



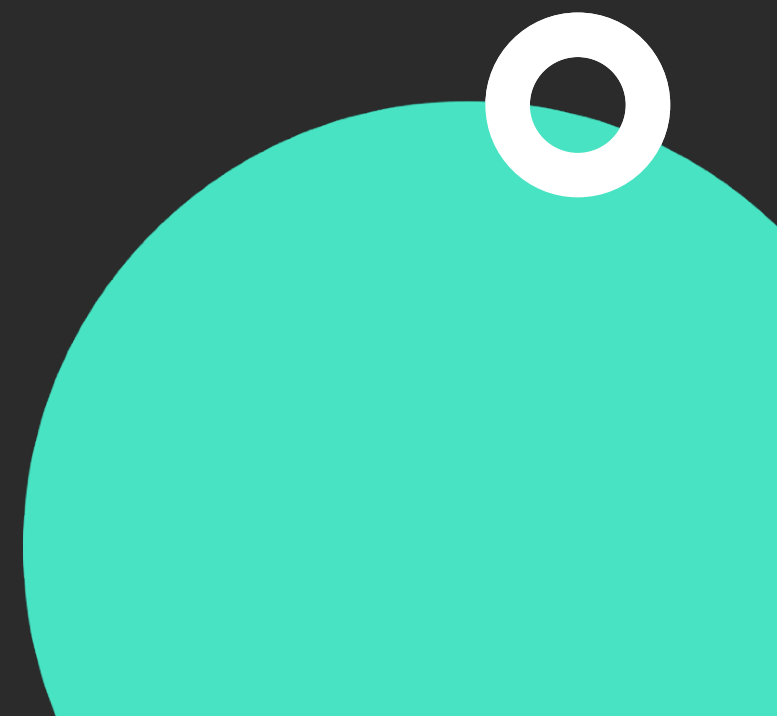
Managing Widget States



Piotr Prus

 @piotr_prus

 in/piotrprus



Section Overview

- What is glanceID and how it corresponds with appWidgetId
- GlanceStateDefinition
- How to use preferences and datastore for widget state
- Summary





GlanceID vs appWidgetID



```
val appWidgetId: Int
```

Opaque object used to describe a glance view.

```
interface GlanceId
```

```
internal data class AppWidgetId(val appWidgetId: Int) : GlanceId
```



WeatherWidget.kt

```
class WeatherWidget : GlanceAppWidget() {  
    override suspend fun provideGlance(context: Context, id: GlanceId) {  
        provideContent {  
            GlanceTheme(GlanceColorScheme.colors) {  
                WidgetContent()  
            }  
        }  
    }  
}
```





GlanceStateDefinition





GlanceStateDefinition

Preferences

DataStore





Preferences for Widget State



WeatherWidget.kt

```
@Composable
fun WidgetContent() {
    val prefs: MutablePreferences = currentState()
    //SET
    prefs[doublePreferencesKey("latitude")] = 50.09
    //GET
    val latitude = prefs[doublePreferencesKey("latitude")]

    // UI code. . .
}
```



WidgetStateHelper.kt

```
fun saveAddress(prefs: MutablePreferences, address: String) {  
    prefs[stringPreferencesKey(widgetAddressKey)] = address  
}  
  
fun saveLocation(prefs: MutablePreferences, latitude: Double, longitude: Double) {  
    prefs[doublePreferencesKey(widgetLatitudeKey)] = latitude  
    prefs[doublePreferencesKey(widgetLongitudeKey)] = longitude  
}  
  
fun isStored(prefs: Preferences, latitude: Double, longitude: Double): Boolean =  
    prefs[doublePreferencesKey(widgetLatitudeKey)] == latitude &&  
    prefs[doublePreferencesKey(  
        widgetLongitudeKey  
    )] == longitude
```





Code in Android Studio





Updating Widget State

Up Next

