Shared Preferences - Data Store

### What are shared preferences in Android Kotlin?

A SharedPreferences object points to a file containing key-value pairs and provides simple methods to read and write them. Each SharedPreferences file is managed by the framework and can be private or shared. This page shows you how to use the SharedPreferences APIs to store and retrieve simple values.

# What are shared preferences used for in Android?

What are SharedPreferences? Android provides many ways of storing app data such as an SQLiteDatabase, saving a data text file, etc. One of the ways is called SharedPreference. SharedPreferences allows you to save and require data in the form of keys and values and provides a simple method to read and write them.

# How to get value from shared preference in Android kotlin?

SharedPreferences Methods

getSharedPreferences(String, int) method is used to retrieve an instance of the SharedPreferences . Here String is the name of the SharedPreferences file and int is the Context passed.

The SharedPreferences.

We can call commit() or apply() to save the values in the SharedPreferences file.

### What is DataStore in Kotlin?

Jetpack DataStore is a data storage solution that allows you to store key-value pairs or typed objects with protocol buffers. DataStore uses Kotlin coroutines and Flow to store data asynchronously, consistently, and transactionally.

### What is the benefit of DataStore?

Datastore features include:

Atomic transactions.

High availability of reads and writes.

Massive scalability with high performance.

Flexible storage and querying of data.

Balance of strong and eventual consistency.

Encryption at rest.

Fully managed with no planned downtime.

#### How to create DataStore in android?

Preferences DataStore

Create the instance of DataStore:

Create keys:

Write to a Preferences DataStore.

Read from a Preferences DataStore.

Add the below dependency into the app-level build.

Add the protobuf to plugins in the build.

Add the proto file (Define a schema):

Create the serializer for DataStore:

# What is the use of proto DataStore?

Image result for data store in kotlin

Proto DataStore defines the schema using Protocol buffers. Using Protobufs allows persisting strongly typed data. They are faster, smaller, simpler, and less ambiguous than XML and other similar data formats.

#### What is DataStore vs database?

A data store is a repository for persistently storing and managing collections of data which include not just repositories like databases, but also simpler store types such as simple files, emails, etc. A database is a series of bytes that is managed by a database management system (DBMS).

#### What is DataStore?

A data store is a repository for persistently storing collections of data, such as a database, a file system or a directory. In an information technology context, data stored can be of any type that can be rendered in digital format and placed in electronic media.

#### What is the difference between DataStore and firestore?

Datastore mode can automatically scale to millions of writes per second. Use Firestore in Native mode for new mobile and web apps. Firestore offers mobile and web client libraries with real-time and offline features. Native mode can automatically scale to millions of concurrent clients.

### What are the 3 types of data storage?

Data can be recorded and stored in three main forms: file storage, block storage and object storage.