

"ALTERNATIVE SMARTPHONE APP FOR PARTICLE DETECTION: STATUS AND PERSPECTIVES"

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The background of the slide is black, with decorative blue wireframe leaves and foliage along the top and bottom edges. The leaves are rendered in a mesh-like style, giving them a translucent, digital appearance.

Plan

1. Introduce
2. Features
3. Development

Introduce

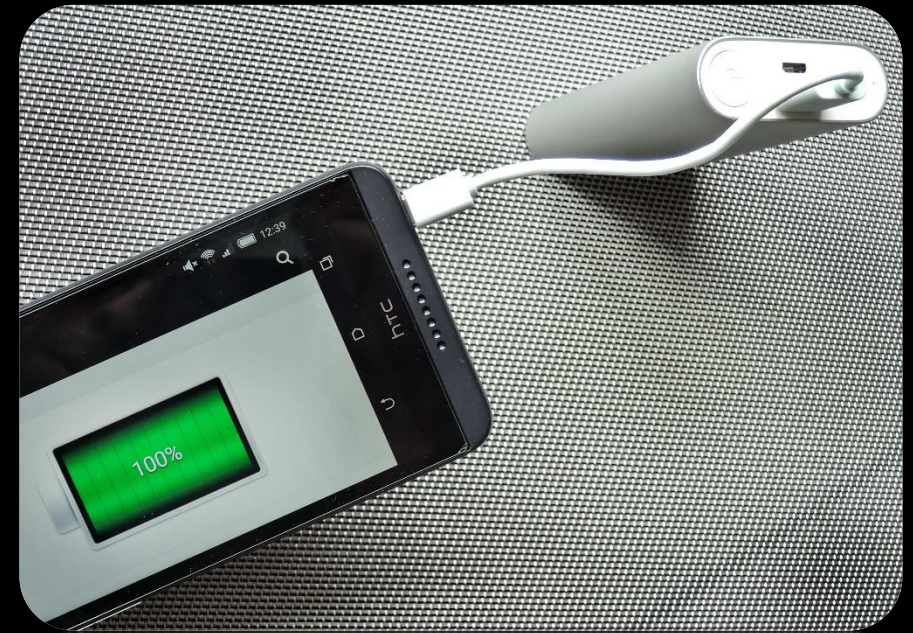
The application uses the smartphone camera to capture particles that fall into the camera lens. We take a lot of picture and save only this where defect occurs, which signals that probably the particle hit into our lens. Then we send this picture to the server where we analyze the data.



Does it make it difficult to use your smartphone?

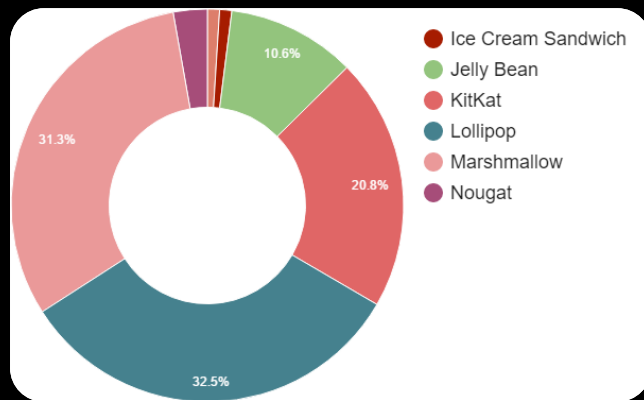
We can choose when the application will work.

- Auto start when the smartphone is charging
- User manually start and stop

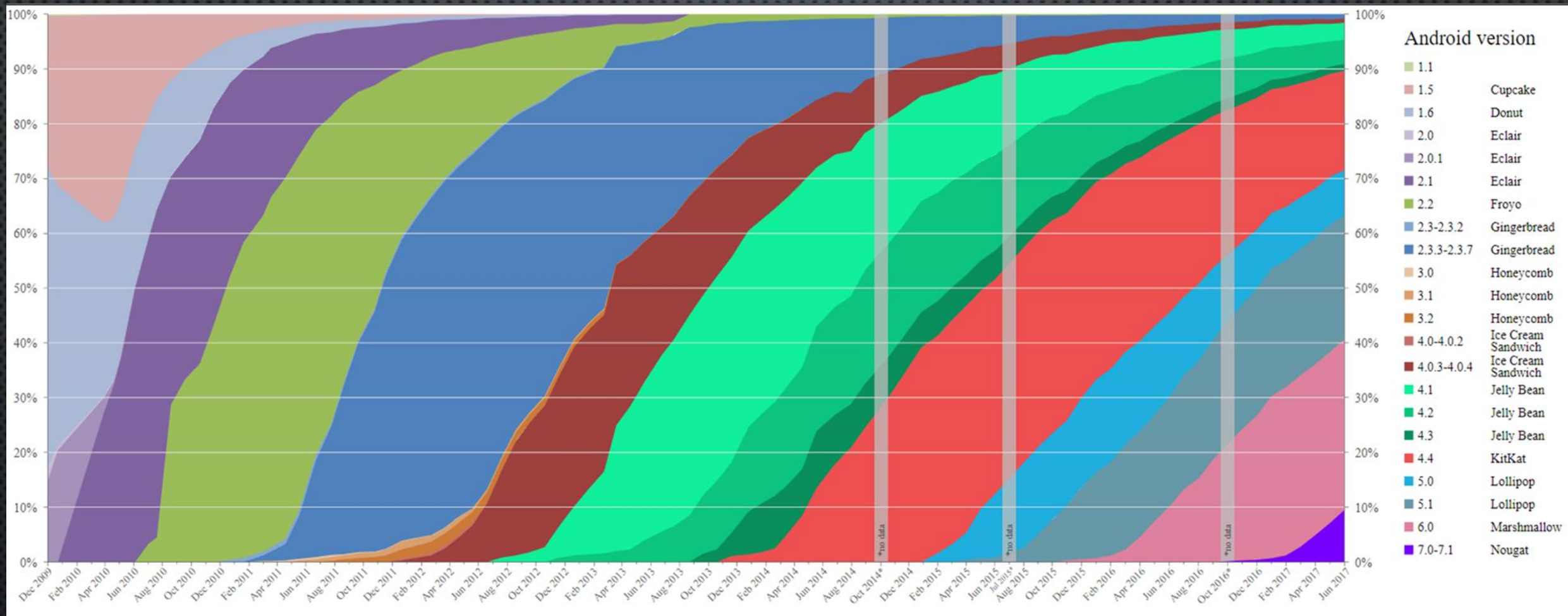


What if I have an old smartphone?

Our application can be run on android version 4.0.3 (Ice cream sandwich) or higher. Today it means that almost **100%** of device can run it.



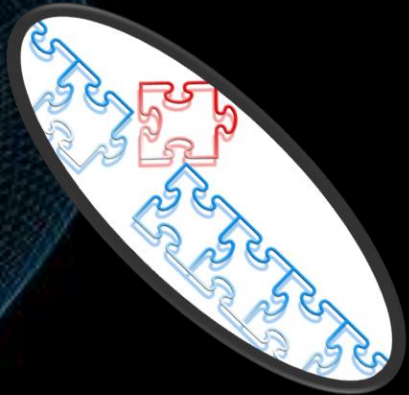
In addition we can choose resolution of photo, this guarantee smooth work also on worse machine.



Internet cost, little space in memory...

Despite the development of technology, there will always be someone who complain and search for cons.

For that reason we optimized our application. Now when hit occur, we cut only little fragment from photo. By this trick we reduce the amount of data transferred and space on user device.



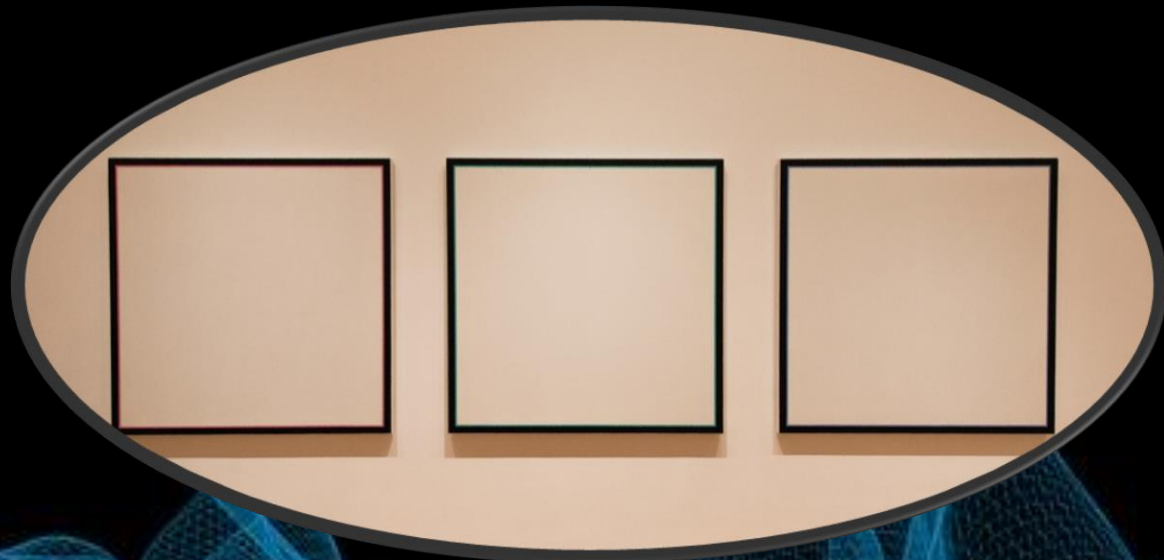
To complete comfort of using application, we give options to choose the way of connecting to the server. Following options are:

- WiFi
- Cellular network
- Both



False positive

We set restrictions for amount of light. If photo is too bright, we skip it.



Gallery

Captured particles can be admired in gallery.

Development

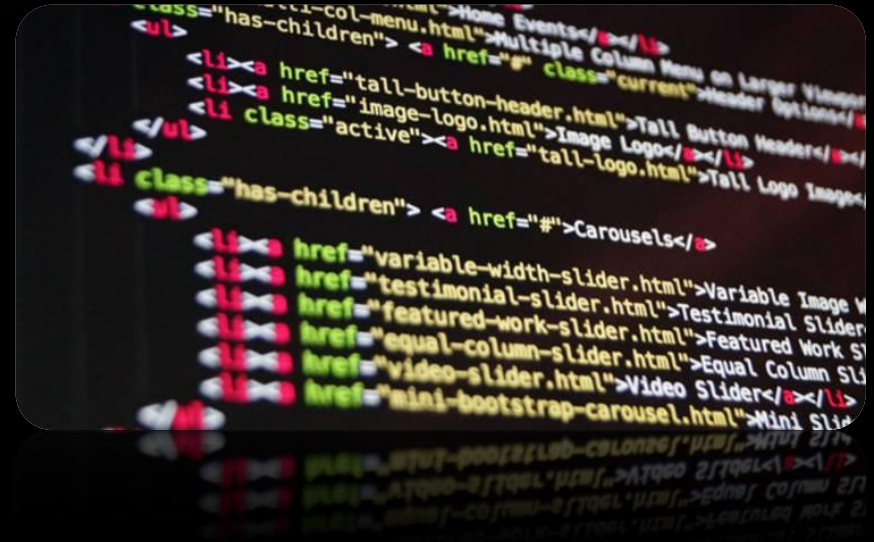
Every user can create account by using email or link it with one of the following services:

- Facebook
- Google

In future we want use it to start rivalries between user, team or some agglomeration.

To better encourage user, we will make ranks and prize for some milestone. For example:

- Best person get title „Albert Einstein“
- If you scan for 100h you get new skin for application



Development

Many people stop using the phone at a particular time in a day and for most of us, the day is cyclic. We can use it to create more universal tool.

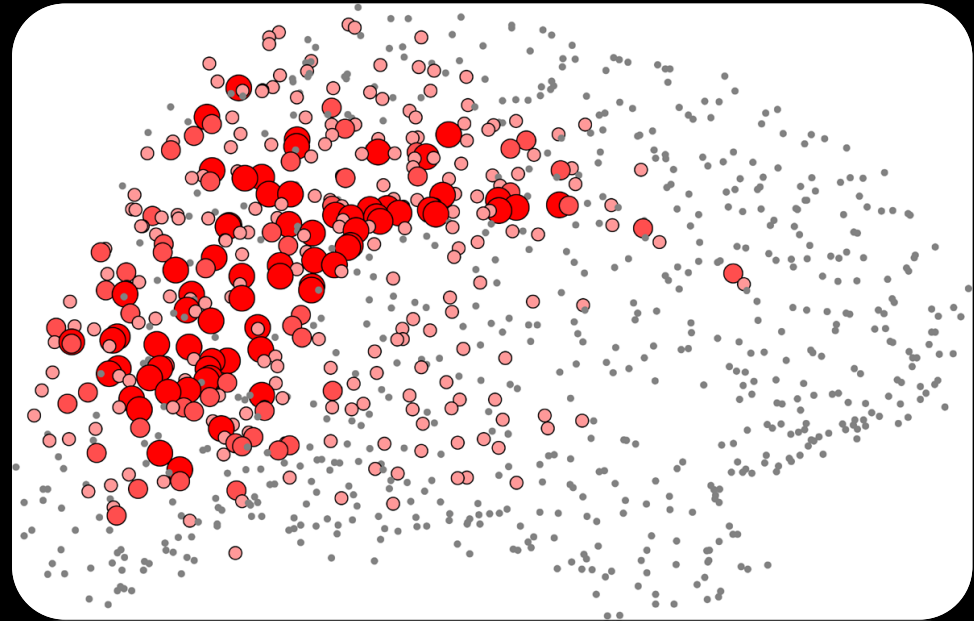


We want to add a new option to automate application.

- Scanning during inactivity
- Automatic scanning at a given time

Development

- 3D Map with the density of hits
- 2D Map with the density of hits
- Few GUI for user
- Application for other mobile systems
- New type of saved photo



We have many ideas about this project and a lot of it are waiting for the invention.



THANK YOU FOR YOUR ATTENTION