos/files/ pictures/KRONOS_20191121_113347_331213432313791461.jpg	String

Image Storage File Path & SharedPreferences ID

This is an example of the image file name after taking a photo

storage/emulated/0/android/data/com.example.kronos/files/pictures/KRONOS_20191121_113347_331213432313791461.jpg

The image file name will conveniently be set the same as the corresponding SP ID as shown above

Method to generate correct ID / Image Filename format

```
String timeStamp = new SimpleDateFormat("yyyyMMdd_HHmmss",
Locale.ENGLISH).format(new Date());
        String imageFileName = "KRONOS_" + timeStamp + "_";

        File storageDir =
context.getExternalFilesDir(Environment.DIRECTORY_PICTURES);
        File image = File.createTempFile(
                imageFileName,  /* prefix */
                ".jpg",         /* suffix */
                storageDir      /* directory */
        );
```

Save SharedPreferences Utility

Use this function to save a shared preferences in the format we standardize

prefName: the **ID** of the SP, followed the format stated above)

```
void savePref(String prefName, String title, String location, String
description, String fromDate, String fromTime, String toDate, String toTime,
Boolean reminder, String imagePath){
        SharedPreferences sharedPref =
this.context.getSharedPreferences(prefName, Context.MODE_PRIVATE);
        SharedPreferences.Editor editor = sharedPref.edit();
        editor.putString("title", title);
        editor.putString("location", location);
        editor.putString("description", description);
        editor.putString("fromDate", fromDate);
        editor.putString("fromTime", fromTime);
        editor.putString("toDate", toDate);
        editor.putString("toTime", toTime);
        editor.putBoolean("reminder", reminder);
        editor.putString("imgPath", imagePath);
        editor.apply();
        Toast.makeText(this.context, "Entry saved with ID: " + prefName,
Toast.LENGTH_SHORT).show();
    }
```

Retrieve SharedPreferences Utility

Use this function to retrieve the SP and access its contents

prefName: the **ID** of the SP, followed the format stated above)

! for getting values from SP, you need to put in a default value as the second argument

```
SharedPreferences retrievePref(String prefName){
        return this.context.getSharedPreferences(prefName,
Context.MODE_PRIVATE);
    }  // this part retrieve the SP

// this is to get the current calendar date and time
```

```
// it is used as default value for get SP below
final Calendar cldr = Calendar.getInstance();
            final int year = cldr.get(Calendar.YEAR);
            final int month = cldr.get(Calendar.MONTH);
            final int dayNum = cldr.get(Calendar.DAY_OF_MONTH);
            final int day = cldr.get(Calendar.DAY_OF_WEEK);
            final int hour = cldr.get(Calendar.HOUR_OF_DAY);
            final int min = cldr.get(Calendar.MINUTE);
            final GalleryUtils galleryUtils = new
GalleryUtils(MainActivity.this);

            String dayStr = galleryUtils.convertDay(day);  // this method
converts day in integer to day as String -> see below for the code

// this part calls the retrieveSP method and get relevant contents out
SharedPreferences pref = retrievePref(sharedPref);
            String title = pref.getString("title", "");
            String location = pref.getString("location", "");
            String description = pref.getString("description", "");
            String fromDate = pref.getString("fromDate", String.format("%s
%d/%d/%d", dayStr, dayNum, month+1, year));
            String fromTime = pref.getString("fromTime",
String.format("%d:%d", hour, min));
            String toDate = pref.getString("toDate", String.format("%s
%d/%d/%d", dayStr, dayNum, month+1, year));
            String toTime = pref.getString("toTime", String.format("%d:%d",
hour, min));
            Boolean reminder = pref.getBoolean("reminder", false);
            String imgPath = pref.getString("imgPath", "");
```

Sub utility to convert day-of-week in Integer to String

```
String convertDay(int day) {
      String dayStr;

      switch (day) {
          case Calendar.MONDAY:
              dayStr = "Monday";
              break;
          case Calendar.TUESDAY:
              dayStr = "Tuesday";
              break;
          case Calendar.WEDNESDAY:
              dayStr = "Wednesday";
              break;
          case Calendar.THURSDAY:
              dayStr = "Thursday";
              break;
          case Calendar.FRIDAY:
              dayStr = "Friday";
              break;
          case Calendar.SATURDAY:
              dayStr = "Saturday";
              break;
          case Calendar.SUNDAY:
              dayStr = "Sunday";
              break;
```

```
            default:
                dayStr = "";
                break;
        }
        return dayStr;
    }
```