### Slide 1

Hello! My name is VS and now I am going to tell you about JerryScript - scripting language for microcontrollers and some information about Internet of Things and BigData.

# Slide 2

To start I will explain what is BigData.

BigData is a term that describes the work with large volumes of information. This trend is pretty modern (only 20 years old). On this slide, you can see almost all the spheres, where bigdata is involved. Here are the Date Analytic, Health monitoring, Virtual reality, and of course the Internet of things.

### Slide 3

The Internet of things extends the interaction of some devices using the Internet, wi-fi and so on.

#### Slide 4

This picture is a good joke, but those people and companies who work into this area want this. And Samsung company is not an exception.

### Slide 5

I will not tell you that everybody wants the progress and Samsung decided to go into this area for good intentions. Peace, love, cookies and so on. No. This is not true. Everybody wants money. And there are a lot of them in IoT area.

Lets remember what are the main products of Samsung, with the exception of Galaxy note and notebooks. It is Appliances.

What will happen if each such thing can be managed remotely with the help of a phone, a clock, a computer?

More demand, more sales, more profit.

But there is a problem. You needed to insert WiFi adapter and chip into every product.

The most non-expensive platform for IoT programming is Node.js. To write a pong game on this platform, you will need to buy a Raspberry which in Belarus costs 80 dollars.

Thus, the cost increases.

What kind of housewife would like to buy an teapot which cost as Iphone ten?

None of them.

Therefore, it is necessary to make the cost of the product as less as possible.

So the guys from Samsung decided to write a library that would allow to use a small amount of RAM and install cheaper components.

Slide 6

And the JerryScript was born.

Slide 7

No not like this. But I think previous logo is better.

### Slide 8

Development began in June 2014 and lasted a year. All tests where compited in August 2015. The following year, it was optimized to reduce memory consumption and increase performance.

In September 2016 First version of JerryScript released.

**JerryScript** is an ultra-lightweight <u>JavaScript</u> engine for the <u>Internet of Things</u>.

It use less than 64KB of RAM and the entire code fits in less than 200KB of RAM.

### Slide 9

JerryScript has two main components: Parser and Interpretator. Parser translate of input ECMAScript application into byte-code. Then the byte code is sent to an interpreter where they performed.

### Slide 10

Now you're watching a demo with flashing lights. Here used STM32F4 board, which costs 20 dollars. Thus, there is a savings of \$ 60 per board if compared with Raspberry.

# JerryScript.

- There's a huge pool of JavaScript developers.
- Opens up the possibility for web developers to easily write software for embedded devices
- Ability to load code dynamically over the network
- Executing JavaScript code is safer than executing arbitrary native code

## Slide 11

You can easily build it and try in any operation system. This code is for Linux:

It will allow you to try it in the console and write Hello world