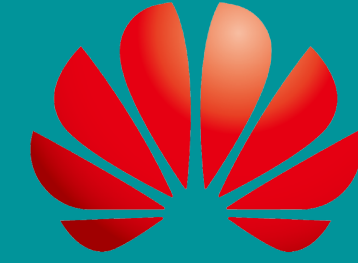




**YALOVA UNIVERSITY**

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**HUAWEI**

# **Android Programming with Huawei Mobile Services**

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# WHAT WE DO TODAY

## Overview of Ads Kit

- What is Ads Kit?
- Usage Areas & Common Features
- What is the type of Ads?

## HMS Core Integration

- How to create project using with HMS Core
- HMS Core Integration

## Shared Preferences

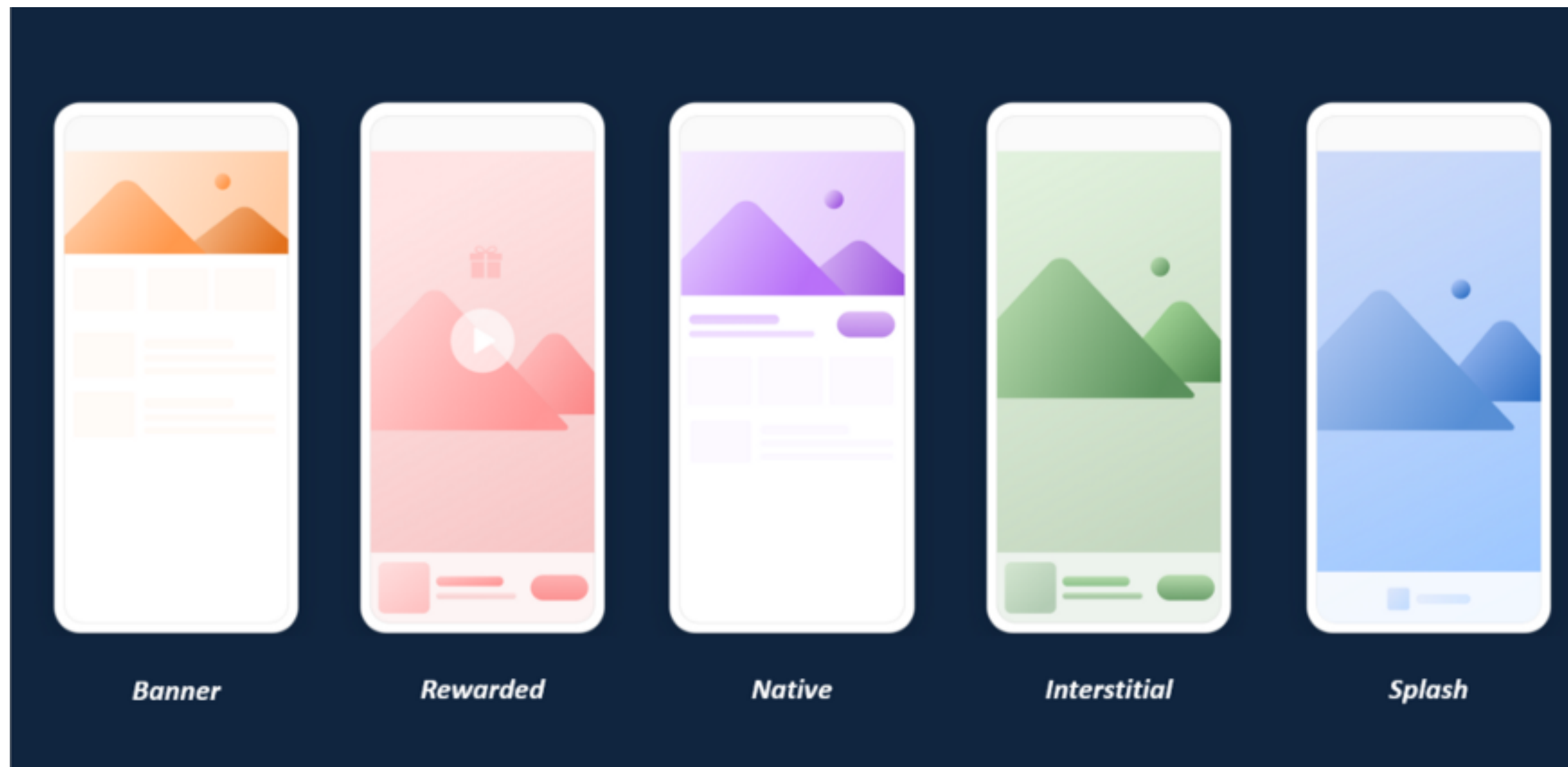
- What is Shared Prefs?
- How to use Shared Prefs
- Ads kit and Shared Prefs. Sample Integration



# Overview of Ads Kit

# What is Ads Kit?

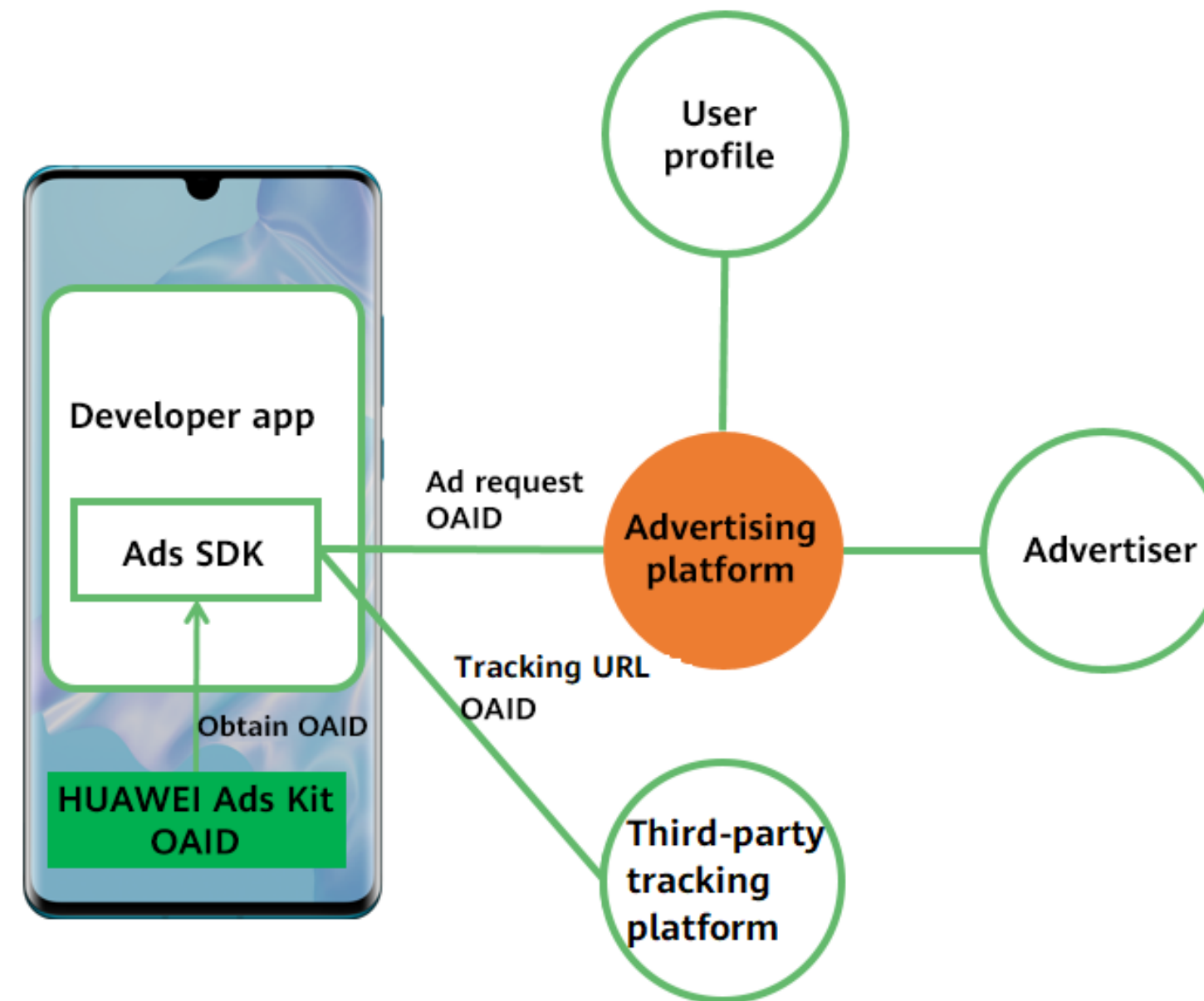
HUAWEI Ads Publisher Service is a monetization service that leverages Huawei's extensive data capabilities to display targeted, high quality ad content in your apps to the vast user base of Huawei devices.



# Usage Areas & Common Features

## Traffic monetization

Provides the Publisher service platform for you to obtain high-quality ad content and quickly grow your business based on Huawei's device capabilities and integrated resources.



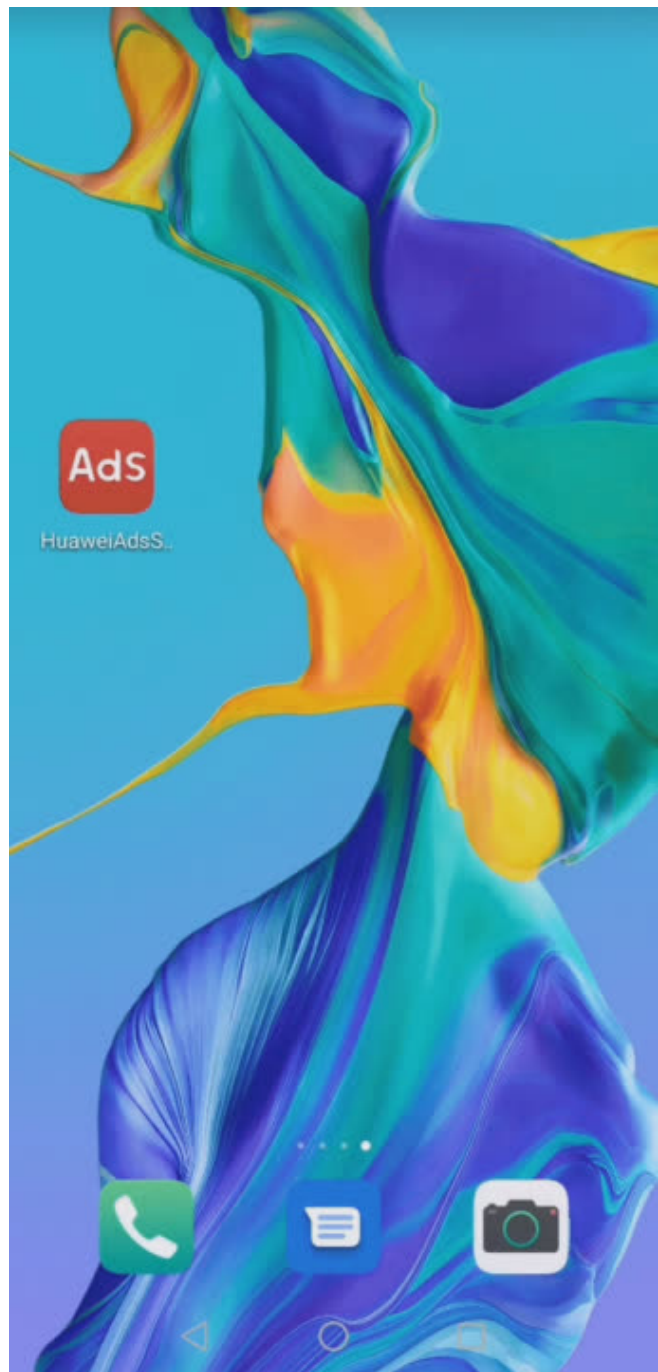
## Advertising identifiers

Uses Open Advertising Identifier (OAID), a non-permanent device identifier to personalize ads for your users while protecting their privacy, and provide a basis for third-party tracking platforms to perform conversion attribution for advertisers. Advertisers can integrate Huawei's open APIs to obtain install referrers, analyze app promotion channels, and accurately measure conversions from the channels.



# Type of Ads Kit

# Banner Ads

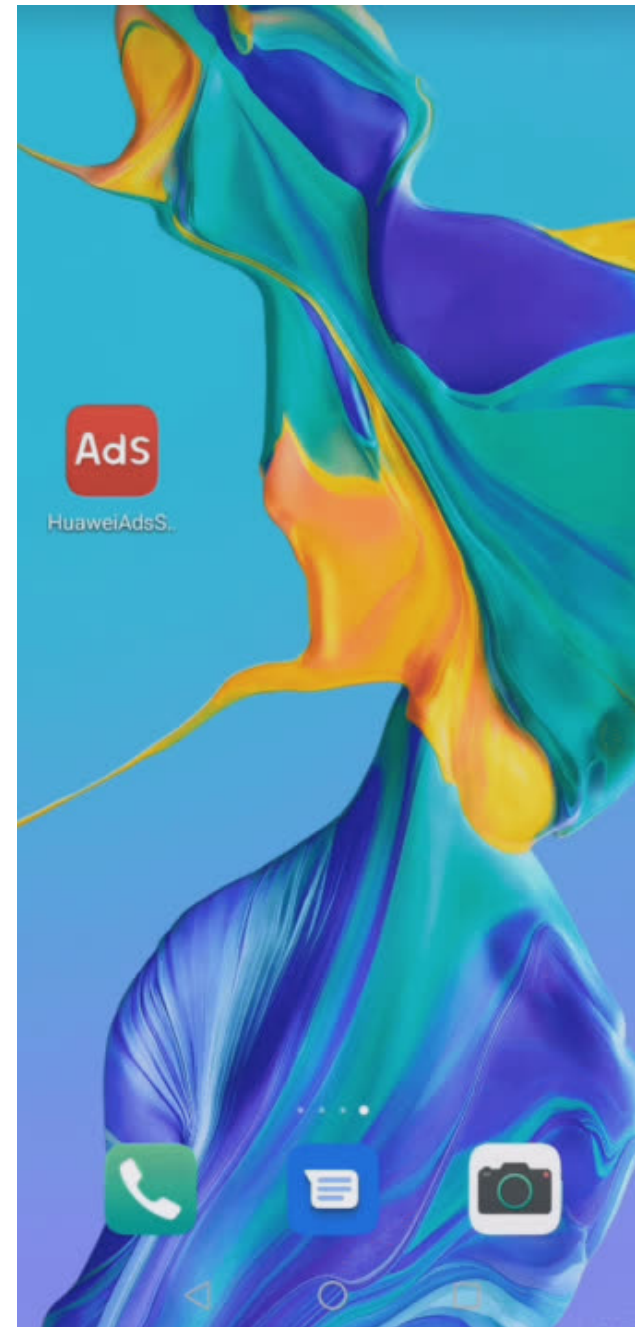
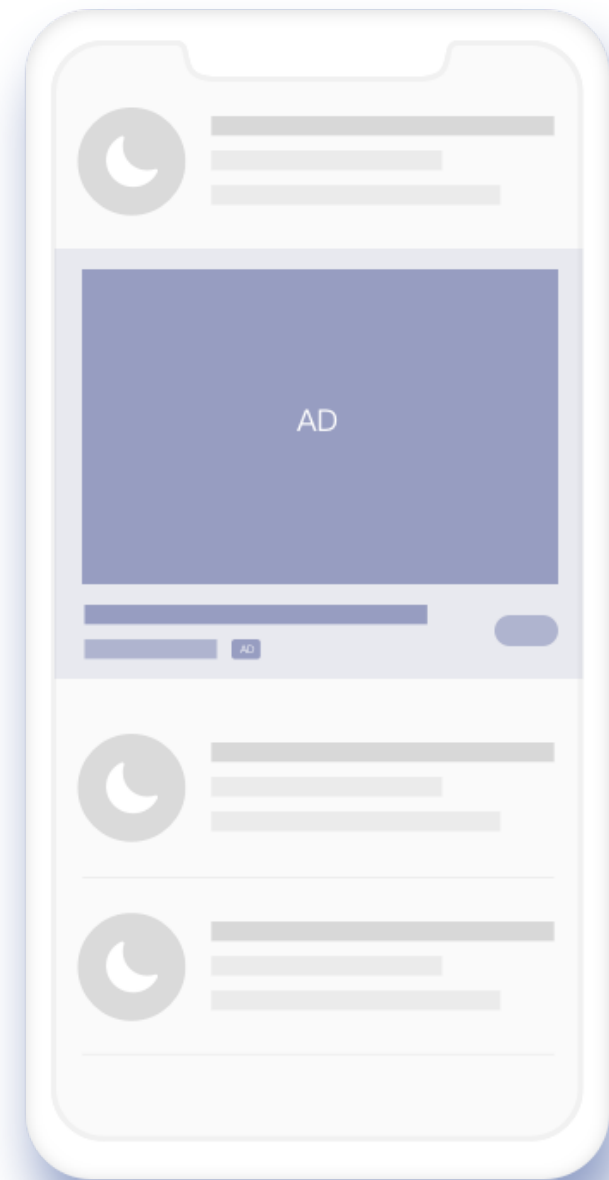


Banner ads are rectangular images that occupy a spot at the top, middle, or bottom within an app's layout. Banner ads refresh automatically at regular intervals. When a user clicks a banner ad, the user is usually redirected to the advertiser's page.

Type	Size in dp (W x H)	Description
BANNER_SIZE_320_50	320 x 50	Common banner ads, applicable to phones.
BANNER_SIZE_320_100	320 x 100	Large banner ads, applicable to phones.
BANNER_SIZE_300_250	300 x 250	Medium rectangular banner ads, applicable to phones.
BANNER_SIZE_360_57	360 x 57	Common banner ads, applicable to 1080 x 170 px ad assets.
BANNER_SIZE_360_144	360 x 144	Large banner ads, applicable to 1080 x 432 px ad assets.
BANNER_SIZE_SMART	Screen width x 32 50 90	Adaptive banner ads (whose size is automatically adjusted based on the aspect ratios of devices), applicable to phones.



# Native Ads



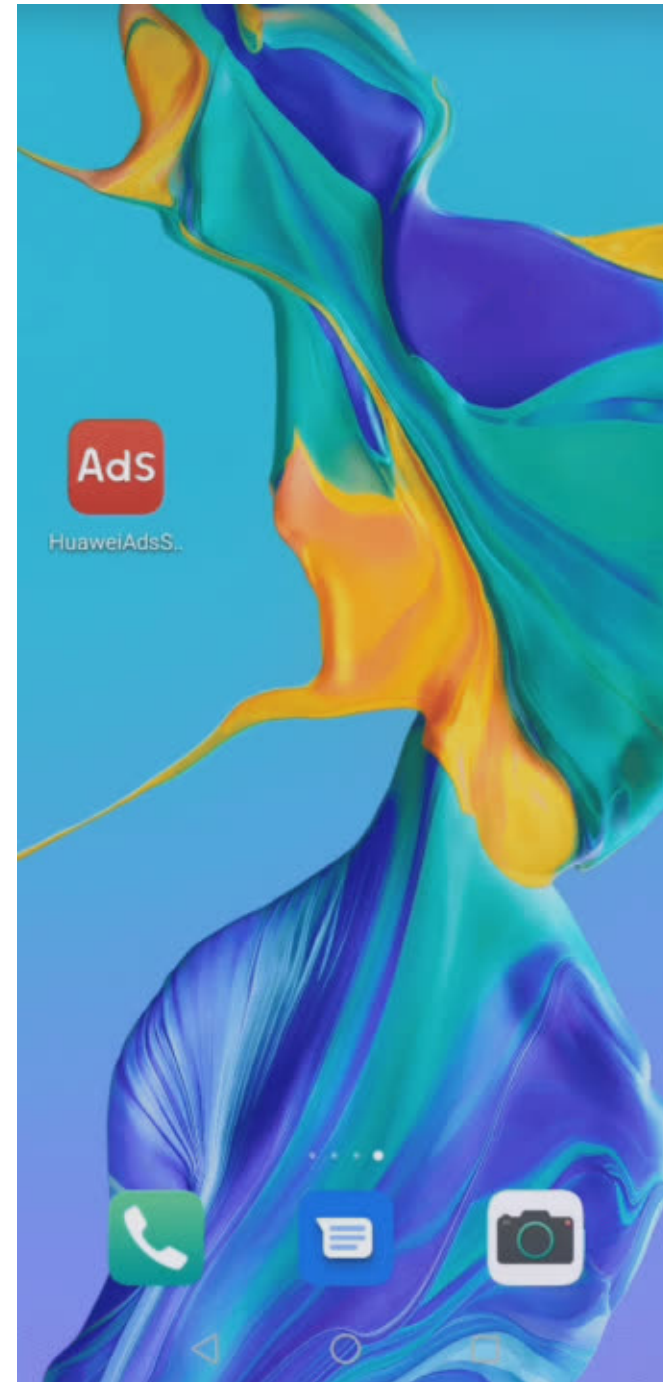
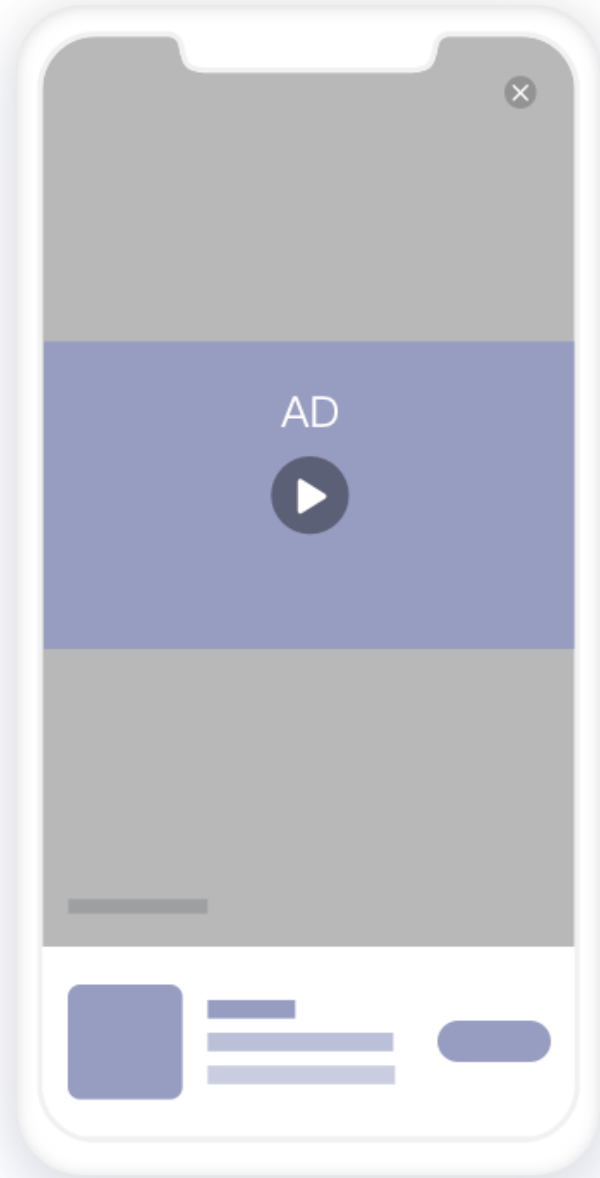
Native ads fit seamlessly into the surrounding content to match your app design. Such ads can be customized as needed.

Display Form	Dimensions	Aspect Ratio
Large image with text	1080 x 607	16:9
Small image with text	225 x 150	3:2
Video with text	640 x 360	16:9

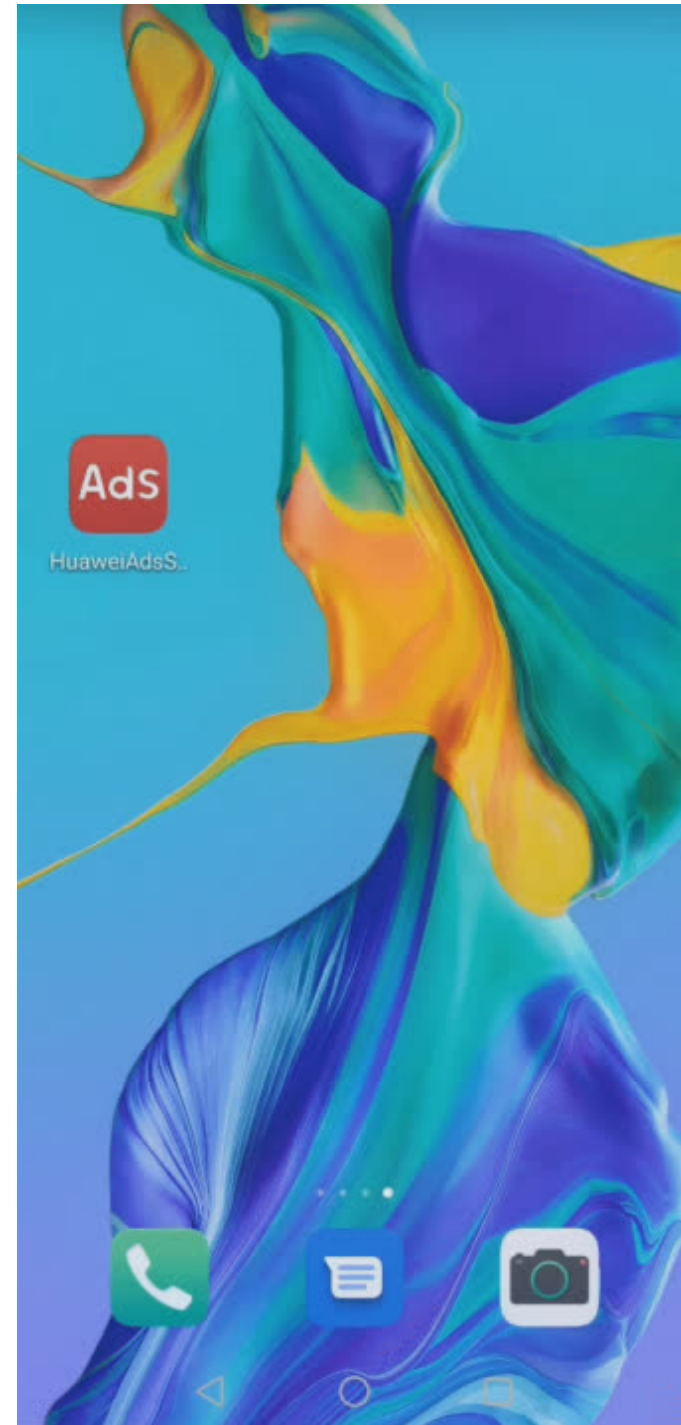


# Rewarded Ads

Rewarded ads are full-screen video ads that reward users for watching.



# Interstitial Ads

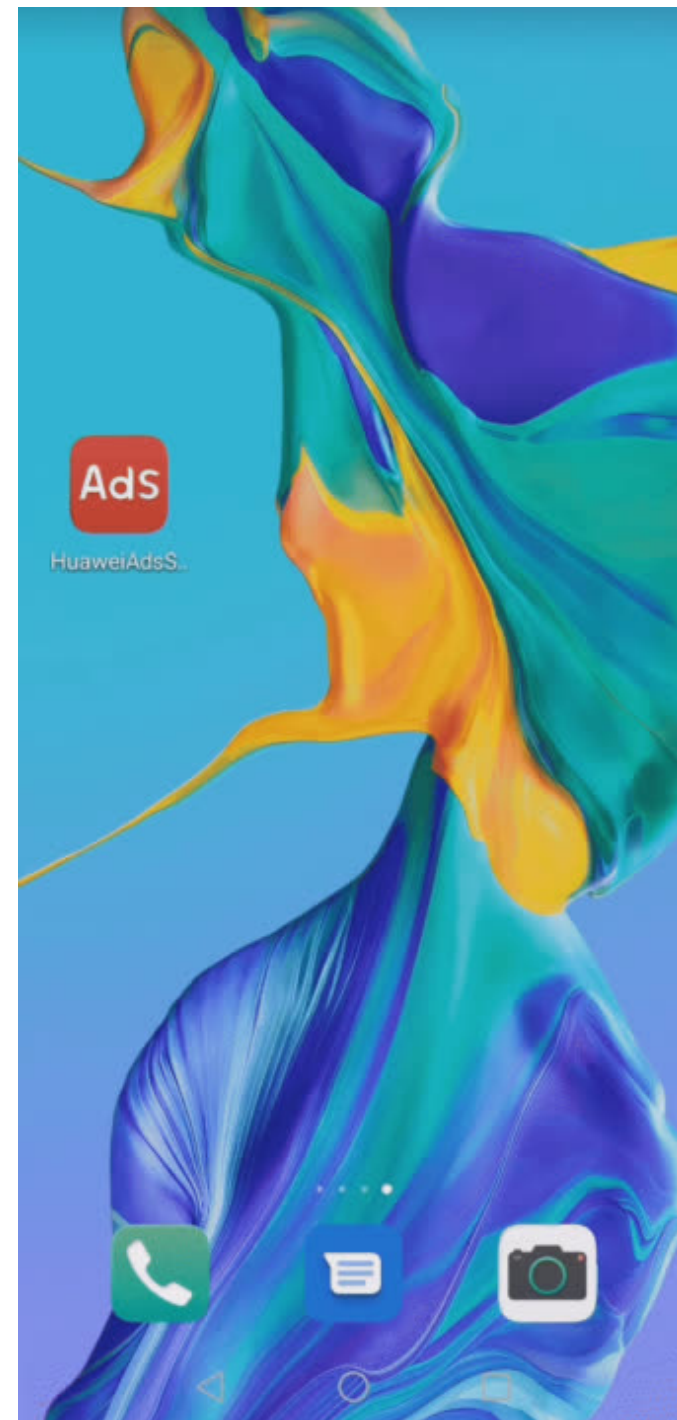


Interstitial ads are full-screen ads that cover the interface of an app. Such an ad is displayed when a user starts, pauses, or exits an app, without disrupting the user's experience.

Display Form	Screen Orientation	Dimensions
Image	Portrait	1080 x 1620
Video	Portrait	720 x 1080

Use the code for interstitial ads and execute the code, the following screen will be displayed

# Splash Ads

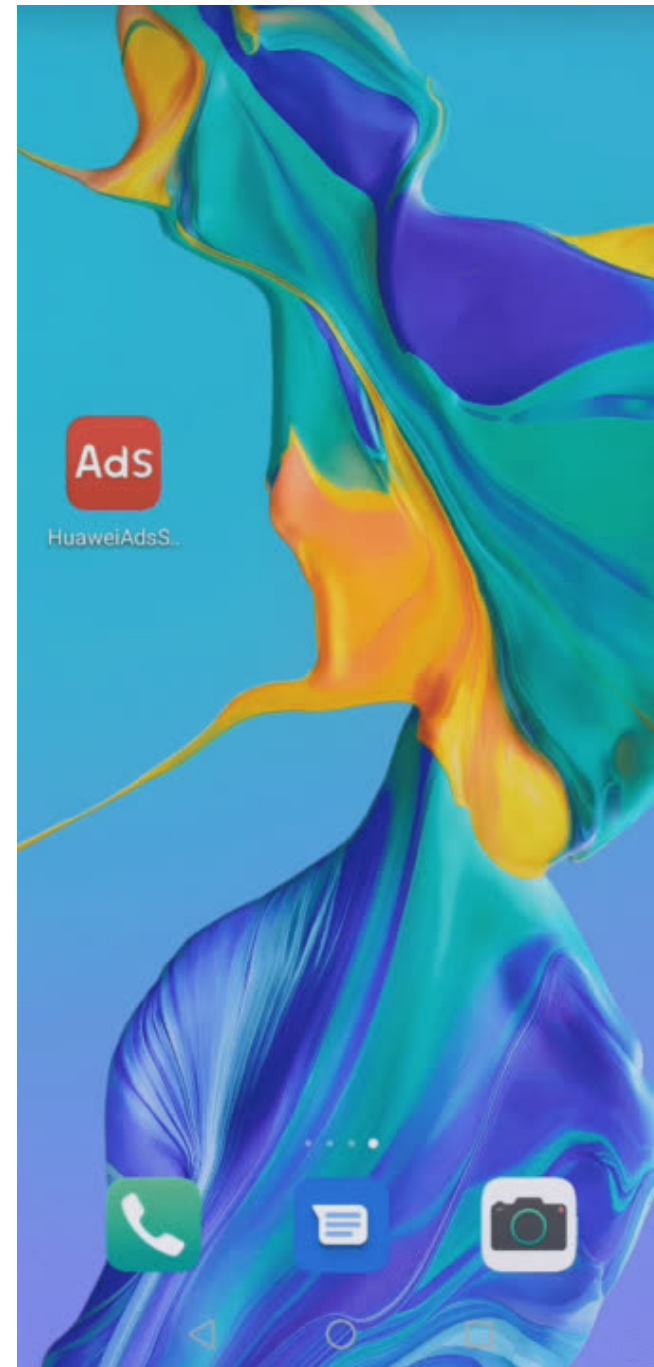
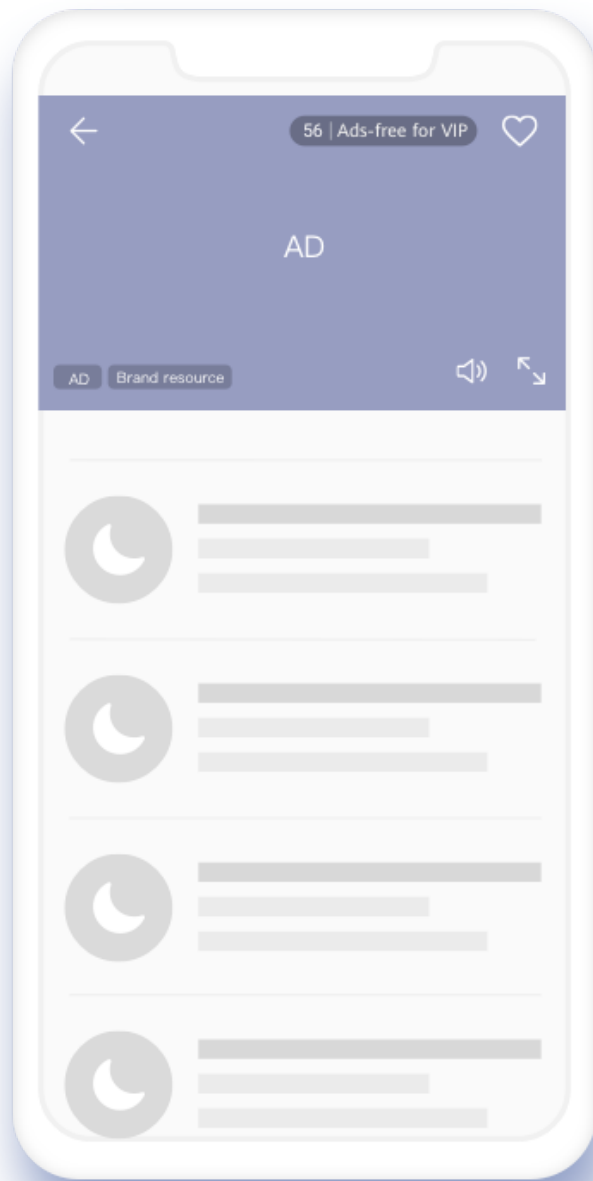


Splash ads are displayed immediately after an app is launched, even before the home screen of the app is displayed.

Ad Format	Display Form	Dimensions	Aspect Ratio
Splash	Image	1080 x 1620	2:3
Splash	Video	720 x 1280	9:16

# Roll Ads

Roll ads are displayed as short videos or images, before, during, or after the video content is played.



Ad Format	Display Form	Dimensions
Roll	Image or video	640 x 360



# HMS Core Integration

# HMS Core Integration



1. App Creation
2. Integrate HMS Core into App
3. Installing the application in the AGC environment

Online Guide for HMS Core Integration

<https://developer.huawei.com/consumer/en/codelab/HMSPreparation/index.html#0>



# Ads Kit Sample Application



# Ads Kit



## Usefull Links

### Homepage

<https://developer.huawei.com/consumer/en/hms/huawei-adskit>

### Development Guide

<https://developer.huawei.com/consumer/en/doc/development/HMSCore-Guides/service-introduction-0000001050040060>

### Sample Code

<https://developer.huawei.com/consumer/en/doc/development/HMSCore-Examples/sample-code-0000001050066947>

### Codelab:

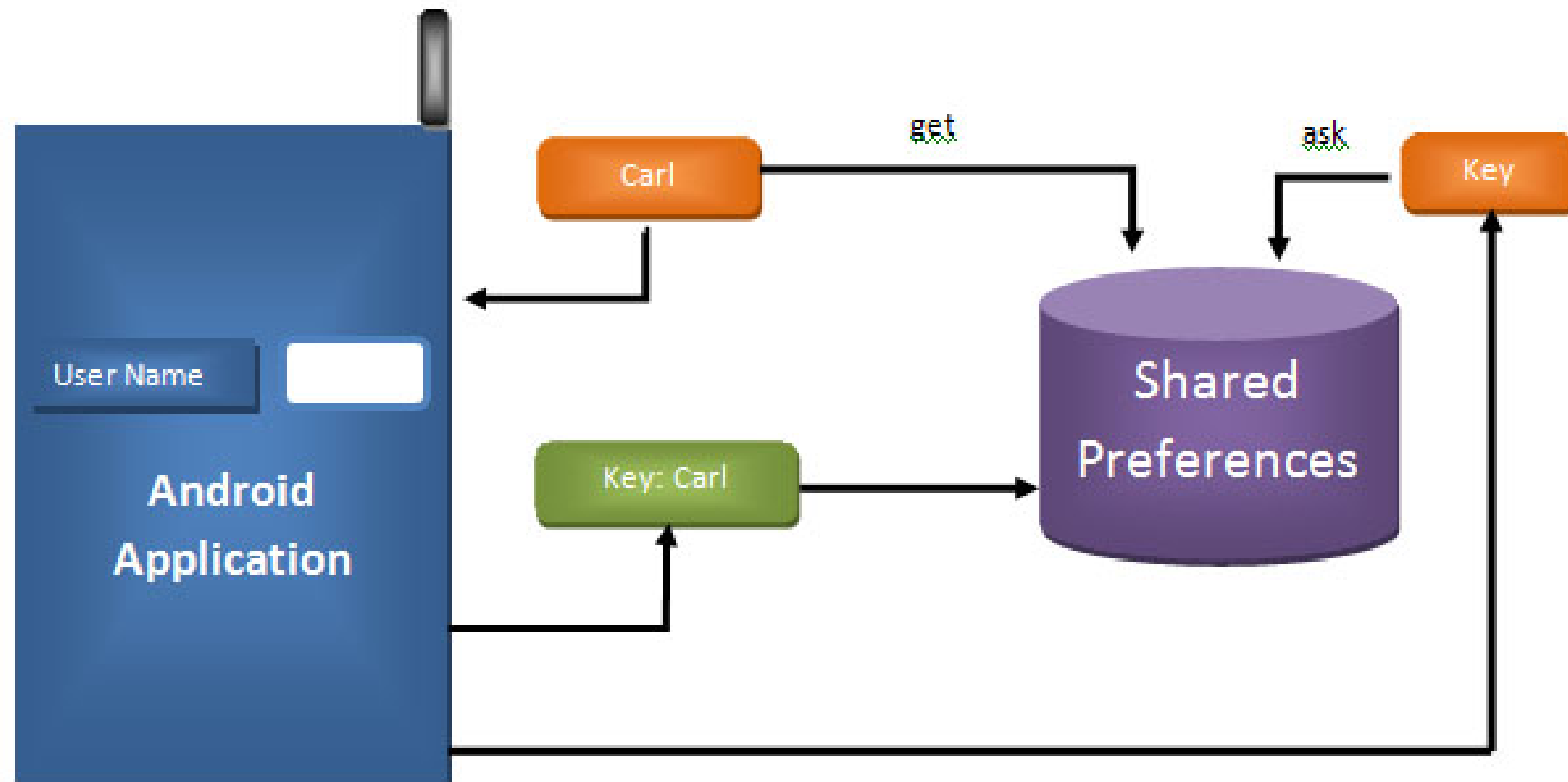
[OAID](#), [Install Referrer](#), [NativeAds](#), [BannerAds](#), [RewardedAds](#), [InterstitialAds](#), [SplashAds](#)



# Shared Preferences

# Shared Preferences

**Reference:** <https://developer.android.com/reference/android/content/SharedPreferences>



One of the most Interesting Data Storage option Android provides its users is Shared Preferences. Shared Preferences is the way in which one can store and retrieve small amounts of primitive data as key/value pairs to a file on the device storage such as String, int, float, Boolean that make up your preferences in an XML file inside the app on the device storage. Shared Preferences can be thought of as a dictionary or a key/value pair.

# Methods of Shared Preferences

## How to Write Data in Shared Preferences



// Storing data into SharedPreferences

```
SharedPreferences sharedPreferences  
    = getSharedPreferences("MySharedPref",  
                           MODE_PRIVATE);
```

```
// Creating an Editor object  
// to edit(write to the file)  
SharedPreferences.Editor myEdit  
    = sharedPreferences.edit();
```

```
// Storing the key and its value  
// as the data fetched from edittext  
myEdit.putString(  
    "name",  
    name.getText().toString());  
myEdit.putInt(  
    "age",  
    Integer.parseInt(  
        age.getText().toString()));
```

```
// Once the changes have been made,  
// we need to commit to apply those changes made,  
// otherwise, it will throw an error  
myEdit.commit();
```

## How to Read Data in Shared Preferences



// Retrieving the value using its keys

// the file name must be same in both saving  
// and retrieving the data

```
SharedPreferences sh  
    = getSharedPreferences("MySharedPref",  
                           MODE_APPEND);
```

```
// The value will be default as empty string  
// because for the very first time  
// when the app is opened,  
// there is nothing to show  
String s1 = sh.getString("name", "");  
int a = sh.getInt("age", 0);
```

```
// We can then use the data  
name.setText(s1);  
age.setText(String.valueOf(a));
```



# Ad Counting Feature in our application with Ads Kit



# LET'S TALK

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