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Software Studies: From Agents to Interfaces

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BackgroundData

“I’m just an ordinary Wallpaper, not collecting any Data!!” – BackgroundData, an ordinary Wallpaper

A Catalog entry for a Wallpaper

“This Wallpaper is just here for showing how easy any app can get all your information. It simultaneously checks your clock, your location, your available Wi-Fi Networks, open Bluetooth connections and your microphone. In the case of this Wallpaper, it doesn’t send this data anywhere, but it makes you aware of what and how easy all this information is accessible.

The Source Code is available on GitHub (<http://github.com/KJReal/BackgroundData>)

Best, KJ”

These are the words off the application we are talking about here. It is an app, more precisely an app for an Android phone. It is an app you can’t do a lot with, you can only activate. From that point onwards ‘BackgroundData’ it is your Home screen Wallpaper and you have to look at it all the time. It drove me crazy to look at it and I got a little paranoid and disabled all functions on my phone that could communicate to the outside, not for long because I needed this functions, but it was working. After the activation, the screen shows you different Data, that is fetched in the Background of your mobile all the time, it just makes it visible for your eye, also all the time.

There are six different things visible on your screen, some more some less obvious ones. It begins with a line of text in small red letters on the top that quotes “I’m just an ordinary Wallpaper, not collecting any Data!!”. It doesn’t change and doesn’t react just saying this sentence all the time. Underneath is a digital clock, it is slightly bigger than the letter of the header and it is grey. It shows you the seconds, minutes, days, months and years and reminds you all the time that time is running. We come to some cyan colored digits where ‘location’ is written above. The two numbers are showing the Latitude and Longitude of a specific position, yours. These coordinates are constantly changing and just screaming in your face ‘I know where you are!’. But the Wallpaper wants to show us even more, it contains two lists labeled ‘WiFi’ and ‘Bluetooth’. The number of entries changes from time to time, depends where you are. The Wi-Fi list is nearly always longer than the Bluetooth one, we have so many Wi-Fi Networks around us we sometimes forget. The List shows the MAC-Addresses and the human given name of the access points. These addresses are unique, worldwide unique, and all openly shared with you. And if that is not enough there is one thing that bothers me extremely when I now look at my phone. When I speak, walk or cough there are big orange bars going up and down in the background. I feel like I’m be listened all the time, no minute is private any more when my phone is near. You will see, it drives you crazy after a few seconds. The amp bars are so present that is really doesn’t feel right to have the phone near me when speaking about private stuff. It really listens all the time.

Mobil phones allow the developer of applications completely new angles of getting information. The thing is here, the user is not only using it on his workplace or at one specific place. And the user is not turning it off all the time after using it, like a computer. And the best part is, the user carries it around on his body all the time. You get information of the user, others waited for years. You can track an IP address or get the land line phone locations, but actually knowing where your user is at what time of the day, that’s brilliant. Also knowing what happens around him. It is possible to create a map of Internet access points just by tracking a mobile for a while. For what do you need that data? I don’t know but I think to collect it is a good start, I bet you can use it later on. Everybody knows that on IPhone and on Android you can speak to your phone, saying for example ‘Okay Google’ on an Android. After that an app starts where you can ask anything. That quite neat because you don’t have to touch your phone any more, only with talking and listening you get your information, and that’s what we want. But if we turn that around, everyone who thought about it once knows, if the microphone reacts to one specific sentence, like ‘Hey Siri’, it has to listen to your words the hole time. Wait…like all the time? Yes, because you could say ‘Hello’ to your phone and it would be a shame if the phone misses that. Personally I think (and hope) this information is not saved, because right now normal human speech is quite not understandable for a computer to analyze and the number of humans we would need is not what we want to think about right now. They could use that data to train human imitating artificial intelligence, or maybe they even do. But just theoretically, every app on any smartphone could, if it is activated, and a wallpaper is active quite a lot, listen to every single word you say during carrying your phone. In the morning when you go to the toilet, during work, when you’re eating lunch, the fight with your friend, the talk with mom about dad’s illness or just your sleeping noise, because I guess you are also not turning your phone off during the night. I don’t like the thought of being located, mapped and listened all the time, and that’s what BackgroundData shows really well.

I’m not an advanced app developer and I wouldn’t call myself a programmer, but it doesn’t took me long to make an app that collects all that data. It is not transferring it anywhere, not even saving it on the device, so nobody has to be scared that I’m also one of the listeners. You can check it in the source code if you want. It just reads the data that is already generated and then shows it to the user. I only can tell from my experience with the wallpaper, because no one else has it. I can tell before, after three days of using and testing it I changed back to a normal picture, I couldn’t look at it all the time. From the technical point of view, it works well, you install it, it asks for permission to access your location and your microphone (yea, since the update to Android 6.0 every app has to ask directly for permission to use certain things, that’s a step closer to transparency of apps) and then you can use it. Of course the features are only working when the specific service is activated, means Wi-Fi networks are only displayed when Wi-Fi is enabled on the device, same counts for location and Bluetooth, only the microphone status is not mutable. The clock just runs, but I guess there aren’t that many developers out there who wants to steal your time. From the business point of view, it’s not a really good app, it won’t sell really well, because it more scares the user than keeps him using it. Take myself as an example I created the app and not used it more than three days, that’s not a good condition to make profit out of it. From my point of view, even if I didn’t used it for long, it is a great app showing how our mobile world runs right now. And critics a lot of different aspects of app usage. From the user, how we use mobile applications and how we toss out information, to the developer, what information we are able to get, to the company, what do they do with all that stuff. The app doesn’t answer any questions but confronts the user a little more with his own privacy issues. I don’t want to change how people use their mobiles or be paranoid all time, but I want them to be aware of what we are doing. I decided for myself what I want to share and what stays private. The private section is not a lot because for me it is more important to use the technology than not showing ‘the internet’ who I am, but that is my decision. Don’t using this app any more was also my decision.