

Java

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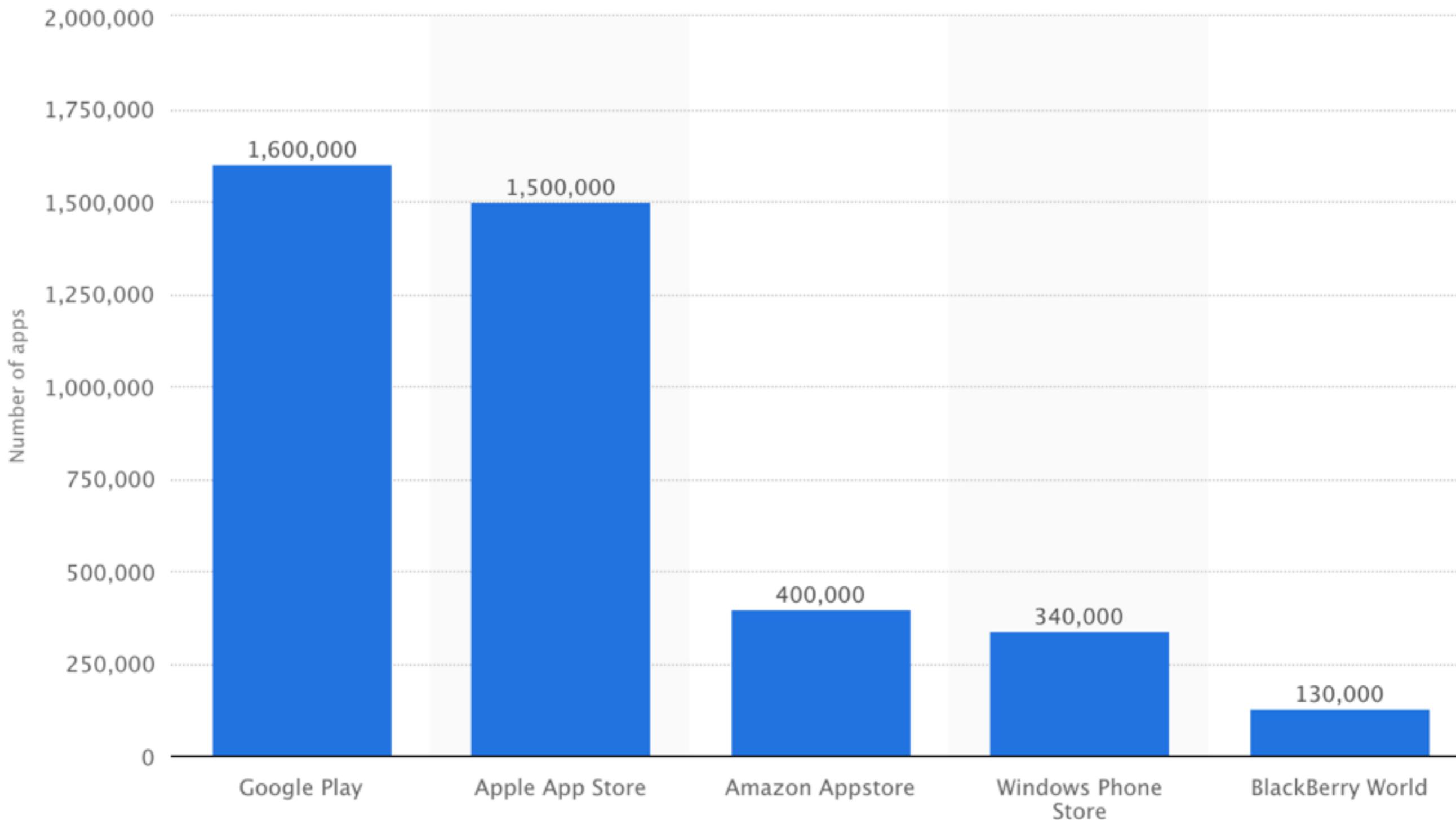
AGENDA

(2days)

- ⦿ Java Status Today
- ⦿ Netbeans and Maven
- ⦿ Object Oriented Application
- ⦿ Test Driven Development
- ⦿ Enum, Exception, Try with Resources
- ⦿ Java 8 with Lambda
- ⦿ Java 8 Streaming
- ⦿ Dependency Injection & Spring JDBC

OpenJDK

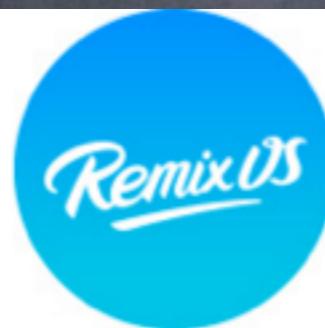






BlueStacks
play bigger





What is Remix OS?

Remix OS is our state of the art Android-based operating system. We mean it when we say you get a PC experience unlike anything on Android and an Android experience unlike anything on a PC. The innovative features we've brought to Remix OS 2.0 have been meticulously engineered to bring you the best of both worlds – the harmonious fusion of a mobile and desktop experience.

[Learn more about Remix OS design.](#)





Apache
Harmony



OpenJDK

Jan 2016	Jan 2015	Change	Programming Language	Ratings	Change
1	2	▲	Java	21.465%	+5.94%
2	1	▼	C	16.036%	-0.67%
3	4	▲	C++	6.914%	+0.21%
4	5	▲	C#	4.707%	-0.34%
5	8	▲	Python	3.854%	+1.24%
6	6		PHP	2.706%	-1.08%
7	16	▲	Visual Basic .NET	2.582%	+1.51%
8	7	▼	JavaScript	2.565%	-0.71%
9	14	▲	Assembly language	2.095%	+0.92%
10	15	▲	Ruby	2.047%	+0.92%
11	9	▼	Perl	1.841%	-0.42%
12	20	▲	Delphi/Object Pascal	1.786%	+0.95%
13	17	▲	Visual Basic	1.684%	+0.61%
14	25	▲	Swift	1.363%	+0.62%
15	11	▼	MATLAB	1.228%	-0.16%



James Gosling reviewed NetBeans — 5★

September 19, 2014 ·

I live in NetBeans. I use it more than email. Everything works together smoothly, it doesn't feel like a bag of disconnected parts. All the tools are there. The refactoring tools are so good that they've replaced a huge amount of what I used to do with the editor - using them is not an occasional thing for me.

The Smarter and Faster Way to Code

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NetBeans
Computers & Electronics · 95,435 Likes

Save

Maven

- Standard Project Structure
- XML Config with a lots of Plugins
- Support both of JavaEE and Spring
- Based on CLI (Easy for Continuous Delivery)
- IDE Completely Support

New Project

1 Choose Project



Categories:

- Java
- Java Web
- Java EE
- HTML5/JavaScript
- Maven
- NetBeans Modules
- Samples

Projects:

- Java Application
- JavaFX Application

New Java Application

2 Name and Location

Project Name:

Project Location:

Project Folder:

Artifact Id:

Group Id:

Version:

Package:

The screenshot shows an IDE interface with the following details:

- Projects:** Duck
- Source Packages:** main (containing HelloWorld.java)
- File:** HelloWorld.java
- Context Menu (Open):** Run File (selected), Debug File, Profile File, Test File, Debug Test File, Profile Test File, Run Maven.
- Code Editor:** Displays the following Java code:

```
1 package main;
2
3 import java.util.logging.Logger;
4
5 /**
6 * 
7 * @author pasoktummarungsri
8 */
9 public class HelloWorld {
10     public static void main(String[] args) {
11         Logger.getLogger("main").info("Hello World");
12     }
13 }
14
```

OOP in Java

- ⦿ Class / Object
- ⦿ Message Passing
- ⦿ Encapsulation
- ⦿ Inheritance
- ⦿ Composition
- ⦿ Polymorphism

Duck Problem

- ⦿ เปิดมีได้หลายสายพันธ์ แต่ยังเป็นเป็ด
- ⦿ เปิด ทุกสายพันธ์ ต้องร้องได้และมีเสียงร้องของตัวเอง
- ⦿ เปิด ทุกสายพันธ์ เดินเหมือนกัน เช่น RocketDuck ห้ามเดิน
- ⦿ เปิด บางสาย พันธ์ต้องบินได้
- ⦿ เปิดสามารถ เปลี่ยนวิธีบิน ได้

Java TDD

- Test
- Assert
- Coverage

MVC

- ⦿ Model
- ⦿ View
- ⦿ Controller

Lambda

- ⦿ Anonymous Inner Class
- ⦿ Functional Interfaces
- ⦿ Lambda Expression Syntax

```
Collections.sort(list,  
    new Comparator<Duck>() {  
        @Override  
        public int compare(Duck o1, Duck o2) {  
            return o1.toString().compareTo(o2.toString());  
        }  
    }  
);
```

```
Collections.sort(list, (Duck o1, Duck o2) -> o1.toString().compareTo(o2.toString()));
```

```
(int x, int y) -> x + y  
( ) -> 42  
(String s) -> { System.out.println(s); }
```

```
public int func1(final int x, final int y) {  
    return x + y;  
}  
  
public int func2() {  
    return 42;  
}  
  
public void func3(final String s) {  
    System.out.println(s);  
}
```

Collections

- stream / parallelStream
- forEach
- map / flatMap
- filter
- findFirst / findAny
- reduce