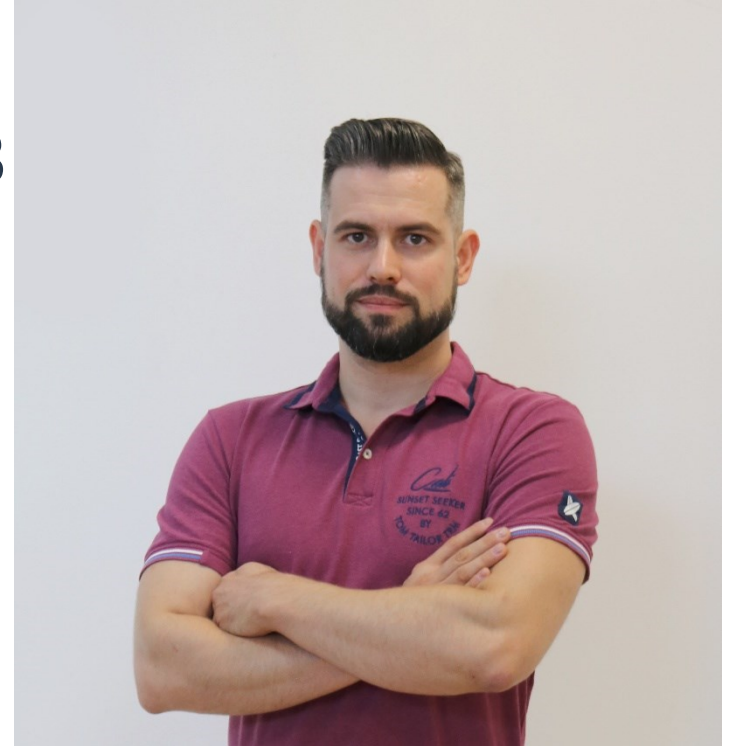


Ivaylo Papazov

- Senior Full Stack Developer & Team Lead at Motion-Software
- Trainer at SoftUni
- Experience with JS, React, Node.js, mongoDB
C#, ASP.NET Core
- TelerikAcademy Graduate





Where?

1. Web Apps
2. Server Apps / Node.js
3. Desktop Apps / Electron framework
4. Mobile Apps
 - Hybrid mobile apps / Apache Cordova
 - PWA
 - Native apps / React Native, NativeScript

Where?

5. Embedded devices / Johnny-Five

- IoT
- Robotics

6. Adobe Creative Cloud Extensions

Where Else?

Strikes Back S01E05



Where Else?

Westworld S01E10

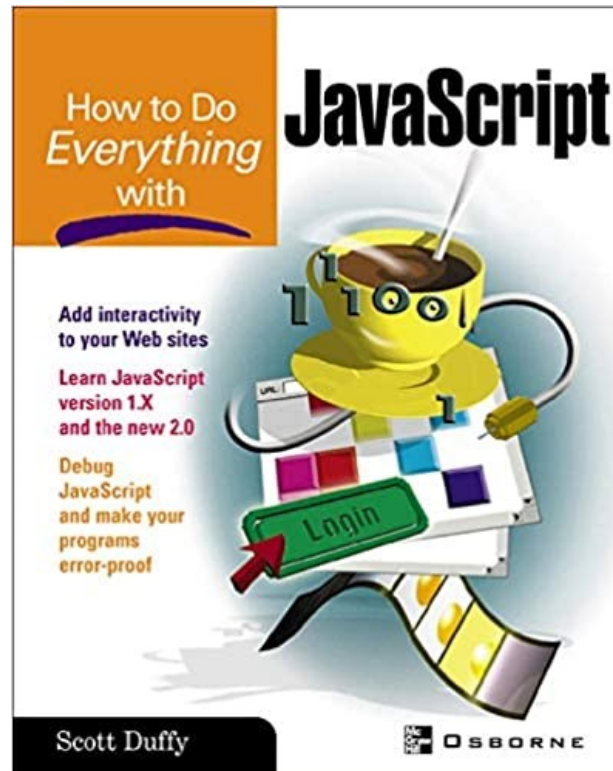


Everywhere



Everything

McGraw-Hill Education; 1 edition (March 17, 2003)



What is JavaScript

- High-Level
- Single-Threaded
- Garbage-Collected
- Interpreted
- Or Just-in-Time Compiled
- Prototype-Based
- Multi-Paradigm
- Dynamic-Language
- With a Non-Blocking Event Loop

— Pros and Cons

Not everything is perfect

- Great community
- Easy to start with
- Depth of language
- Tons of libraries

+

Pros

Cons

-

- Too many recruiters
- Tons of libraries
- Always learning

— JavaScript for Web



NETFLIX



**The
New York
Times**



— JavaScript for Desktop

Electron JS:



Skype



GitHub Desktop



MeisterTask



Discord



Slack



WordPress



MongoDB Compass



Postman

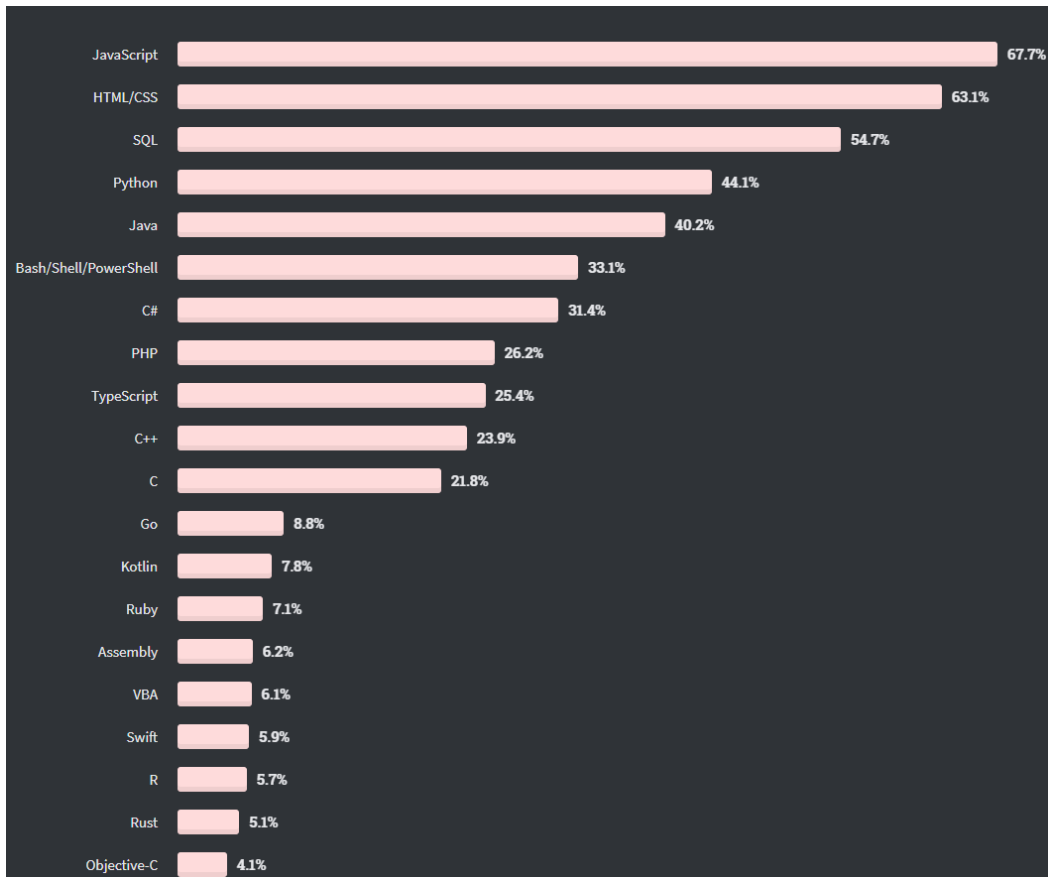


... and many, many, many more!

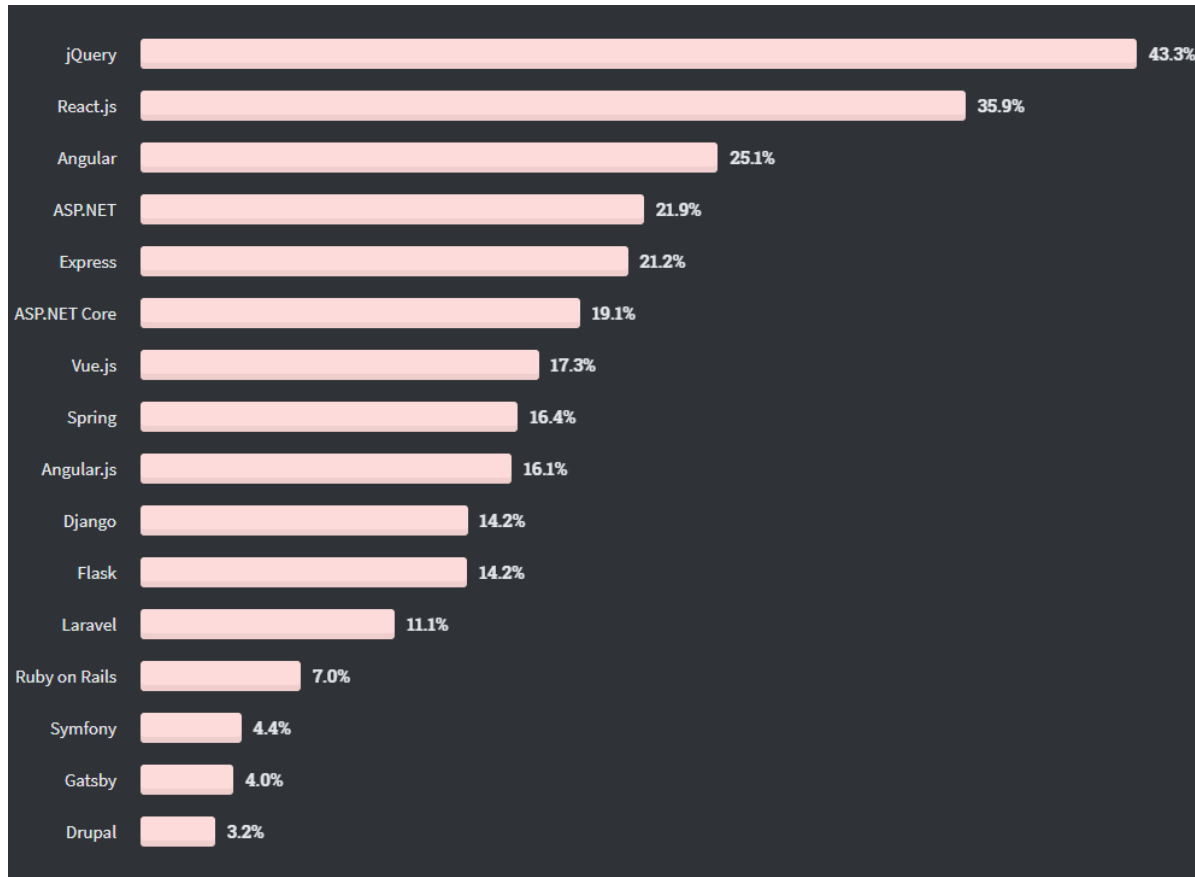
<https://www.electronjs.org/apps>

Stackoverflow statistic 2020

Most Popular Technologies

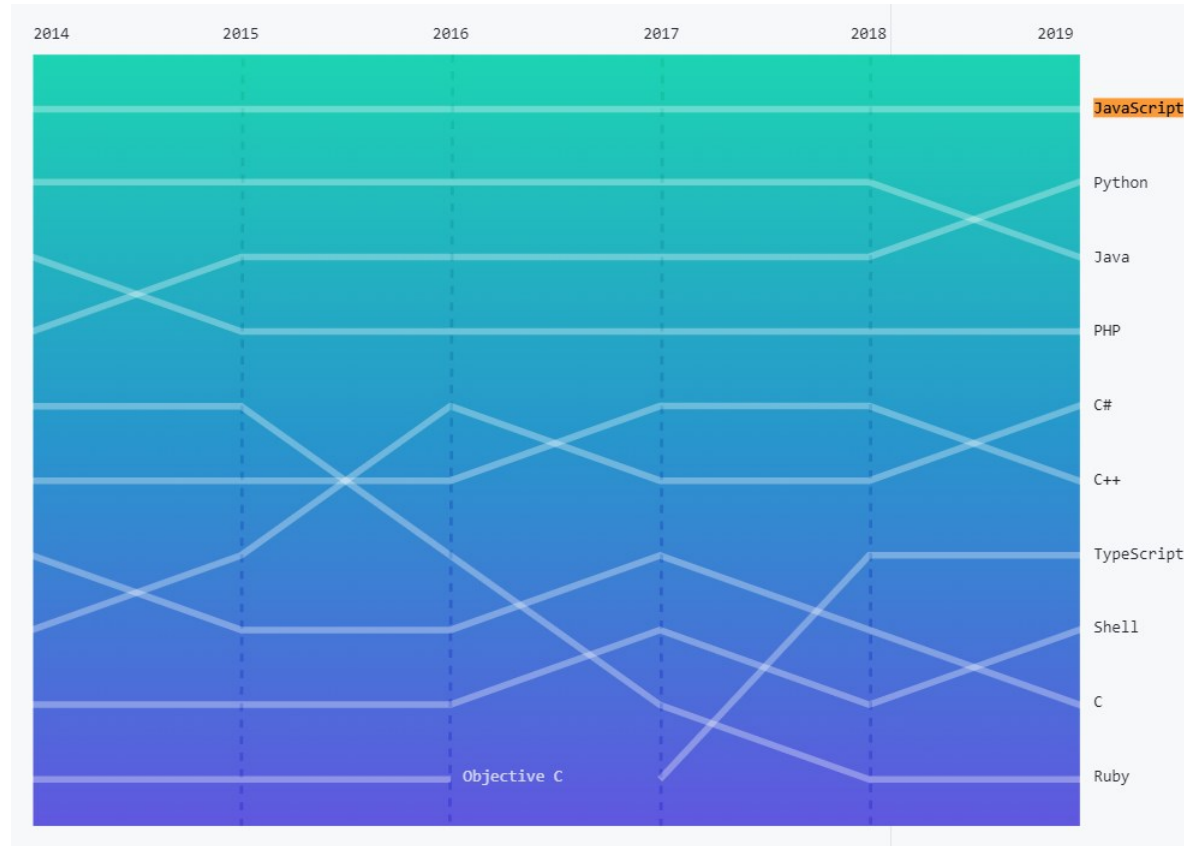


Web Frameworks



GitHub statistic 2019

Top Languages





QUESTIONS?

Resources

- <https://areknawo.com/where-javascript-is-used/>
- <https://themefuse.com/did-you-know-that-wordpress-can-guide-missiles/>
- https://www.youtube.com/watch?v=FSs_JYwnAdI
- <https://www.youtube.com/watch?v=JCATu2WkOq8>
- <https://insights.stackoverflow.com/survey>

Защо да учим Python?



Jordan Jambazov



Rank	Language	Type	Score
1	Python ▼	  	100.0
2	Java ▼	  	95.3
3	C ▼	  	94.6
4	C++ ▼	  	87.0
5	JavaScript ▼		79.5
6	R ▼		78.6
7	Arduino ▼		73.2
8	Go ▼	 	73.1
9	Swift ▼	 	70.5
10	Matlab ▼		68.4



Google Trends

Compare



● Python
Progra...

● Java...
Progra...

● Java
Progra...

● C#
Progra...

● PHP
Progra...

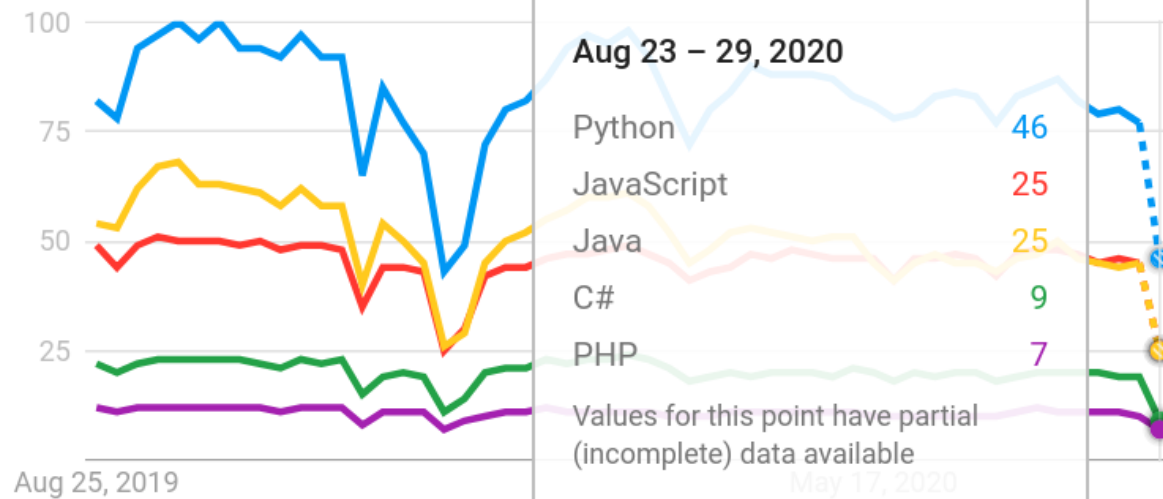
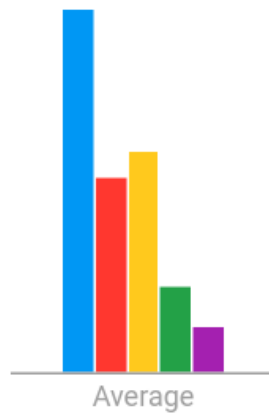
United States ▼

Past 12 months ▼

All categories ▼

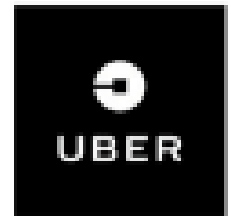
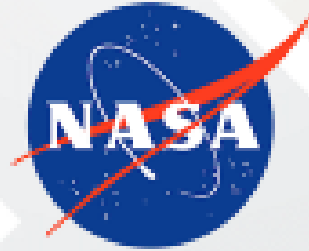
Web Search ▼

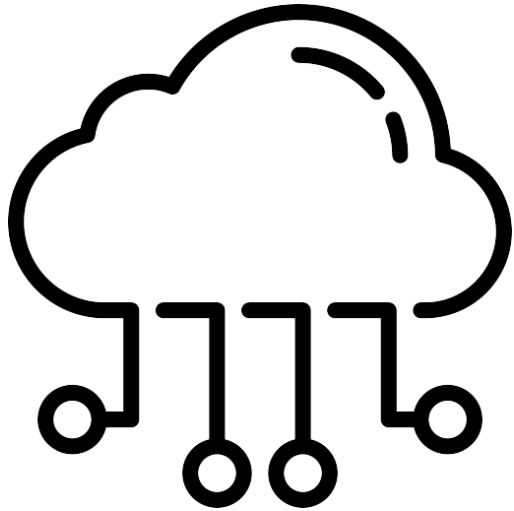
Interest over time ?



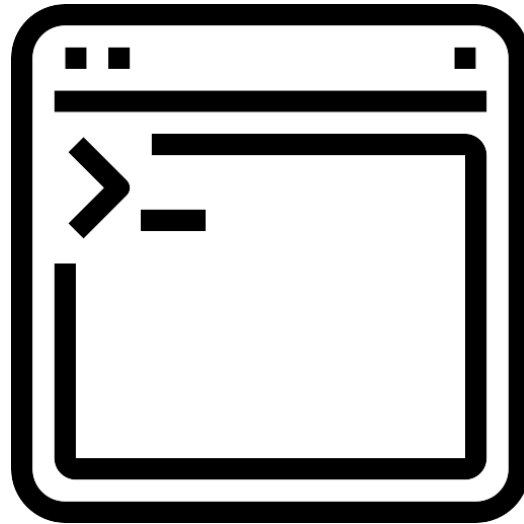


>258,336
packages

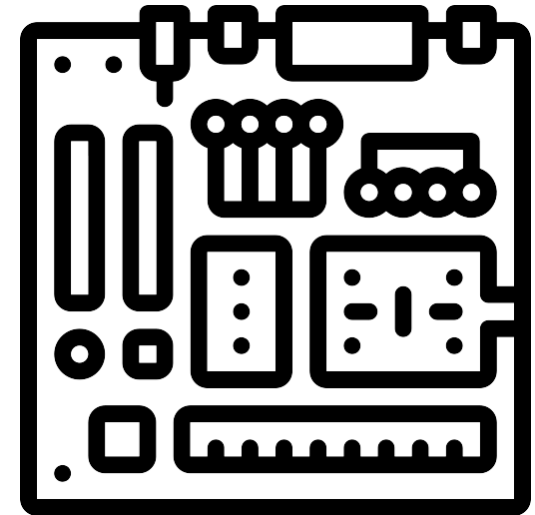




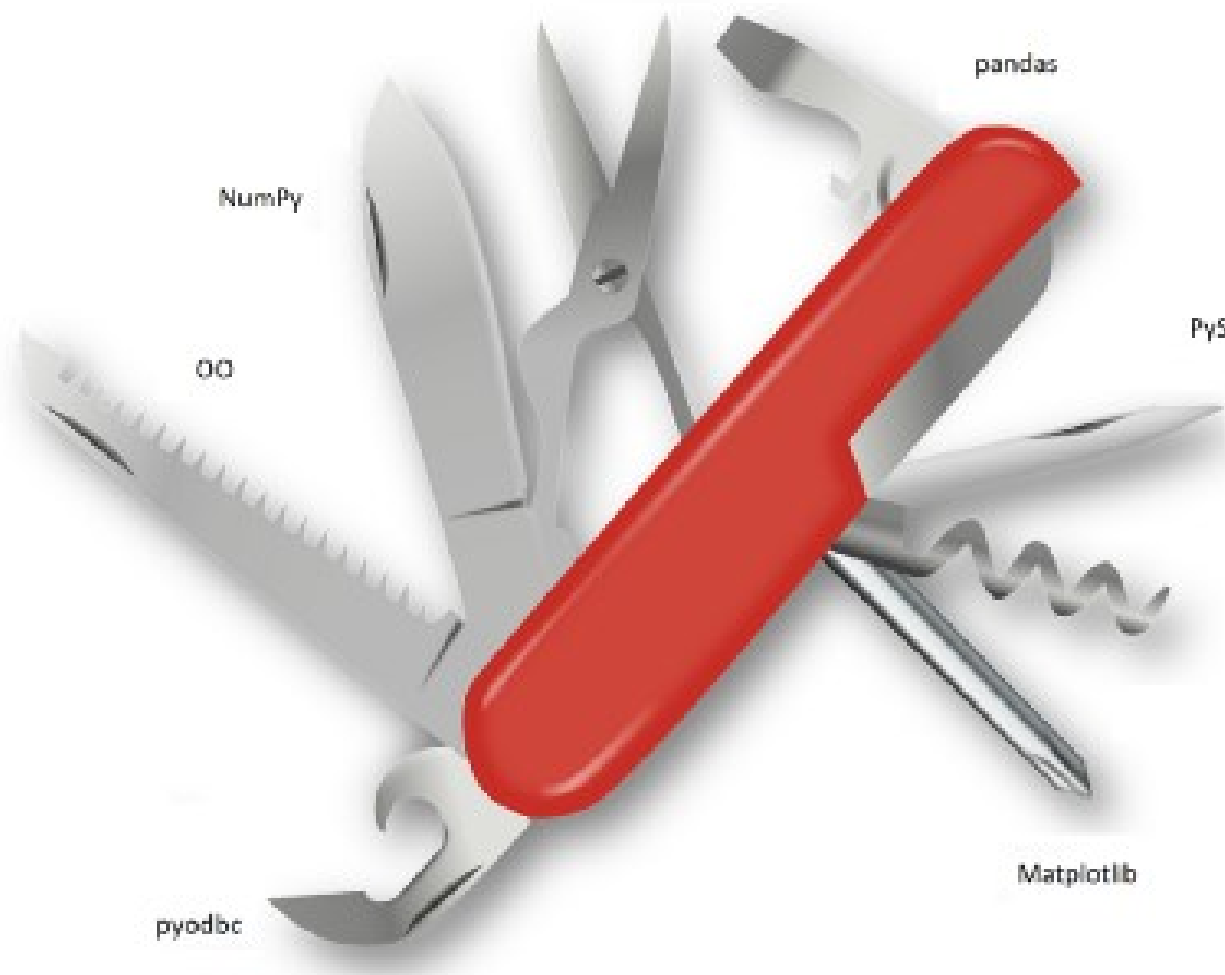
Networkin
g



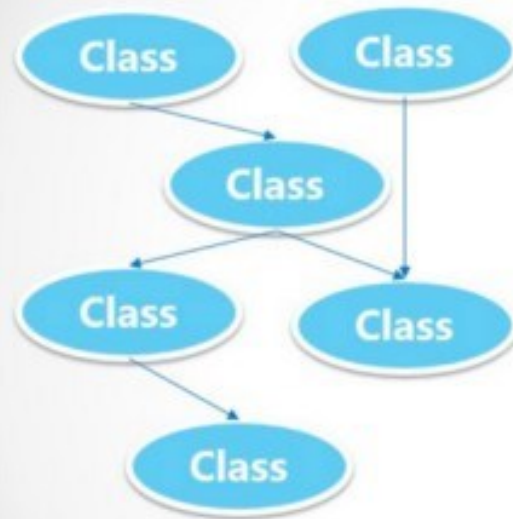
Command
Line



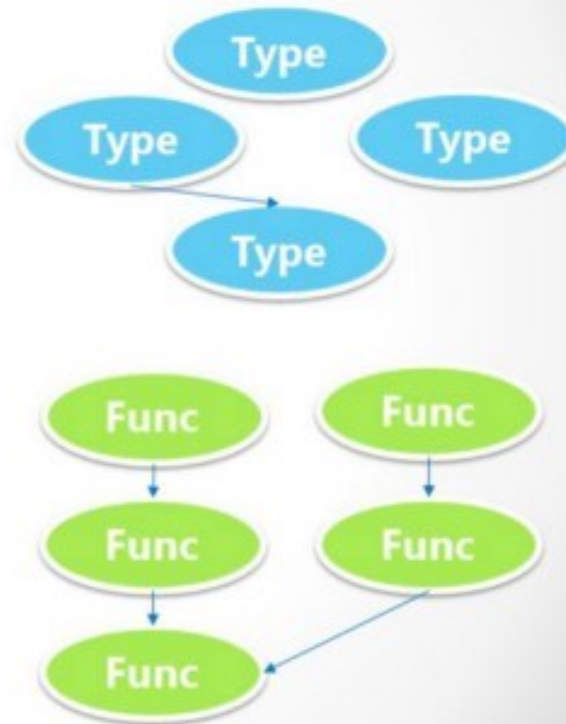
Hardwar
e

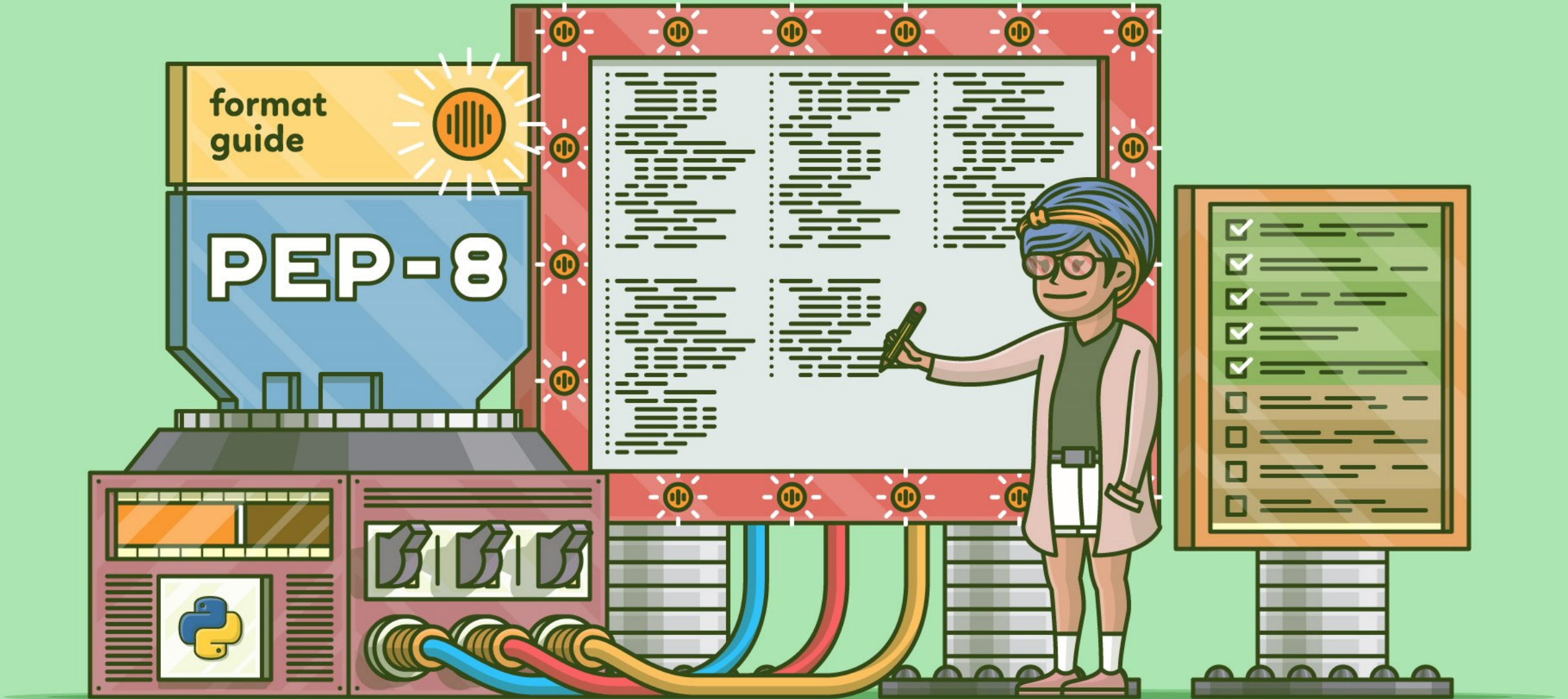


OOP

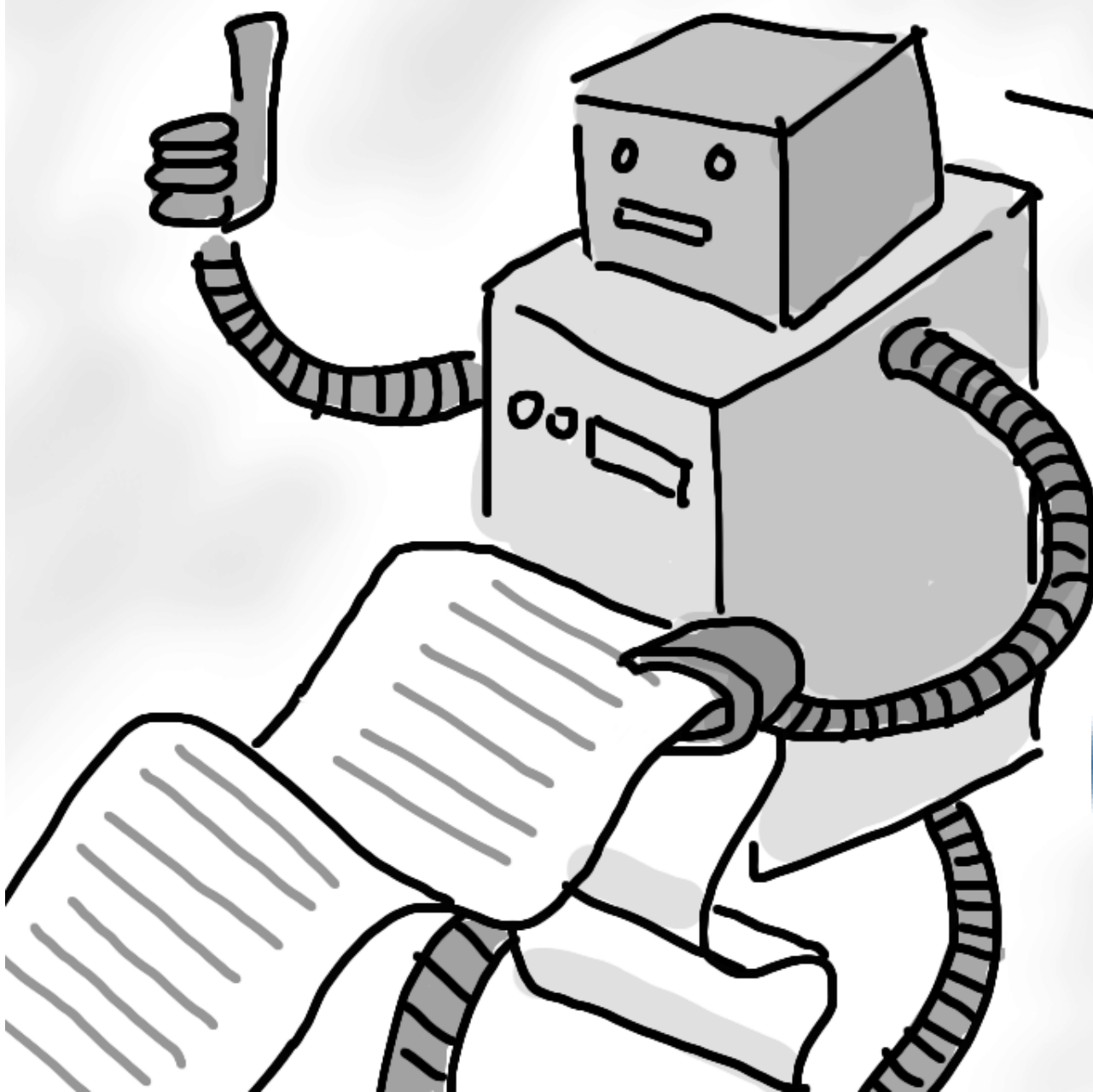


FP



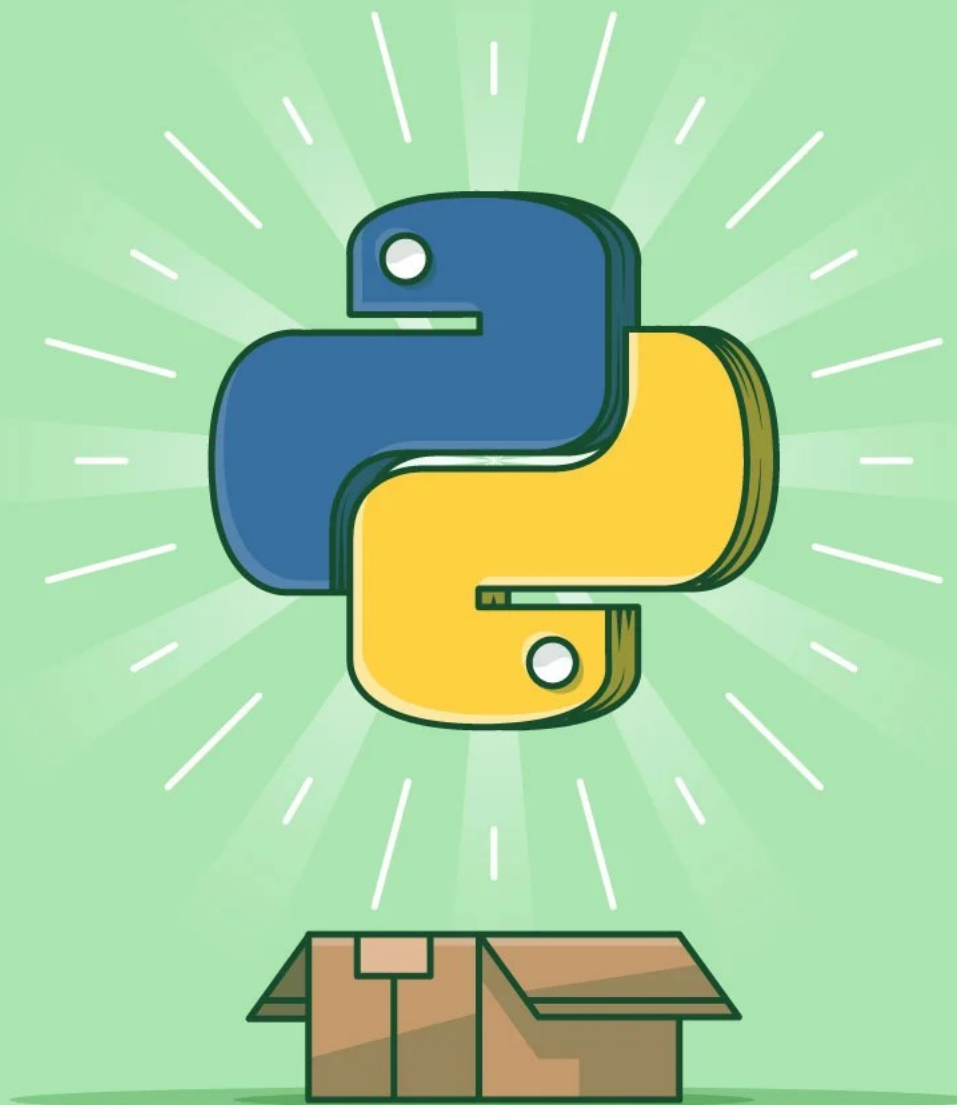
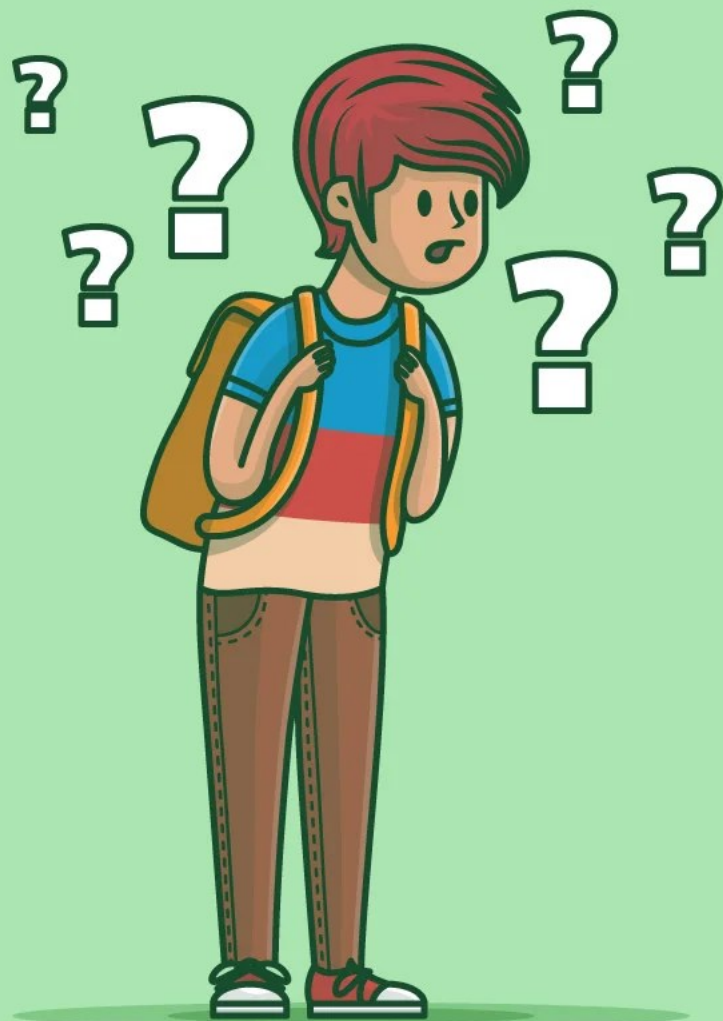


Real Python



83.6%
READABLE





Real Python



Learn Python

Q&A

Why Learn Java?

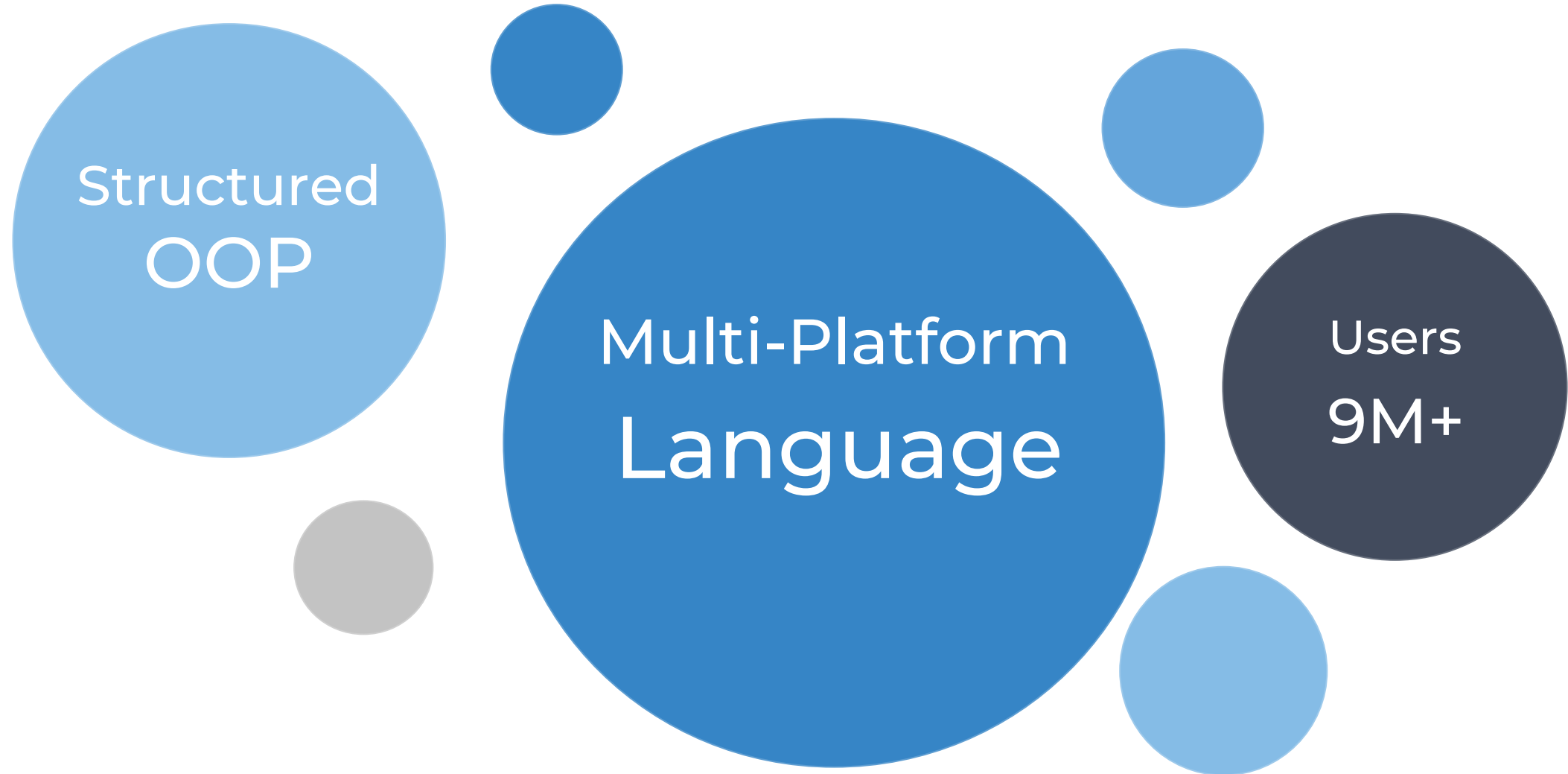
Going for the tried-and-true



Martin Paunov

Presentation by Nikolay Kostov

— What is Java?



— NOT Java:



— Definitely NOT Java:

JavaScript is sometimes confused with Java



Java \neq JavaScript

Car \neq Carpet



Photo: *Developer using JS, 1999, colorized* 😊
By Viktor Mikhailovich Vasnetsov - belygorod.ru, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=1374733>

— The Java Programming Language



Write Once, Run Everywhere, since 1995

Strong, safe, C-like syntax



Great beginner language

Stable & Active 24+ years, verbose



De-facto standard for business apps

Financial services, portals, trading systems, market engines, online banking

— Java Features

Write Once

Code independent of system architecture



Run Everywhere

Server-client, Desktop, Android, other mobile, even in-browser through applets

OOP

Strongly-typed, based on classes & objects

Support

Regularly updated, up-to-date syntax



Community

Multi-purpose/platform + open + non-MS = huge community. Quantity has a quality of its own.



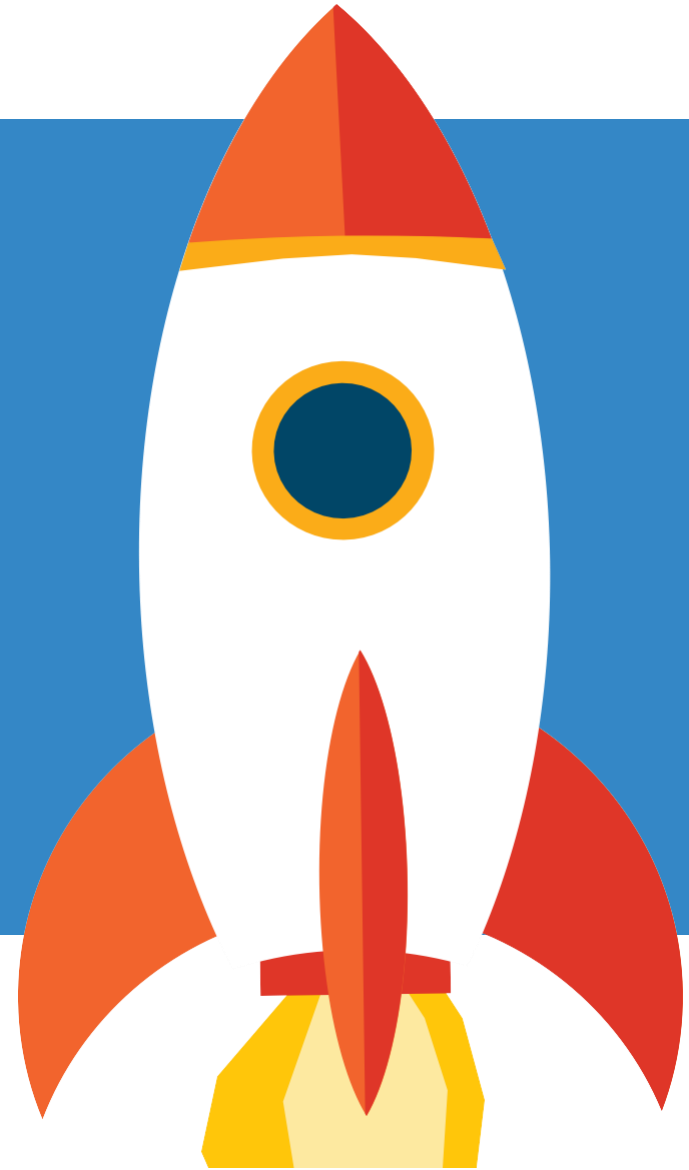
— Coding in Java

Classes & Objects, Conventions

Represent real-world entities with components of code.
Easy to read. Consistent style throughout developers & time.

Compilation

Syntax validity checked before execution. Type-safety.
IDEs even warn about some logic errors.



Java Type Inference

1. The var keyword

- Reduces boilerplate variable type

```
BufferedReader reader = new BufferedReader(new InputStreamReader(System.in));
```

```
var reader = new BufferedReader(new InputStreamReader(System.in));
```

2. However you still have compile time type safety

- This means Java is still statically typed

— Typical Java for Web

Server-side:



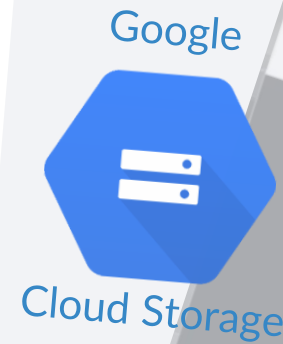
Communication: REST based on HttpServlet

Client-side:



— Virtual Racing School Java

Server-side:



Communication:

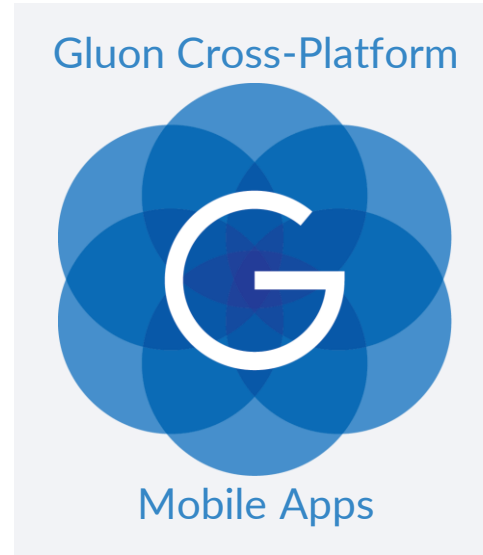
GWT RPC

Client-side:



Java -> JavaScript

— Other Java Tech



... and many, many, many more!

— Why Start with Java?



— You probably don't know what you want



Choosing well requires experience

You don't have that.



Choose how to learn & grow

Pick a path that will teach you the fundamentals well, without distractions



Careers don't depend on the language you start with

They depend on the understanding you acquire

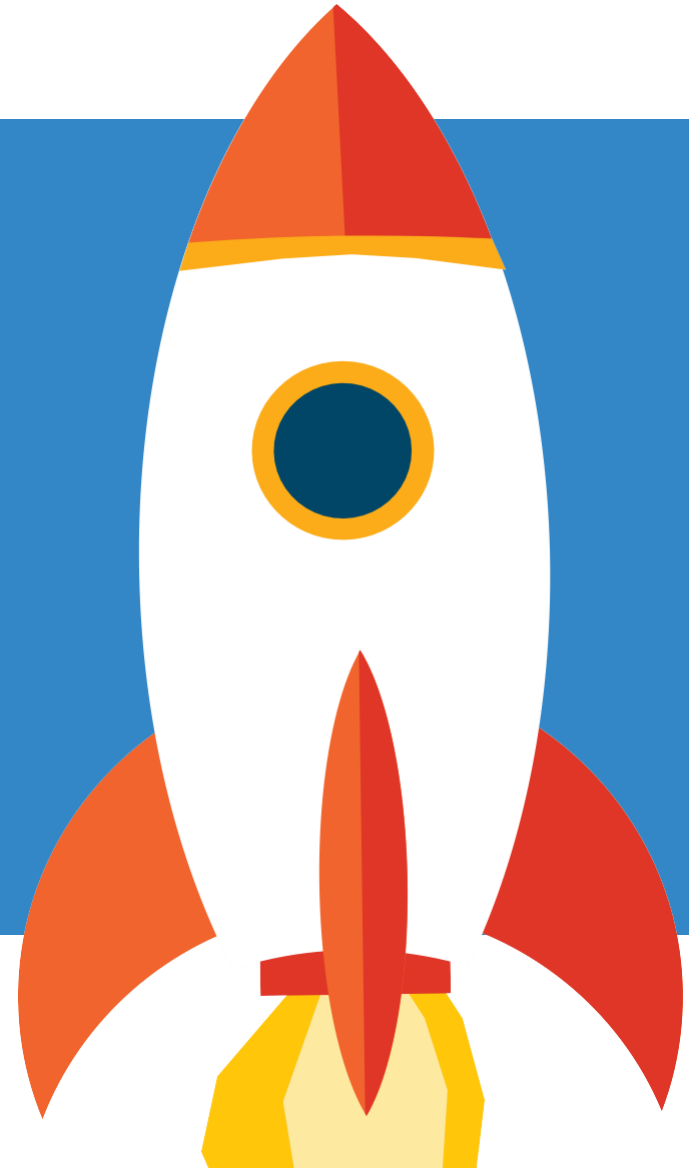
— If it walks like a duck and quacks like a duck...

Java is beginner-friendly

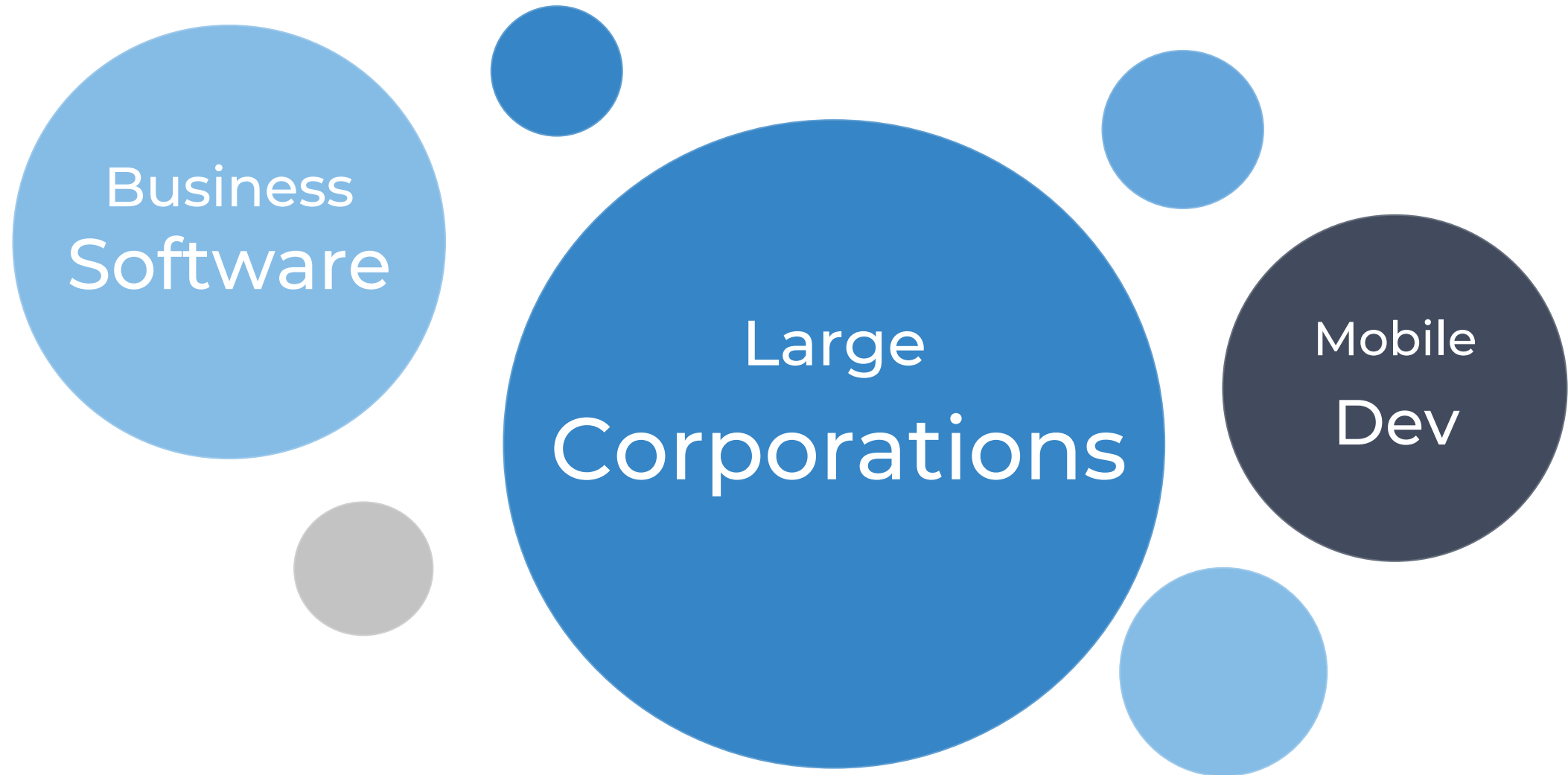
Predictable, few 'gotchas', basis for learning other languages

Java verbosity is your friend

Forces you to be very explicit – good for learning the ropes



— Where can I work with Java?



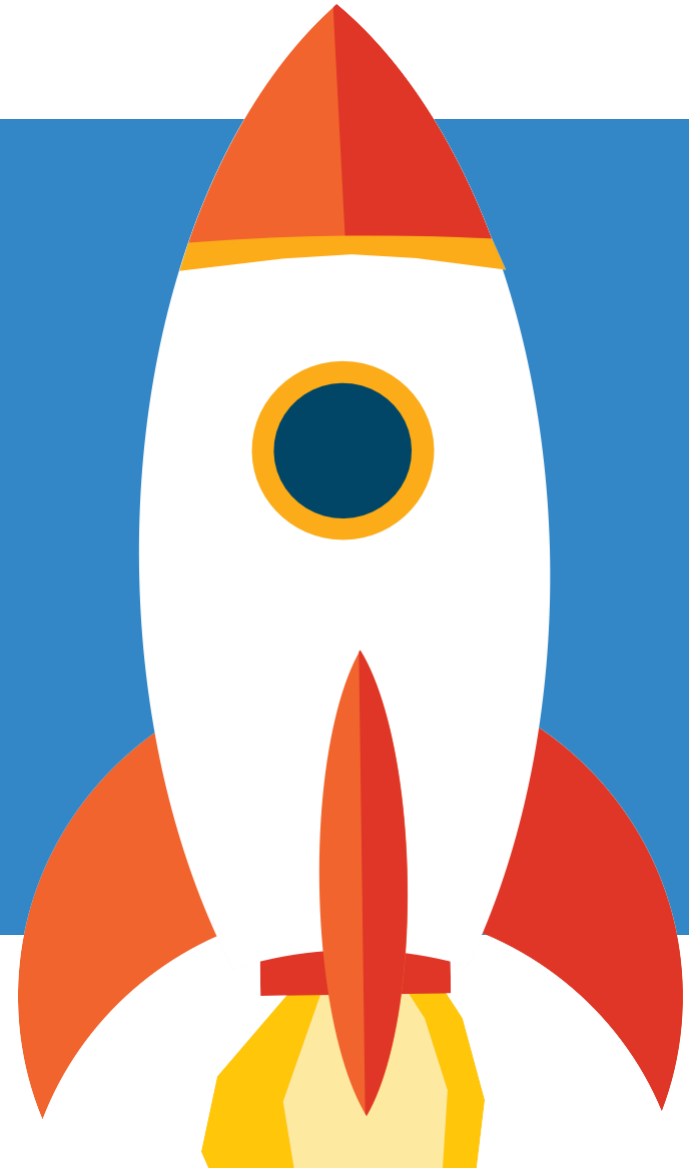
— **Java's been around for loooooong time**

Large software corporations use Java

Also lots of legacy from the time Java dominated the industry

Lots of services need to provide Java APIs

E.g. payment providers like Stripe, Recurly, cloud services like Google Cloud Platform, etc.



— Types of Java Jobs



Mobile Dev – Android

If you prefer smaller and more agile teams



Internal Software, API Development, Open-Source

Average-size companies with software products and services



Mostly Business Software – Web Server + Client

The big players, Google, eBay, SAP, IBM, VMWare, Netflix, TripAdvisor, etc.

— Downsides



— Starting with Java

Strong foundation

Concepts applicable in most other languages



Consistent

24+ years of codebases with similar style

Safe & Structured

Compilers and IDEs check for errors before execution, lots of tools for analysis

Career opportunities

Lots of positions, mostly in large corporations but also some in smaller start-ups



Up to date

The huge community and large business use keep the language active and regularly updated



QUESTIONS?