





 >  > [Jetpack Compose](#) > [UI Libraries](#) > [Text](#)  [2 Parents...](#) > 207626317 


   TextField crash with the German Umlauts ä, ö and ü and/or with rapid typing (dead key)


+1

8

Hotlists (8)

Mark as Duplicate





Comments (12)

Dependencies

Duplicates (3)


Blocking (0)


Resources (6)

Fixed


Bug

P4



 STATUS UPDATE No update yet.

Edit

 DESCRIPTION

ja...@deepl.com created issue [#1](#)

Jetpack Compose release version: 1.0.5 Android Studio Build: Android Studio Arctic Fox | 2020.3.1 Patch 3 Kotlin version: 1.5.31

When I **rapidly** enter text to a `TextField` my App crashes with the following Exception:

```
E/MessageQueue-JNI: Exception in MessageQueue callback: handleReceiveCallback
E/MessageQueue-JNI: java.lang.IllegalArgumentException
    at java.lang.AbstractStringBuilder.appendCodePoint (AbstractStringBuilder.java:800)
    at java.lang.StringBuilder.appendCodePoint (StringBuilder.java:236)
    at androidx.compose.foundation.text.StringHelpers_jvmKt.appendCodePointX (StringHelpers.jvm.kt:20)
    at androidx.compose.foundation.text.TextFieldKeyInput.typedCommand-ZmokQxo (TextFieldKeyInput.kt:65)
    at androidx.compose.foundation.text.TextFieldKeyInput.process-ZmokQxo (TextFieldKeyInput.kt:73)
    at androidx.compose.foundation.text.TextFieldKeyInputKt$textFieldKeyInput$1$1.invoke-ZmokQxo (TextFieldKeyInput.kt:216)
    at androidx.compose.foundation.text.TextFieldKeyInputKt$textFieldKeyInput$1$1.invoke (TextFieldKeyInput.kt:216)
    at androidx.compose.ui.node.ModifiedKeyInputNode.propagateKeyEvent-ZmokQxo (ModifiedKeyInputNode.kt:44)
    at androidx.compose.ui.input.key.KeyInputModifier.processKeyInput-ZmokQxo (KeyInputModifier.kt:82)
    at androidx.compose.ui.platform.AndroidComposeView.sendKeyEvent-ZmokQxo (AndroidComposeView.android.kt:379)
    at androidx.compose.ui.platform.AndroidComposeView.dispatchKeyEvent (AndroidComposeView.android.kt:386)
    at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1986)
    at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1986)
    at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1986)
    at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1986)
    at com.android.internal.policy.DecorView.superDispatchKeyEvent (DecorView.java:901)
    at com.android.internal.policy.PhoneWindow.superDispatchKeyEvent (PhoneWindow.java:1947)
    at android.app.Activity.dispatchKeyEvent (Activity.java:4142)
    ...
```


I'm just using a simple `TextField`:


```
var text by remember { mutableStateOf("") }
TextField(
    value = text,
    onChange = { text = it }
)
```

Steps to Reproduce:

I created a sample project with a `TextField`: <https://github.com/jannisveerkamp/composebugreporter>

I have to admit I'm only able to produce this Crash when I rapidly enter text with my keyboard via scrpcy.

 Links (6)

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"I created a sample project with a `TextField`: <https://github.com/jannisveerkamp/composebugreporter>"

"...ccpy soon/later however the error happening in `AbstractStringBuilder` is a little weird <https://cs.android.com/android/platform/superproject/t/master/libcore/ojuni/src/main/java/java/lang/Abstra>


"based on the description in [here](#) and the code in [here](#) the exception is prevented however the glyph now displays as two separate characters (since more work and access to the next `KeyEvent` is r

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" ...lement while working on hardware keyboard improvements in its [scope](#)"

"<https://android-review.googlesource.com/2323739>"

COMMENTS

 **ja...@deepl.com** <ja...@deepl.com> [#2](#)

Since I can't edit my post: It seems it works on the Emulator, however it crashes on my Samsung S21.

 **je...@google.com** <je...@google.com>

Assigned to an...@google.com.

ri...@ffw.com <ri...@ffw.com> [#3](#)

I get the same crash when using scrpcy to mirror my device and then typing ö on my PC's keyboard

ja...@deepl.com <ja...@deepl.com> [#4](#)

I think this is the real issue. I have the same behavior.

Crashes for the german Umlauts ä, ö and ü

Sadly I cannot edit my bugreport not the title

si...@google.com <si...@google.com> [#5](#)

Thanks for the report. I updated the title.

I manually tested on samsung s8 and samsung fold 2 with German soft keyboard by entering umlauts mentioned, but couldn't reproduce.

Will try with scrpcy soon/later however the error happening in AbstractStringBuilder is a little weird <https://cs.android.com/android/platform/superproject/+/master:libcore/ojuni/src/main/j>

```
public AbstractStringBuilder appendCodePoint(int codePoint) {
    final int count = this.count;

    if (Character.isBmpCodePoint(codePoint)) {
        ...
    } else if (Character.isValidCodePoint(codePoint)) {
        ...
    } else {
        throw new IllegalArgumentException();
    }
    return this;
}
```

does the same thing happen for a regular EditText on the same device and setup?

si...@google.com <si...@google.com> [#6](#)

btw, I didnt know about scrpcy and it is awesome. it was exactly what I was looking for nowadays. thank you :)

si...@google.com <si...@google.com> [#7](#)

Reproduced with macos/ german input/scrpcy

si...@google.com <si...@google.com> [#8](#)

Does not happen on EditText

si...@google.com <si...@google.com> [#9](#)

Repro

- install scrpcy, and start
- get an older samsung device (the one I tested is samsung s8)
- change the laptop/desktop input language to german
- click on german umlaut

what is happening:

- external keyboard sends a KeyEvent that has combining accent mask
- the codepoint sent is masked and is not a valid unicode codepoint
- KeyEvent.android.kt calls nativeKeyEvent.unicodeChar which is not a valid codepoint
- StringuBilder.append fails since the codepoint is not valid

if I change the KeyEvent code into following

```
var i = nativeKeyEvent.unicodeChar
if(i != 0 && i and KeyCharacterMap.COMBINING_ACCENT != 0) {
    i = i and KeyCharacterMap.COMBINING_ACCENT_MASK
}
return i
```

based on the description in [↪here](#) and the code in [↪here](#) the exception is prevented however the glyph now displays as two separate characters (since more work and access to the next K

Will implement while working on hardware keyboard improvements in its [↪scope](#)

no...@google.com <no...@google.com>

Reassigned to gr...@google.com.

gr...@google.com <gr...@google.com> [#10](#)

reproduced per steps above. Stack trace line numbers have moved around a little. New stack trace:

```
java.lang.IllegalArgumentException
  at java.lang.AbstractStringBuilder.appendCodePoint (AbstractStringBuilder.java:800)
  at java.lang.StringBuilder.appendCodePoint (StringBuilder.java:236)
  at androidx.compose.foundation.text.StringHelpers_jvmKt.appendCodePointX (StringHelpers.jvm.kt:20)
  at androidx.compose.foundation.text.TextFieldKeyInput.typedCommand-ZmokQxo (TextFieldKeyInput.kt:78)
  at androidx.compose.foundation.text.TextFieldKeyInput.process-ZmokQxo (TextFieldKeyInput.kt:86)
  at androidx.compose.foundation.text.TextFieldKeyInputKt$textFieldKeyInput$2$1.invoke-ZmokQxo (TextFieldKeyInput.kt:255)
  at androidx.compose.foundation.text.TextFieldKeyInputKt$textFieldKeyInput$2$1.invoke (TextFieldKeyInput.kt:255)
  at androidx.compose.ui.input.key.KeyInputModifier.propagateKeyEvent-ZmokQxo (KeyInputModifier.kt:124)
  at androidx.compose.ui.input.key.KeyInputModifier.processKeyInput-ZmokQxo (KeyInputModifier.kt:103)
  at androidx.compose.ui.platform.AndroidComposeView.sendKeyEvent-ZmokQxo (AndroidComposeView.android.kt:651)
  at androidx.compose.ui.platform.AndroidComposeView.dispatchKeyEvent (AndroidComposeView.android.kt:659)
  at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1991)
  at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1991)
  at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1991)
  at android.view.ViewGroup.dispatchKeyEvent (ViewGroup.java:1991)
  at com.android.internal.policy.DecorView.superDispatchKeyEvent (DecorView.java:1069)
  at com.android.internal.policy.PhoneWindow.superDispatchKeyEvent (PhoneWindow.java:1952)
  at android.app.Activity.dispatchKeyEvent (Activity.java:4251)
  at androidx.core.app.ComponentActivity.superDispatchKeyEvent (ComponentActivity.java:126)
  at androidx.core.view.KeyEventDispatcher.dispatchKeyEvent (KeyEventDispatcher.java:86)
  at androidx.core.app.ComponentActivity.dispatchKeyEvent (ComponentActivity.java:144)
  ...
```

gr...@google.com <gr...@google.com> [#11](#)

See aosp/2323739 for fix.

ap...@google.com <ap...@google.com> [#12](#)

Marked as fixed.

Project: platform/frameworks/support

Branch: androidx-main

commit c9856f9bdd1bd8fb3e309632c46ff4dbea839d08

Author: Grant Toepfer <grantapher@google.com>

Date: Thu Dec 01 11:35:12 2022

Fix crash on dead key input to TextFields

Dead keys wouldn't be parsed correctly, which resulted in a crash when converted into a string.

This change enables dead keys to be stored so that the next key press will correctly be combined with it.

Fix: 207626317

Test: Manual tests

Test: ./gradlew :compose:foundation:foundation:connectedAndroidTest -Pandroid.testInstrumentationRunnerArguments.class=androidx.compose.foundation.text.DeadKeyCombinerTest

Change-Id: Ibccabb7bcbf4be2fb3f4fba63f739131f5129c66

A compose/foundation/foundation/src/androidAndroidTest/kotlin/androidx/compose/foundation/text/DeadKeyCombinerTest.kt
A compose/foundation/foundation/src/androidMain/kotlin/androidx/compose/foundation/text/DeadKeyCombiner.android.kt
A compose/foundation/foundation/src/commonMain/kotlin/androidx/compose/foundation/text/DeadKeyCombiner.kt
M compose/foundation/foundation/src/commonMain/kotlin/androidx/compose/foundation/text/TextFieldKeyInput.kt
A compose/foundation/foundation/src/desktopMain/kotlin/androidx/compose/foundation/text/DeadKeyCombiner.desktop.kt
M compose/ui/ui/src/androidMain/kotlin/androidx/compose/ui/input/key/KeyEvent.android.kt

<https://android-review.googlesource.com/2323739>