

Junior-Developer questions

Algorithms

- BigO notation
- Sorting algorithms (define how algorithm works and what's a big o notation)

Podstawy kryptografii

- What algorithm would you use to hash a password?

Java Basics

- Java 7, Java 8 → 2 favorite features, try-with-resources
- Polimorfizm, przykład polimorfizmu
- 'final' keyword
- 'volatile' and threads
- Immutable objects, how to create an immutable object.
- Thread basics: how to implement a thread? What ways you know of making objects thread-safe?
- Boxing/autoboxing
- HashMap - tablica hashująca, equals/hashcode
- Synchroniczne/asynchroniczne przetwarzanie (przykład. Backend/frontend)

Testing

- What kind of tests do you know?
- Mocks/stubs/fakes

Spring

- IoC vs DI
- How do you provide configuration metadata to the Spring Container?
- Auto-wiring

Design patterns

- Command
- Visitor
- Observer
- Template method vs Strategy pattern
- Decorator

HTTP

- Get idempotent
- RESTful methods
- SOAP vs REST

DB

- Normalizacja/denormalizacja bazy danych
- ACID
- ORM (Object-relational-mapping)
- Indeksy? Jakie struktury danych?
- SQL Injection attack
- SQL vs NoSQL

Software architecture

- Microservices
- DDD
- CQRS, Event sourcing

