jOrthanc

Widening Orthanc's adoption

The TL;DR

jOrthanc in a nutshell

Recap

What is Orthanc?

Adopting Orthanc

Big-bang, Parallel or Phased?

Integration

The need for plugins

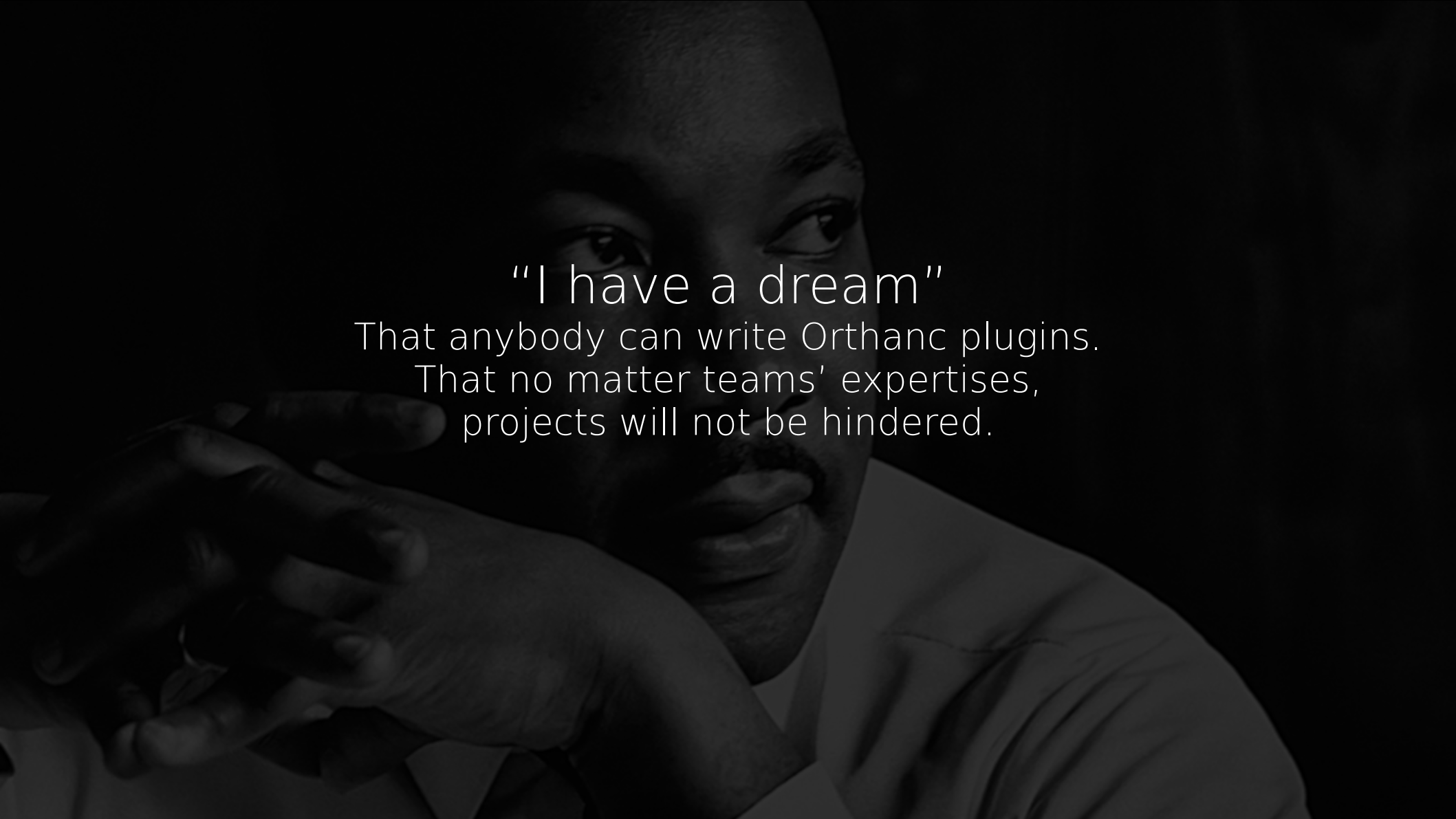
Things to consider

Here's to a true story
The one where we modernise PACS services

Example
DICOM Sync

Choose your destiny

Lua vs C++


"I have a dream"
That anybody can write Orthanc plugins.
That no matter teams' expertises,
projects will not be hindered.

Enter jOrthanc

aka Orthanc Java Framework

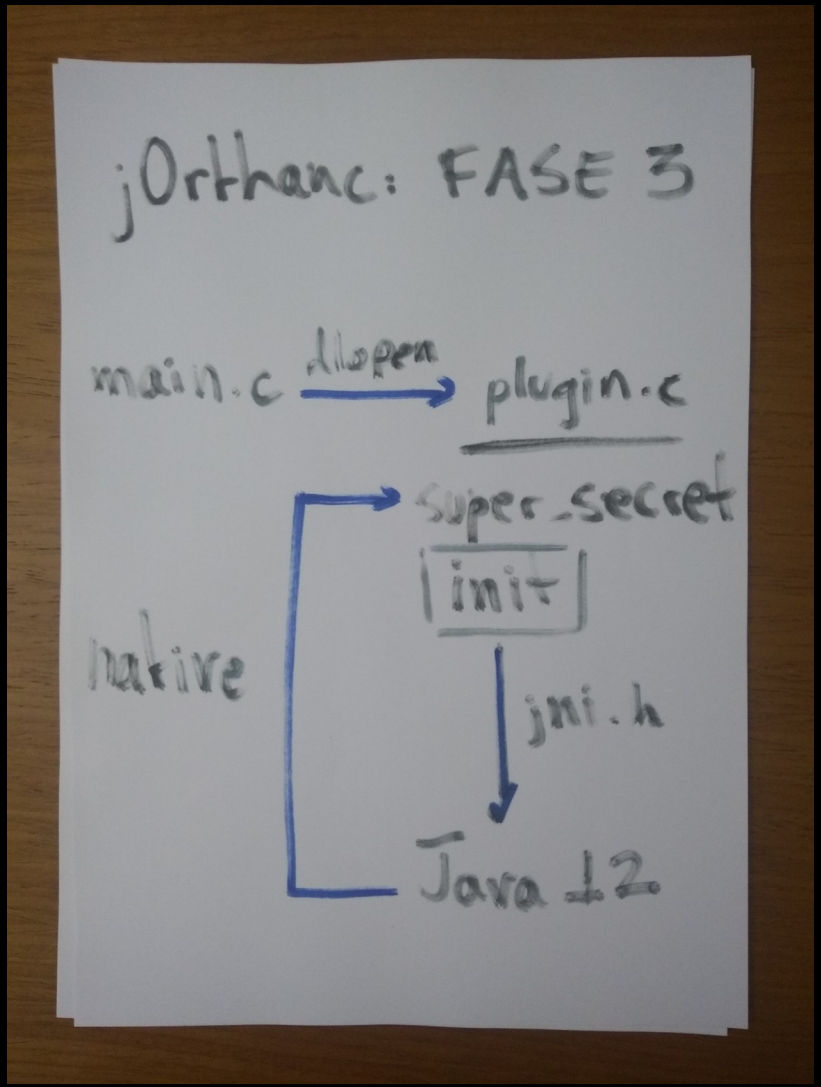
So now we're able to code this:

```
@RestController
@RequestMapping( path = "/series" )
public class SeriesController {

  // …

  @GetMapping( path = "/{seriesInstanceUid}/count", produces = "text/plain" )
  public String getInstanceCount(
    @PathVariable( "seriesInstanceUid" ) String seriesInstanceUid
  )
    throws
      ObjectNotFoundException
  {
    log.info( String.format( "Counting series for %s", seriesInstanceUid ) );
    Series series = seriesService.get( seriesInstanceUid );
    Collection< String > instanceIds = series.getInstanceIds();
    String instanceCount = Integer.toString( instanceIds.size() );
    return instanceCount;
  }

  // …

}
```

Can we ALT-TAB for a moment?

What just happened?

The nitty-gritty details


jOrthanc: FASE 3
main.c
dlopen
plugin.c
super_secret
init
native
jni.h
Java 12

Possibilities

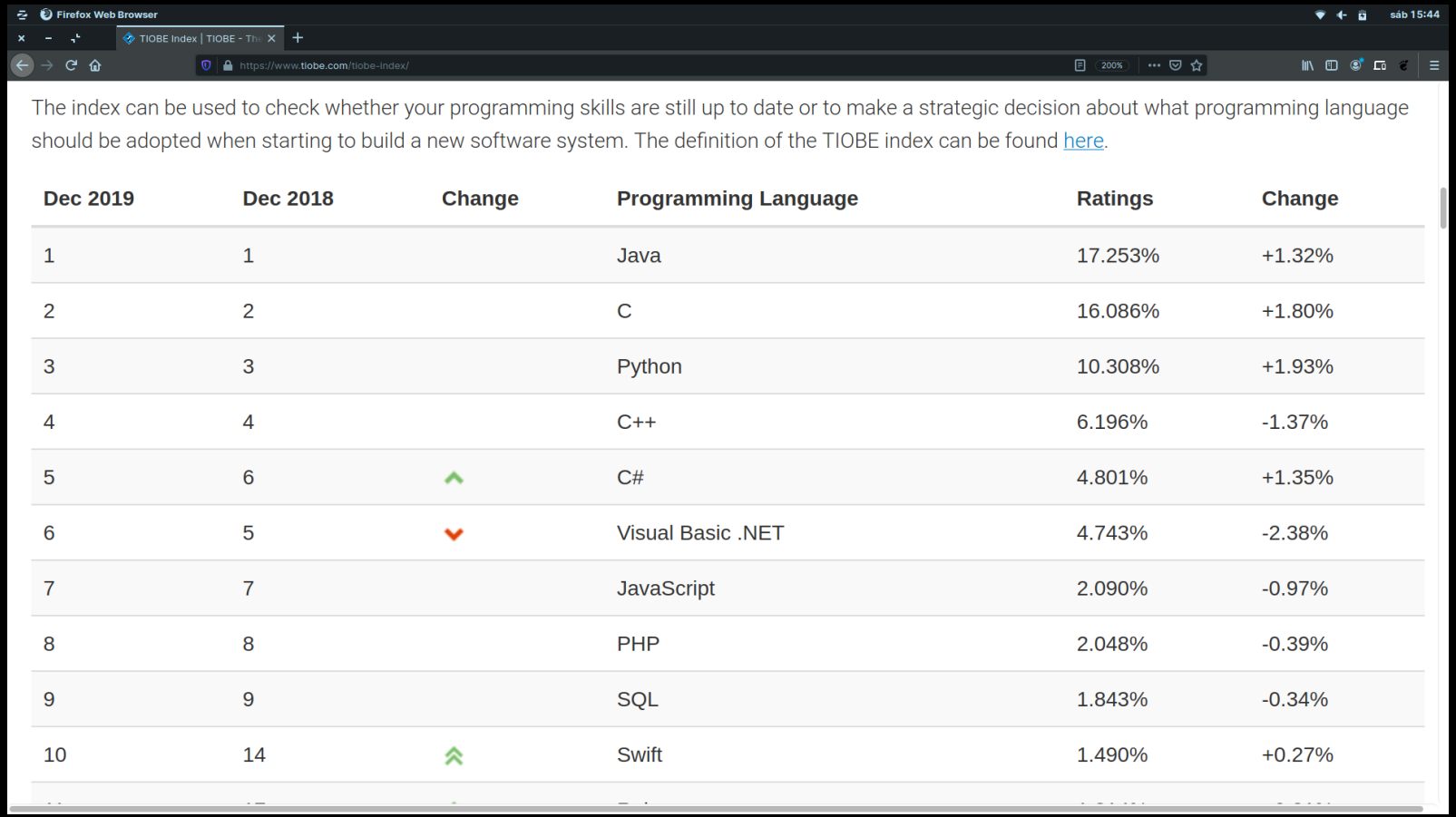
Storage plugins

Index plugins

Use of ORM's frameworks like JPA

etc

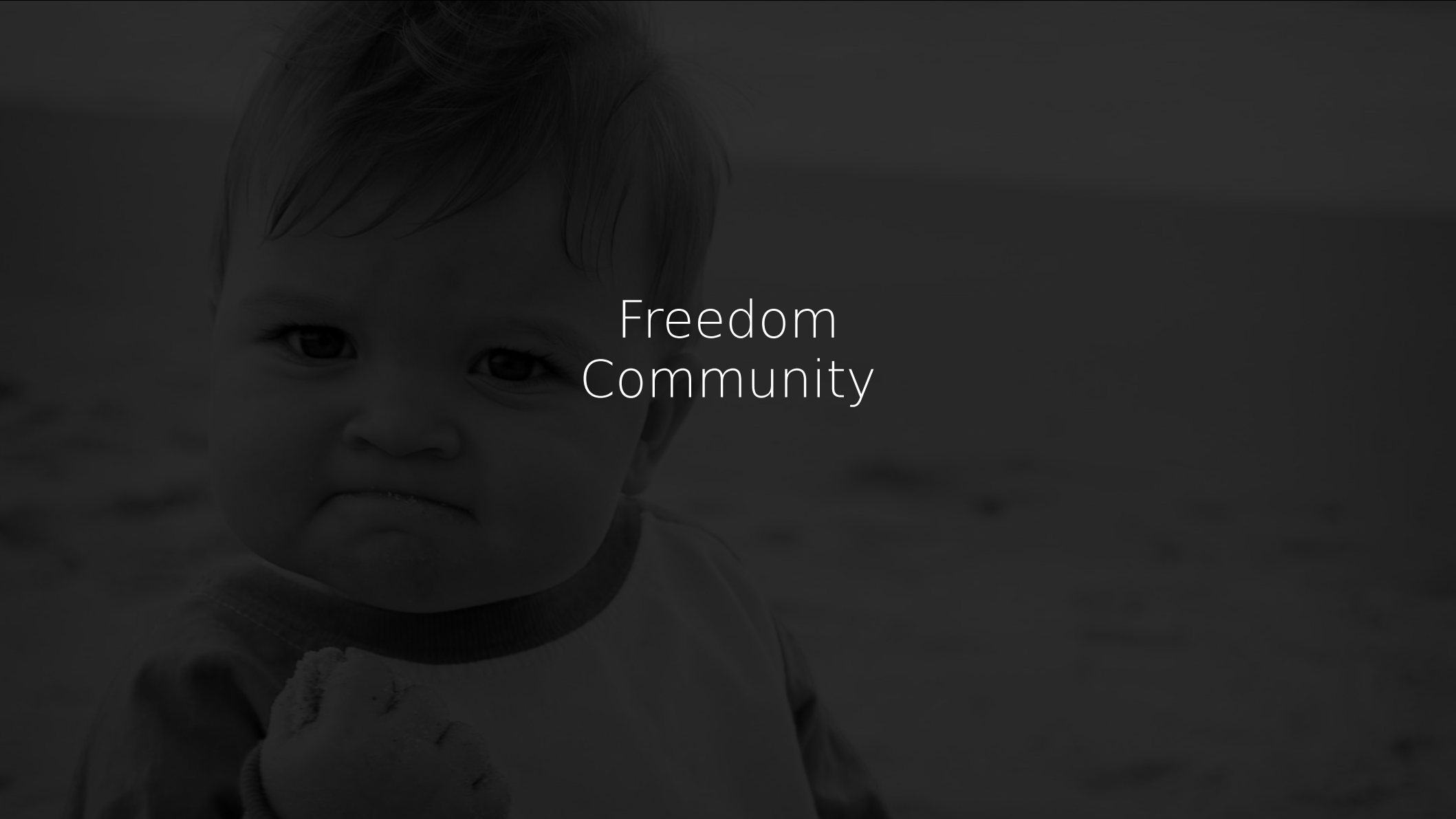
Let’s not forget the TIOBE index!



The index can be used to check whether your programming skills are still up to date or to make a strategic decision about what programming language should be adopted when starting to build a new software system. The definition of the TIOBE index can be found here.

Dec 2019	Dec 2018	Change	Programming Language	Ratings	Change
1	1		Java	17.253%	+1.32%
2	2		C	16.086%	+1.80%
3	3		Python	10.308%	+1.93%
4	4		C++	6.196%	-1.37%
5	6	▲	C#	4.801%	+1.35%
6	5	▼	Visual Basic .NET	4.743%	-2.38%
7	7		JavaScript	2.090%	-0.97%
8	8		PHP	2.048%	-0.39%
9	9		SQL	1.843%	-0.34%
10	14	⇈	Swift	1.490%	+0.27%

The bigger picture


Freedom
Community

Questions?

Thank you! Merci!

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