

Common Javatips

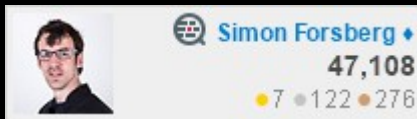
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Tomorrow Pilot at Sigma IT Consulting
within Code Review and Clean Code

Tomorrow What?

- Part of Sigma's “Tomorrow” concept
- Expert within an area
- Spend about 10% of time
- Hold workshops and presentations
- Be visible both internally and externally

Two aspects of this talk

Ask questions at any time!

Logging & Exceptions

Logging and Exceptions

- What do you want to log?
- How do you want to log it?
- InterruptedException: Make sure thread stops
- Stacktrace!
- `.toString()` instead of `.getMessage()`
- Avoid catching too much
- How to reproduce?

Should it be caught or prevented?

- `ClassCastException`
- `NullPointerException`
- `IllegalArgumentException`
- `IllegalStateException`
- `NoSuchElementException`
- `ConcurrentModificationException`
- `EnumConstantNotPresentException`
- `FileSystemNotFoundException`

Edge cases

Edge-cases

- Empty array/list
- Null
- Illegal value

Choosing a data structure

List vs. Set vs. Map

- Do you need the items to be ordered?
- Do you want duplicates?
- Are you interested if it just exists or not?
- Do you have a key that you use to lookup by?
- Do you need to store the items
or can you process each item directly?

Enums

enum

- Can contain fields
- Can contain methods
- Can implement interfaces
- Do not rely on ordinal()

Measuring time spent

Measuring time

- `nanoTime()` vs. `currentTimeMillis()`
- `currentTimeMillis()` is not a timer!

Designing a class

Designing a class

- Composition over inheritance!
- One field = one thing
- Class extends... `super()`
- `addItem(...)` instead of `getItems().add(...)`
- Defensive copies!

Reusable classes

Reusable classes

- Extract interfaces for dependencies
- Don't request more than you need
- Generics

hashCode, equals, Comparable

- Do you really need hashCode and equals?
- Are you ever going to compare two of these?
- Are you ever going to use it as key in a Map?
- Or in a Set?
- `.compareTo(other) == 0 <=> .equals(other)`

Thank you!