

# METHOD FOR DETERMINING THE MOBILE NETWORK LINE OCCUPANCY OF ANDROID DEVICE

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Today, mobile devices are more than a communication device, but also a personal assistant, a planner and a device for entertainment. but still the main unchanged function is the possibility of voice communication through cellular communication. We propose to develop a software package to determine the occupancy of the communication line.

Mobile devices running the Android OS are the most popular mobile devices in the world. According to indicators - about 55% of people use Android smartphones. Thus, it will be convenient to know the line status of the expected interlocutor [1][2].

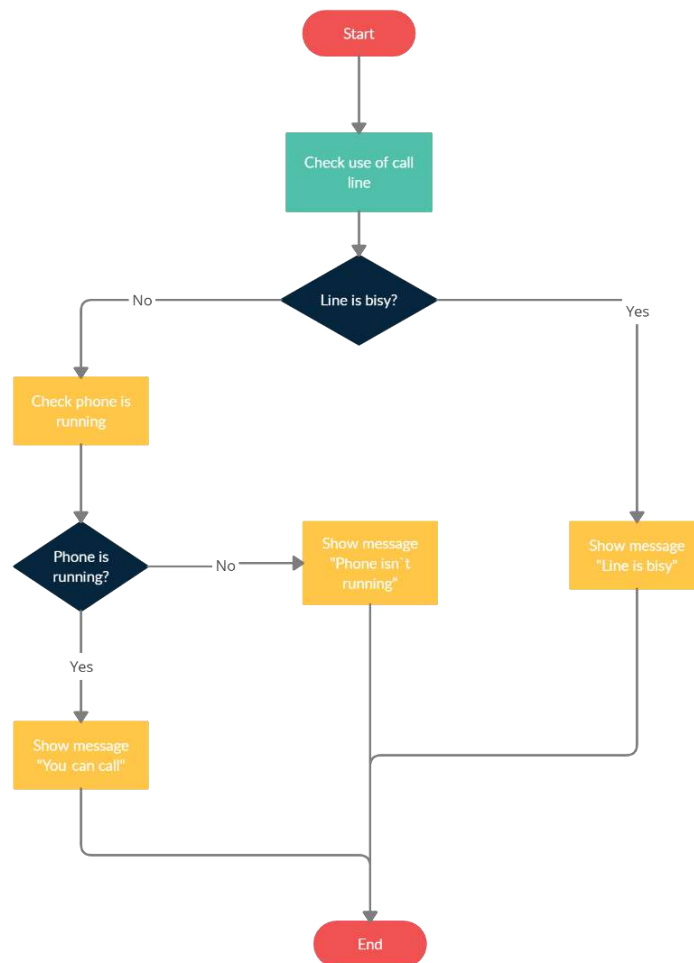


Fig. 1 - Block diagram of the proposed program

During the analysis of this problem was proposed a block diagram of the algorithm (Fig. 1) of the program to determine the line availability of the called party [3].

The user launches the application and requests the availability of the line of the interlocutor, who needs to make a call. The application checks whether the line is busy and whether the phone is running. Determining if the phone is on allows us to determine if the interlocutor's device is turned on or if he or she is within range. It is worth noting that the application will work correctly if four conditions are met:

- the app is installed;
- the application is running or in autorun;
- the necessary permissions are given;
- the mobile Internet on the device is enabled.

At first glance, it may seem that nothing will happen that could cause the application to work incorrectly. But in fact all of the above conditions must be met.

Thus, this task is relevant and requires further development. For further research it is proposed to study the features of granting permission to use the mobile Internet, check the call log, optimize battery power consumption, optimize the load on the main physical components of the device, as well as research the impact of this application on the device security and privacy of the user.

#### References:

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