



BRAVE **JAVA** *WORLD*

!ЕНТЕРПРАЙЗОМ ЄДИНИМ



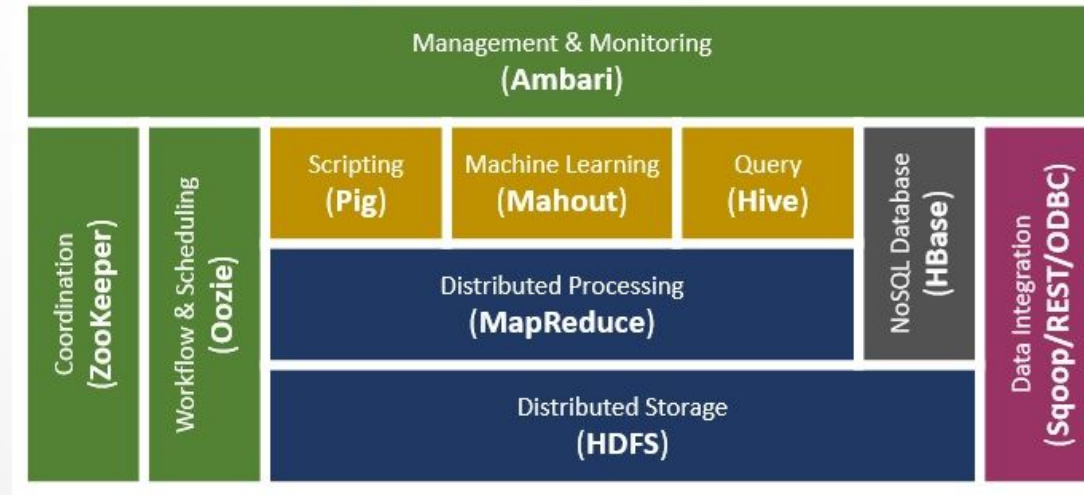
AGENDA

- BIG DATA
- EMBEDDED
- ROBOTS



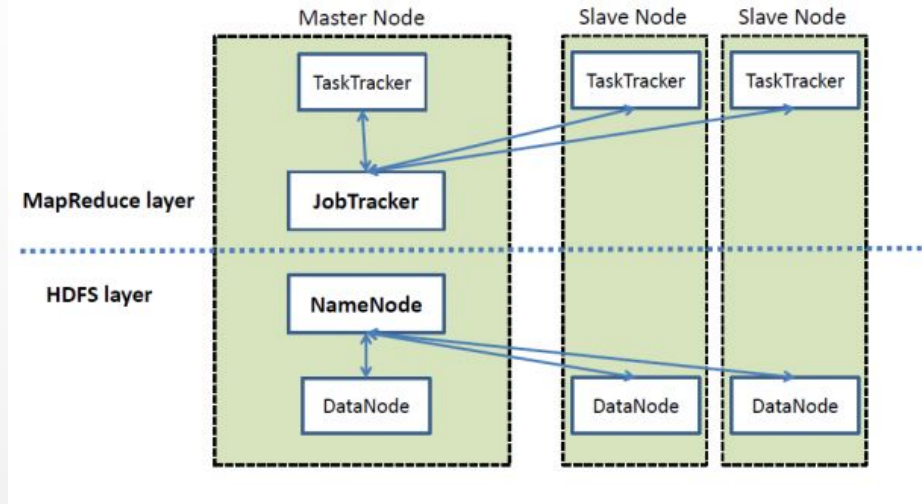
- **BIG DATA** IS A BROAD TERM FOR [DATA SETS](#) SO LARGE OR COMPLEX THAT TRADITIONAL [DATA PROCESSING](#) APPLICATIONS ARE INADEQUATE

Apache Hadoop Ecosystem

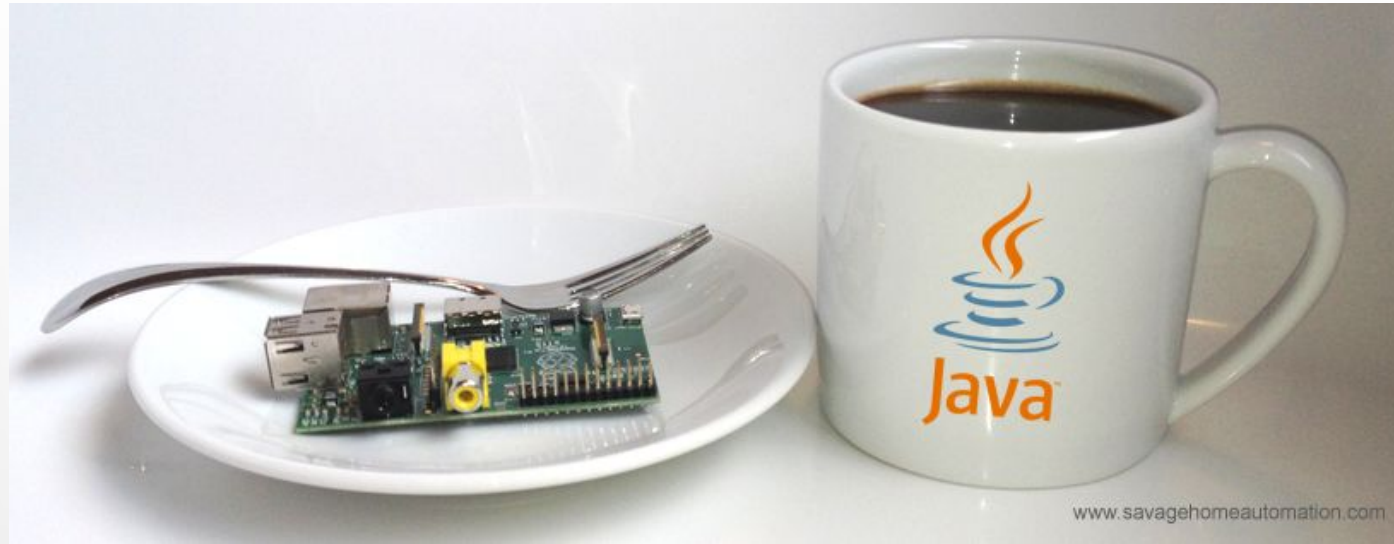


- **HADOOP** IS AN OPEN-SOURCE SOFTWARE FRAMEWORK FOR STORING DATA AND RUNNING APPLICATIONS ON CLUSTERS OF COMMODITY HARDWARE. IT PROVIDES MASSIVE STORAGE FOR ANY KIND OF DATA, ENORMOUS PROCESSING POWER AND THE ABILITY TO HANDLE VIRTUALLY LIMITLESS CONCURRENT TASKS OR JOBS

High Level Architecture of Hadoop



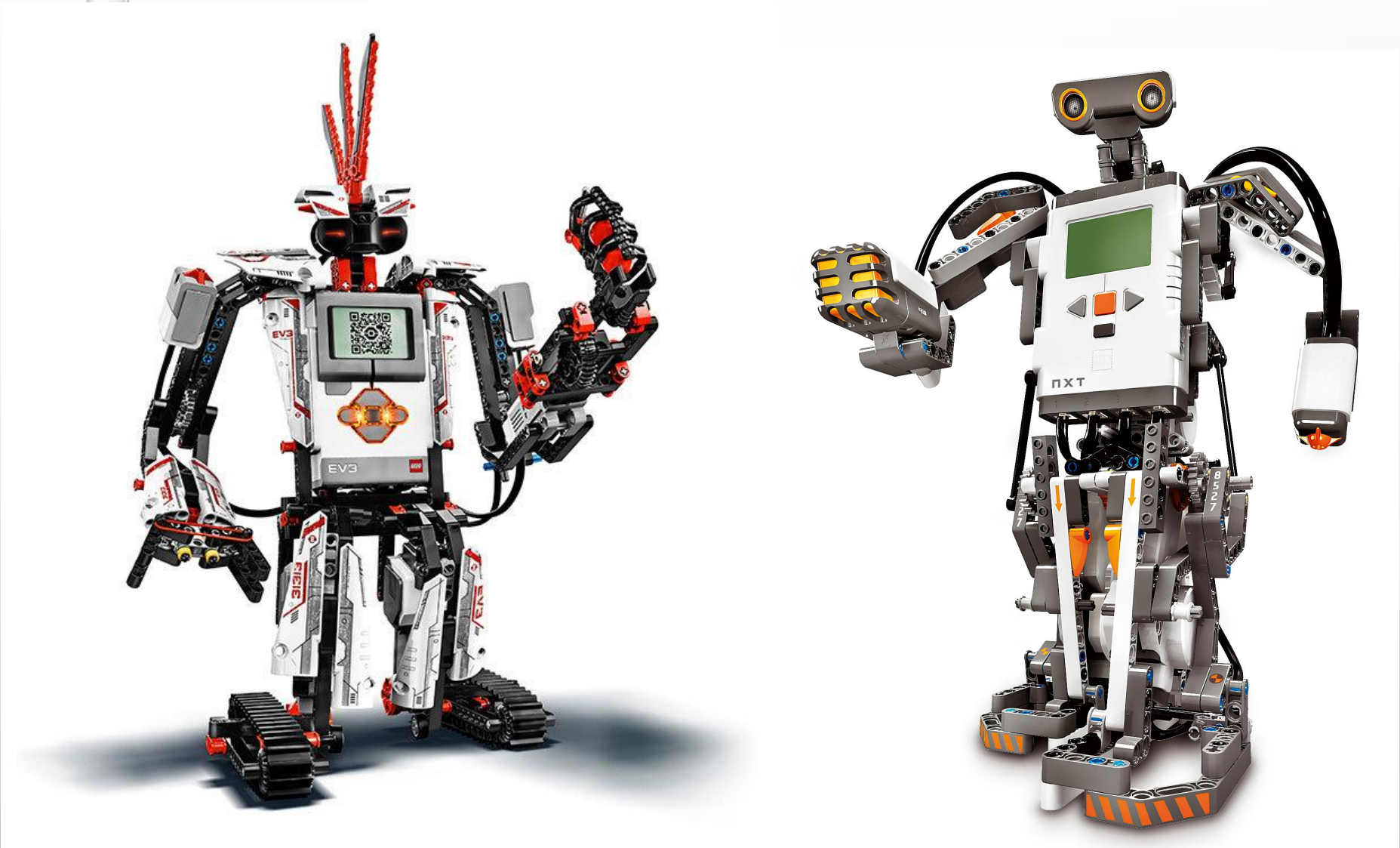
- HADOOP COMMON: CONTAINS LIBRARIES AND UTILITIES NEEDED BY OTHER HADOOP MODULES
- HADOOP DISTRIBUTED FILE SYSTEM (HDFS): A DISTRIBUTED FILE-SYSTEM THAT STORES DATA ON THE COMMODITY MACHINES, PROVIDING VERY HIGH AGGREGATE BANDWIDTH ACROSS THE CLUSTER
- HADOOP YARN: A RESOURCE-MANAGEMENT PLATFORM RESPONSIBLE FOR MANAGING COMPUTE RESOURCES IN CLUSTERS AND USING THEM FOR SCHEDULING OF USERS' APPLICATIONS
- HADOOP MAPREDUCE: A PROGRAMMING MODEL FOR LARGE SCALE DATA PROCESSING
- EXAMPLE: [HTTPS://WIKI.APACHE.ORG/HADOOP/WORDCOUNT](https://wiki.apache.org/hadoop/wordcount)



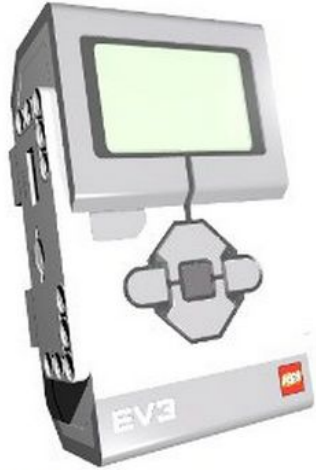
- ORACLE JAVA SE EMBEDDED IS A FULL-FEATURED IMPLEMENTATION OF THE JAVA SE PLATFORM, OPTIMIZED FOR EMBEDDED SYSTEMS. IT ENABLES YOU TO DEVELOP HIGHLY FUNCTIONAL, RELIABLE, AND PORTABLE APPLICATIONS FOR TODAY'S MORE-POWERFUL EMBEDDED SYSTEMS AND DEVICES.

JAVA POWERED

- PARROT AR.DRONE: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=J0CSKLIFQUO](https://www.youtube.com/watch?v=J0CSKLIFQUO)
- EV3 MINDSTORMS: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=NHMYSSVZW14](https://www.youtube.com/watch?v=NHMYSSVZW14)
- RASPBERRY PI: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=HL-DWG_8KJY](https://www.youtube.com/watch?v=HL-DWG_8KJY)



LEJOS Java for LEGO Mindstorms



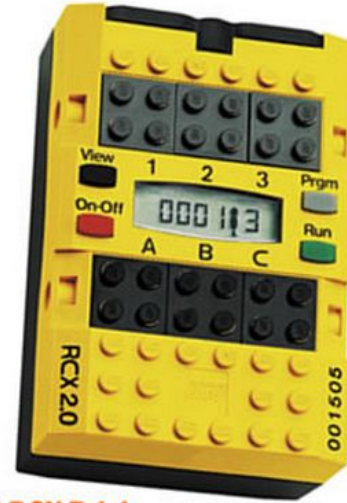
EV3 Brick

GO >



JVM NXT Brick, Icommand
technology, ...

GO >



JVM RCX Brick

GO >

- **Sensors framework** provides unified access to all sensors supported:

```
// get a port instance
Port port = LocalEV3.get().getPort("S2");

// Get an instance of the Ultrasonic EV3 sensor
SensorModes sensor = new EV3UltrasonicSensor(port);

// get an instance of this sensor in measurement mode
SampleProvider distance= sensor.getMode("Distance");

// initialize an array of floats for fetching samples.
// Ask the SampleProvider how long the array should be
float[] sample = new float[distance.sampleSize()];

// fetch a sample
while(true)
    distance.fetchSample(sample, 0);
```

- **Remote Access (also ssh is supported)**

```
RemoteEV3 ev3 = new RemoteEV3("192.168.0.9");
ev3.setDefault();
Sound.beep();
```

- **Navigation framework** provides abstraction layer for robotic transport control



- IPHONE 0

MIDLET VS CORELET

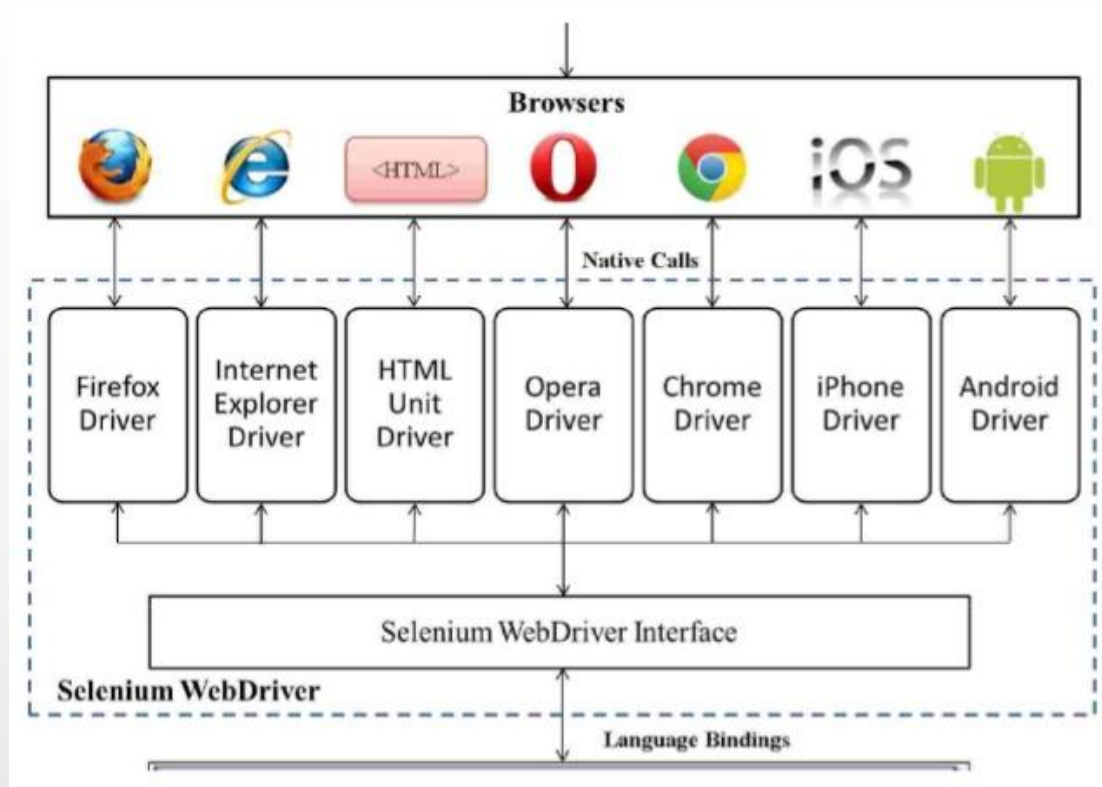
- A **MIDLET** IS AN APPLICATION THAT USES THE [MOBILE INFORMATION DEVICE PROFILE](#) (MIDP) OF THE [CONNECTED LIMITED DEVICE CONFIGURATION](#) (CLDC) FOR THE [JAVA ME](#) ENVIRONMENT.



- **CORELET** — ПРОГРАММНОЕ [ПРИЛОЖЕНИЕ](#), РАЗНОВИДНОСТЬ [МИДЛЕТА](#) В [СИСТЕМЕ J2ME](#), КОТОРЫЙ ЗАПУСКАЕТСЯ ПРИ ВКЛЮЧЕНИИ ТЕЛЕФОНА И ПОСТОЯННО РАБОТАЕТ В ФОНОВОМ РЕЖИМЕ. ИМЕЕТ ПРАКТИЧЕСКИ НЕОГРАНИЧЕННЫЙ ДОСТУП КО ВСЕМ [API JAVA](#)-МАШИНЫ.

А ЗРОБИ МЕНІ БОТА...





- **SELENIUM** IS A PORTABLE SOFTWARE TESTING FRAMEWORK FOR WEB APPLICATIONS.


```
public class Main {
    public static void main(String... args) {
        //Init
        WebDriver driver = new FirefoxDriver();
        //Open site
        driver.get("http://akceptor.org");
        //Browse
        driver.findElement(By.partialLinkText("(частина 1)")).click();
        driver.findElement(By.partialLinkText("Думки вголос")).click();
        driver.findElement(By.partialLinkText("(частина 2)")).click();
        driver.findElement(By.partialLinkText("Думки вголос")).click();

        //Search
        driver.findElement(By.name("s")).sendKeys("selenium");
        driver.findElement(By.name("s")).sendKeys(Keys.RETURN);

        //Featured posts
        driver.findElement(By.className("featured-thumb")).click();

        //Close browser
        driver.close();
    }
}
```

TEXT BOTS:

- TELEGRAM BOTS: [HTTPS://GITHUB.COM/RUBENLAGUS/TELEGRAMBOTS](https://github.com/RubenLagus/TelegramBots)
- SKYPE BOT: [HTTPS://GITHUB.COM/TAKSAN/SKYPE-JAVA-API](https://github.com/Taksan/Skype-Java-API)

```
package com.skype.sample;

import com.skype.Skype;

public class SendChatMessage {
    public static void main(String[] args) throws Exception {
        if (args.length != 2) {
            System.out.println("Usage: java com.skype.sample.SendChatMessage 'skype_id' 'chat_message'");
            return;
        }
        Skype.chat(args[0]).send(args[1]);
    }
}
```

QUESTIONS

Name	Dll Base	DateStmp	Name
ntoskrnl.exe	80010000	33247f89	al.dll
atapi.sys	80007000	3324804	SIPORT
Disk.sys	801db000	336015	ASS2.S
Ntfs.sys	80237000	344eeb4	wvid.s
NTice.sys	f1f48000	31ec6c8d	loppy.S
Cdrom.SYS	f228e000	31ec6c9	ull.SYS
KSecDD.SYS	f2290000	335	.SYS
win32k.sys	fe0c2000	34	dl
Cdfs.SYS	fdca2000	3	
nbf.sys	fdc35000		ys
netbt.sys	f1f68000		s
afd.sys	f2008000		
Parport.SYS	fdc14000		
	f1dd0000		

