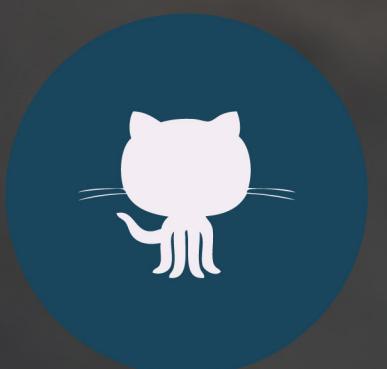




Erwin de Gier

The Ultimate Java Microframework shootout



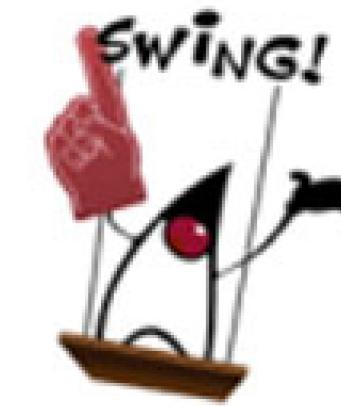
github.com/erwindeg



[@erwindeg](https://twitter.com/erwindeg)



edegier.nl



EJB 3



JDBC



JUnit

Struts²



XML



maven

{JSON}

Micro defined

✓ Small footprint?

✓ Lightweight?

✓ Small runtime?

✓ Fast?

Micro defined

 Easy to start

 Well documented

 No Legacy

 All in one

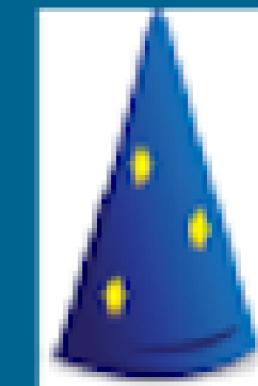
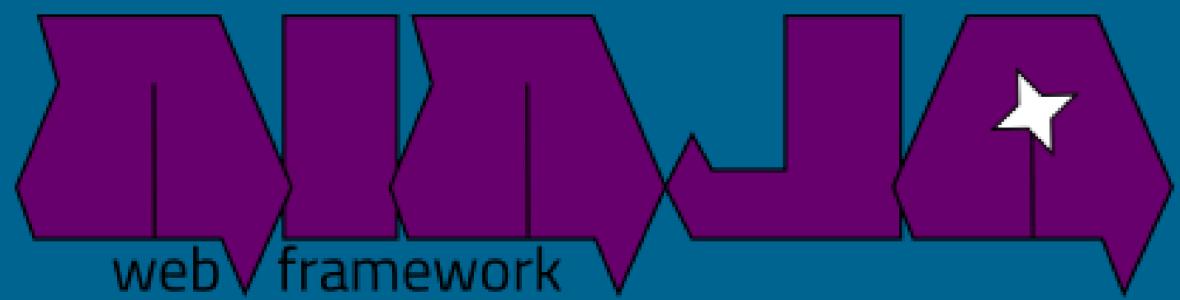
Microservice REST API

✓ REST server/client

✓ Persistence

✓ Runnable JAR

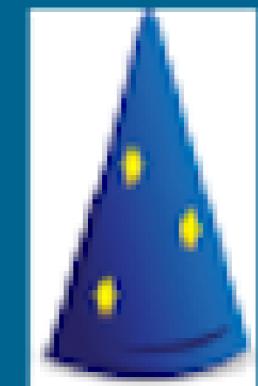
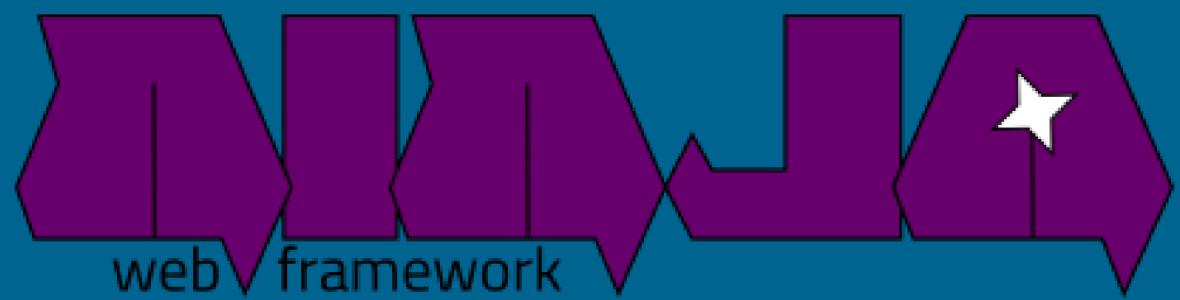
✓ JSON Mapping



Dropwizard

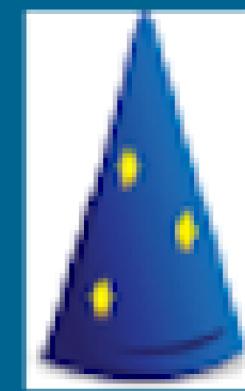
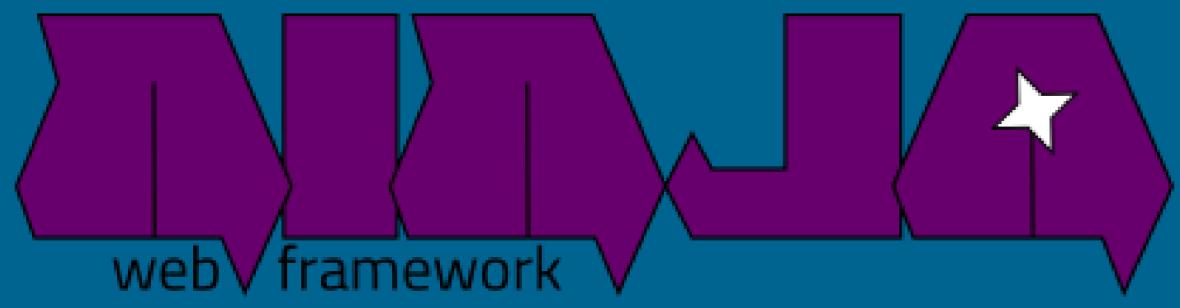
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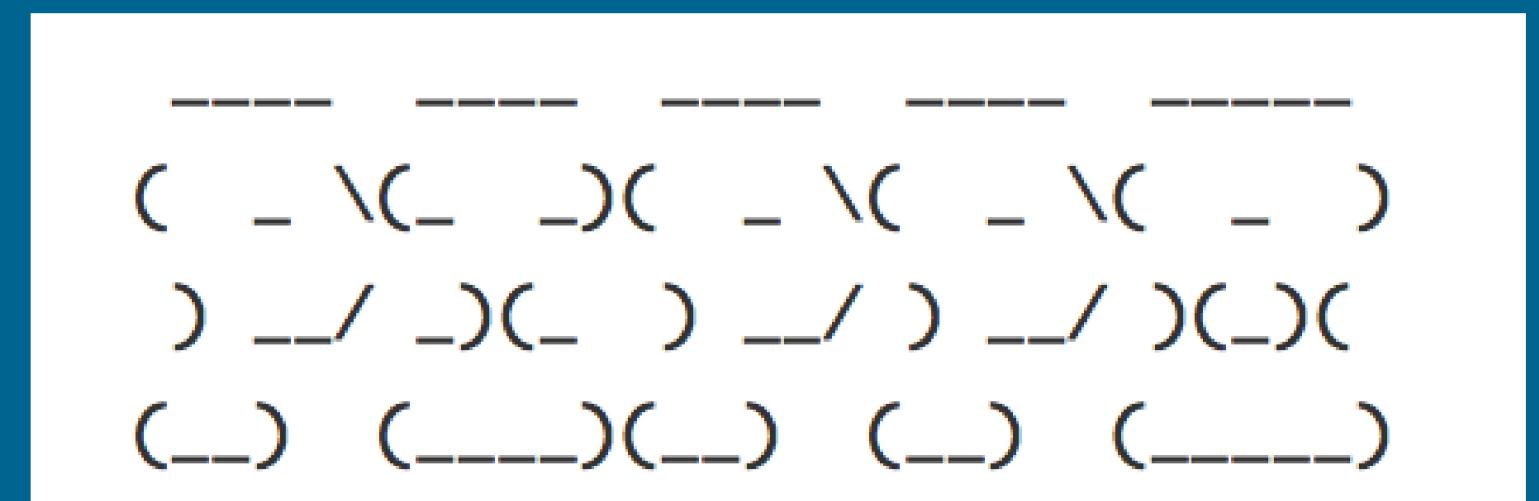
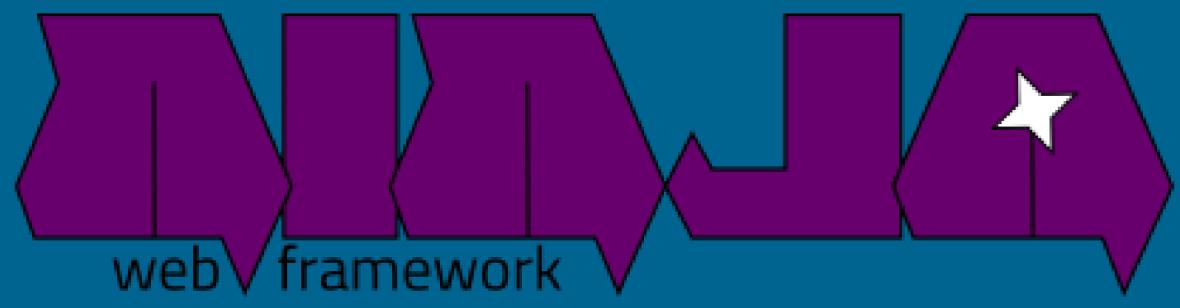
Dropwizard

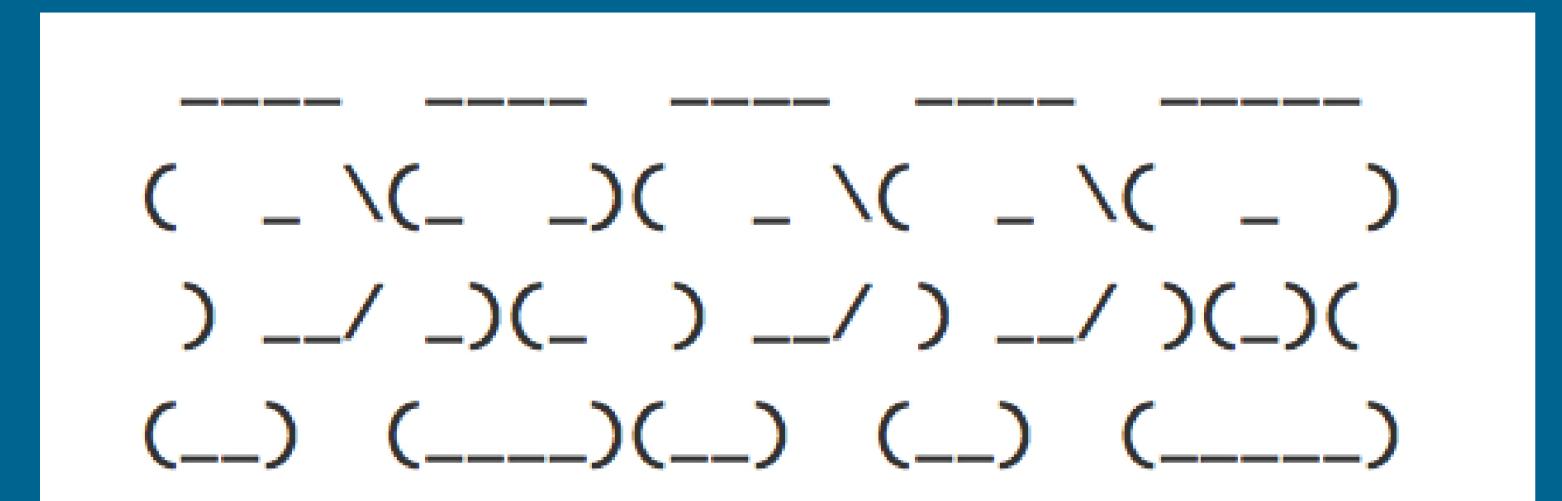
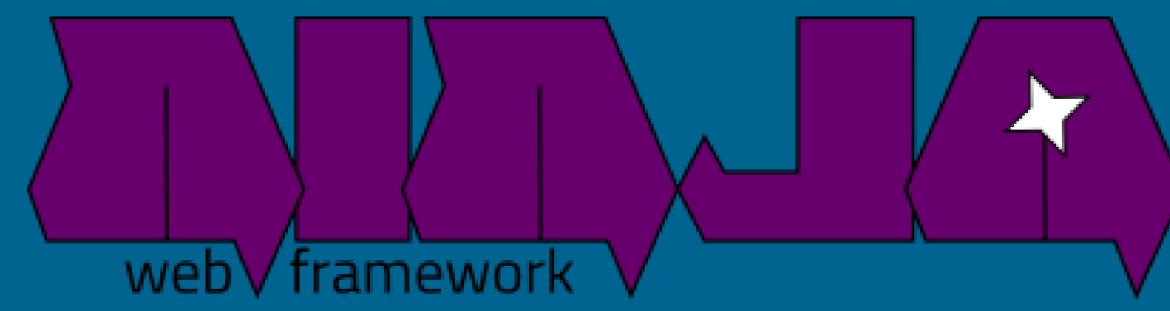
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Dropwizard

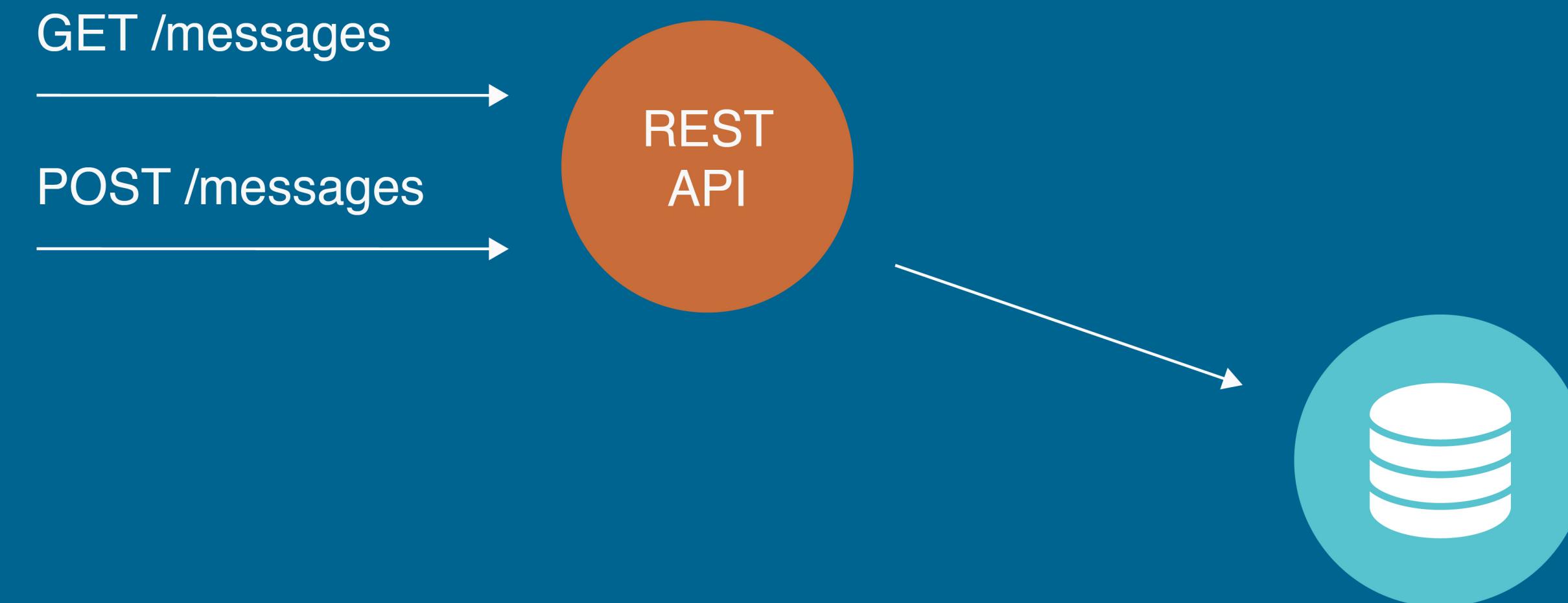
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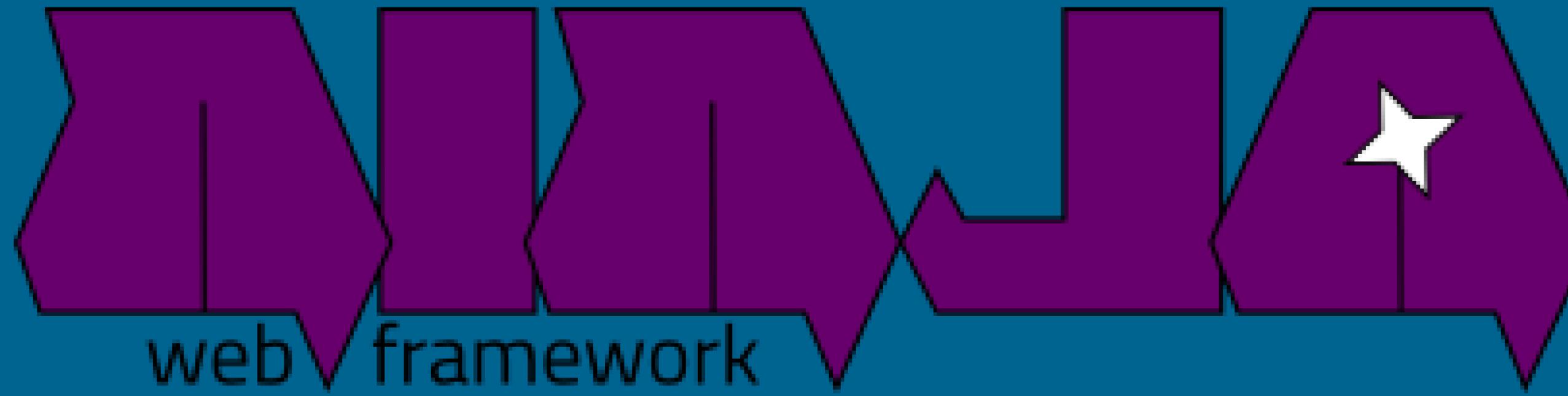




	Ninja	Jooby	Pippo
REST	Java routes	Java DSL (of Annotaties)	Java DSL
HTTP(S)	Jetty	Jetty, Netty, Undertow, Servlets	Jetty, Servlets
JSON	Jackson	Jackson, GSON	Jackson, GSON, Fastjson
Caching	Ehcache, Memcached	Ehcache, Memcached, Redis, Hazelcast, Guava cache	-
Templating / HTML	Freemarker	Freemarker, Handlebars, Jade, Pebble	Freemarker, Jade, Pebble, Groovy
Security	-	Pac4J	- (CSRF filter inclusief)
Database / ORM	JPA	Hibernate, JOOQ, RxJdbc, etc	-
Database / NoSql	-	Cassandra, Mongo, Couchbase	-
Validatie	Bean Validation	Bean Validation	Bean Validation
Metrics	Dropwizard Metrics	Dropwizard Metrics	Dropwizard Metrics
Configuratie	Java props	Typesafe config file	Java props
Build	Maven	Maven	Maven
DI	Guice	Guice	Guice, Spring, Weld
Fat JAR (hello world app)	26 MB	8,5 MB	3 MB

Architecture





web framework

```
~/Workspaces/microframeworks-demo
~/Workspaces/microframeworks-demo
mvn archetype:generate -DarchetypeGroupId=org.ninjaframework -DarchetypeArtifactId=ninja-serv
let-archetype-simple
```

```
}
```

Ninja

✓ Opinionated

✓ Full stack

✓ Not so micro in size

j ∞ by

~/Workspaces/microframeworks-demo

~/Workspaces/microframeworks-demo

}

Jooby

✓ Un-opinionated

✓ Modules

✓ Really tiny or full stack

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)-_-/-_-)(-_-)-_-/-_-)(-_-)(
(_-) (-_-)(_-) (-_) (-_-)

```
~/Workspaces/microframeworks-demo
~/Workspaces/microframeworks-demo mvn archetype:generate -DarchetypeGroupId=ro.pippo -DarchetypeArtifactId=pippo-quickstart -DarchetypeVersion=1.5.0
```

}

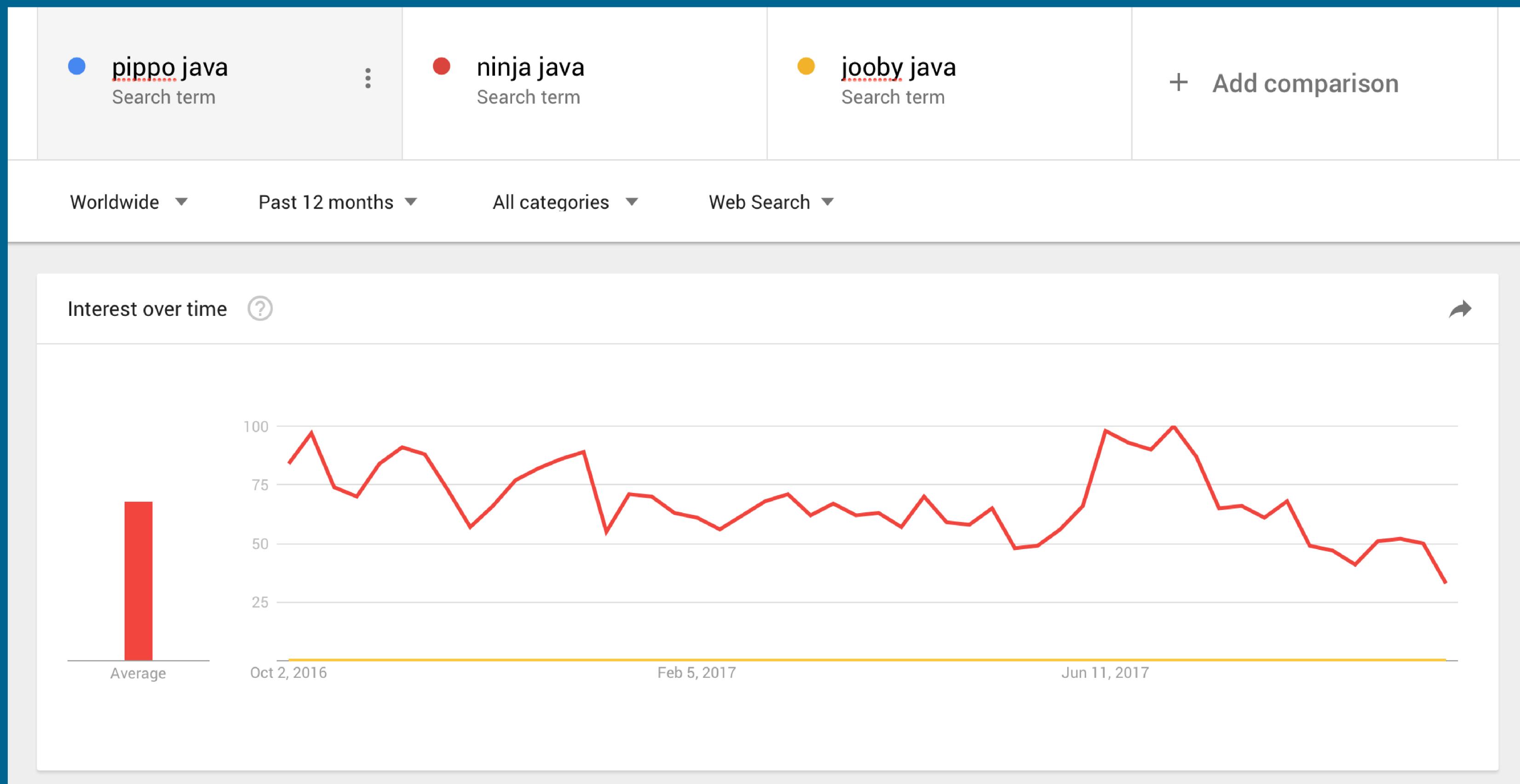
Pippo

- ✓ Customizable
- ✓ Multiple paradigms (controllers, init)
- ✓ Not extremely userfriendly

Community

	Ninja	Jooby	Pippo
GitHub stars	1733	593	624
Commits	1957	1302	1221
Issues / closed	90/161	64/674	10/157
Release date	August 2012	April 2015	Oktober 2014
Contributers	61	29	16
Jar size	26 MB	8,5 MB	3 MB

Popularity



Conclusion

- ✓ Ninja: All-in-one solution
- ✓ Jooby: Full stack, customizable
- ✓ Pippo: Micro, customizable

Microframeworks sweet spot

- ✓ REST API DSL's
- ✓ Little functionality
- ✓ No into the Java platform
- ✓ Easy entry level
- ✓ Or (Pippo) a lot of control