How To Check If The Software Keyboard Is Shown In Android

By Roger Keays, 21 February 2012

Here is a method to detect if the soft keyboard is visible on the screen in Android. All the other methods I have seen test the height of screen elements to guess whether it is displayed. This doesn't work for keyboards like WifiKeyboard which is an invisible keyboard.
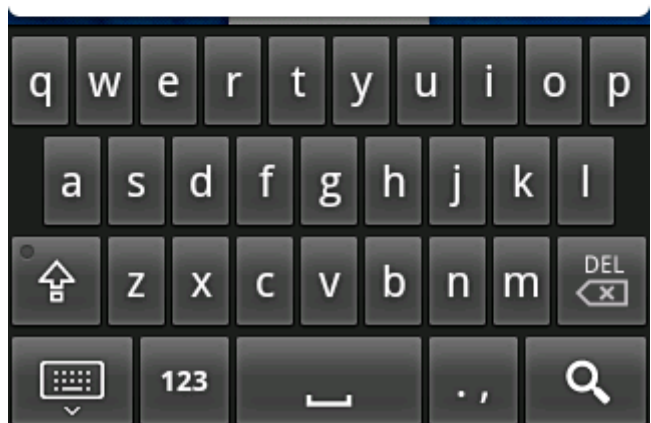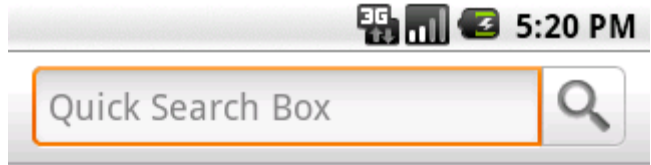
This method uses the callback result of **InputMethodManager.showSoftInput()** to determine if the keyboard status changed. This is suitable for me because I need to call showSoftInput() anyway if the keyboard is not shown. The result from the operation needs to be polled because it is asynchronous. This example only polls 500 milliseconds and assumes that anything longer than that is caused by the keyboard being loaded and rendered.

Here is how the code is used:

```
// try to show the keyboard and capture the result
InputMethodManager imm = (InputMethodManager) getSystemService(INPUT_METHOD_SER
IMMResult result = new IMMResult();
imm.showSoftInput(editText, 0, result);

// if keyboard doesn't change, handle the keypress
int res = result.getResult();
if (res == InputMethodManager.RESULT_UNCHANGED_SHOWN ||
        res == InputMethodManager.RESULT_UNCHANGED_HIDDEN) {
    showTags();
}
```

The **IMMResult** class is the key element. It looks like this:

```java
    /**
     * To capture the result of IMM hide/show soft keyboard
     */
    private class IMMResult extends ResultReceiver {
        public int result = -1;
        public IMMResult() {
            super(null);
        }

        @Override
        public void onReceiveResult(int r, Bundle data) {
            result = r;
        }

        // poll result value for up to 500 milliseconds
        public int getResult() {
            try {
                int sleep = 0;
                while (result == -1 && sleep < 500) {
                    Thread.sleep(100);
                    sleep += 100;
                }
            } catch (InterruptedException e) {
                Log.e("IMMResult", e.getMessage());
            }
            return result;
        }
    }
```

The useful result values are:

- InputMethodManager.RESULT_UNCHANGED_SHOWN

- InputMethodManager.RESULT_UNCHANGED_HIDDEN

- InputMethodManager.RESULT_SHOWN

- InputMethodManager.RESULT_HIDDEN

See the [InputMethodManager documentation](#) for details.

Hope this helps you!

About Roger Keays

Roger Keays is an artist, an engineer, and a student of life. He has no fixed addressand has leftfootprints on 40-something different countries around the world. Roger is addicted to surfing. His other interests are music, psychology, languages, the proper use of semicolons, and finding good food.