Refactoring Effort Survey

25 responses

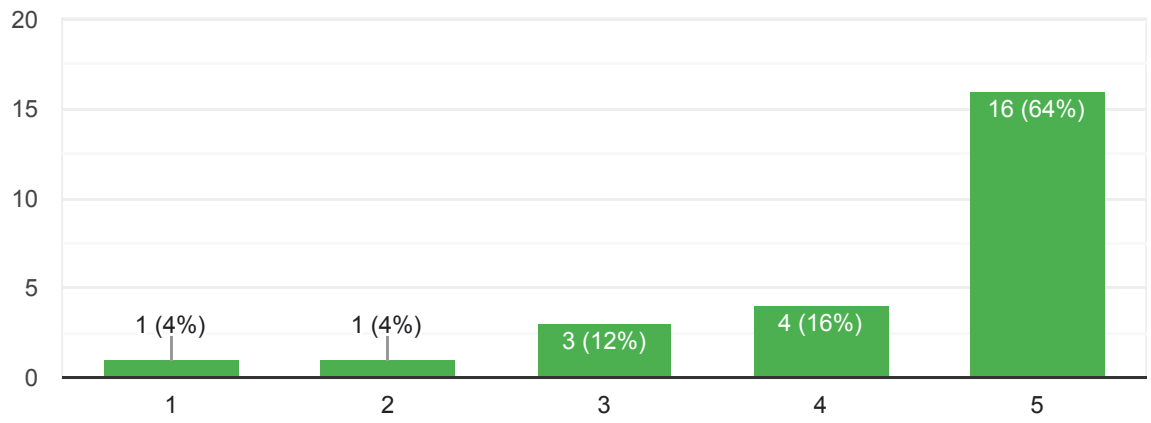
Publish analytics

Basic Information

How familiar are you with SIG's quality models?

Copy

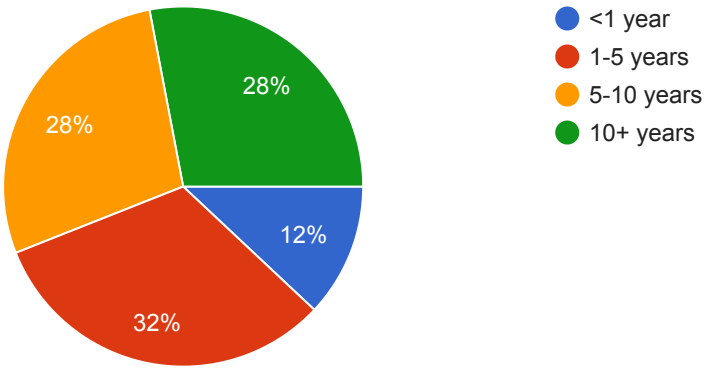
25 responses



How many years have you been working in IT?

Copy

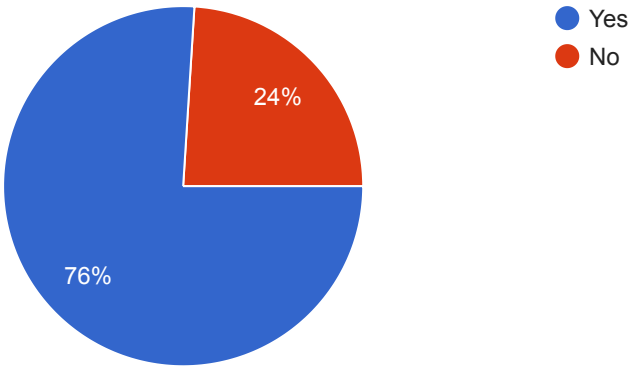
25 responses



Do your daily responsibilities include writing, reviewing, and/or analyzing source code?

Copy

25 responses



Task Description

Refactoring 1: Convert Local Variable to Field

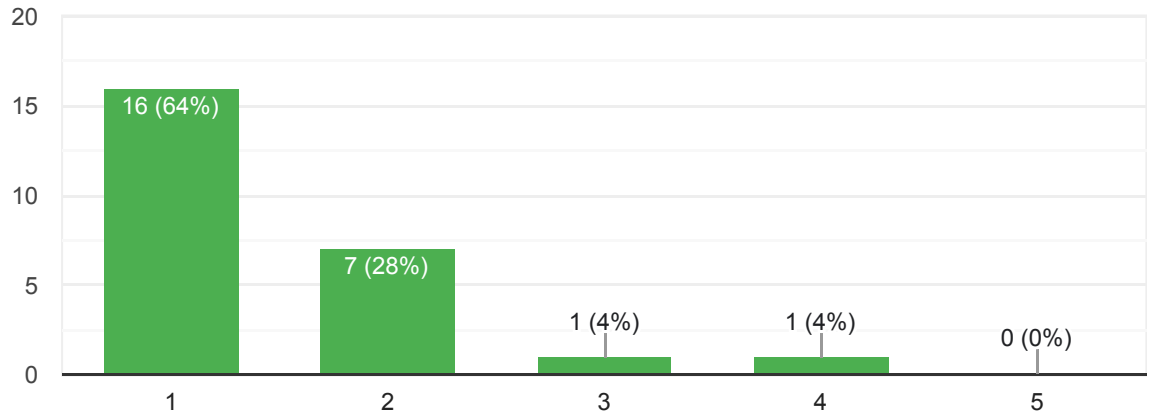
Task

Maintainability

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

Copy

25 responses

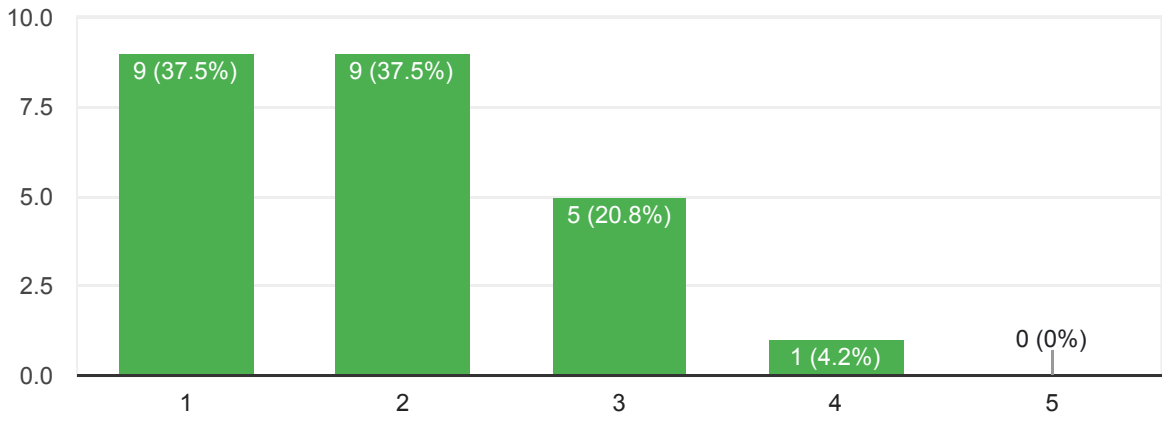


Reliability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

24 responses

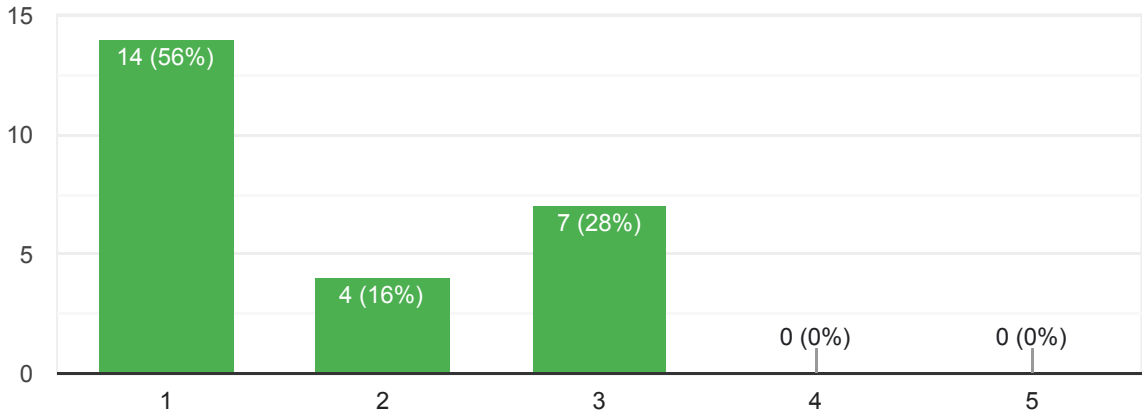


Architecture Quality

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Freshness

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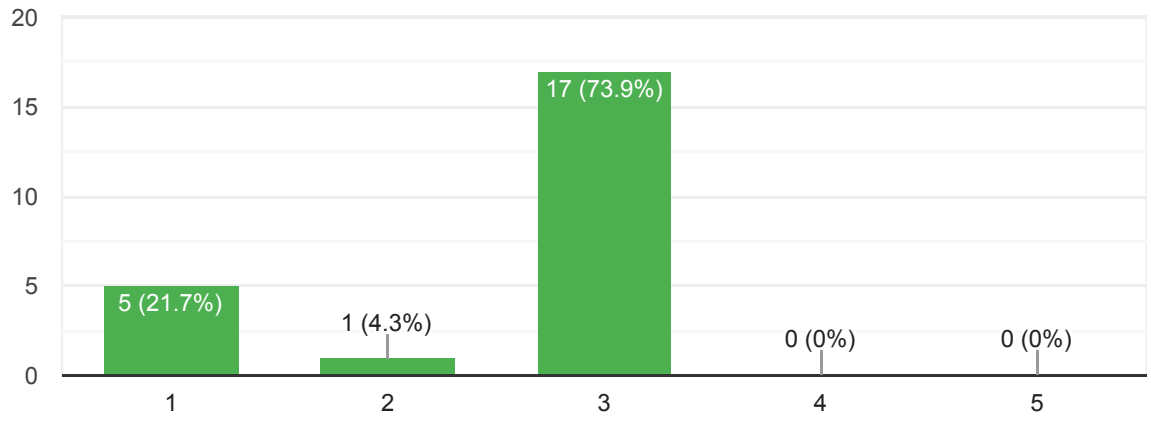
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses

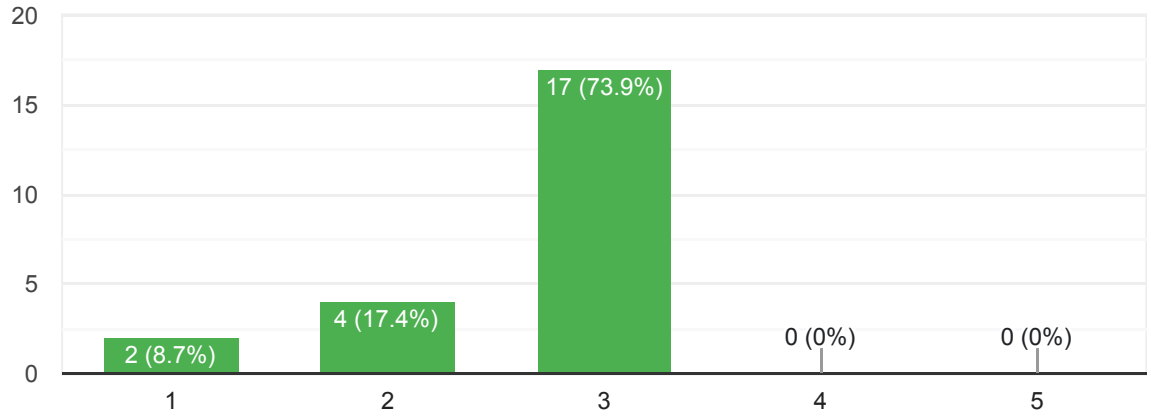


Performance Efficiency

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Refactoring 2: Extract Local Variable

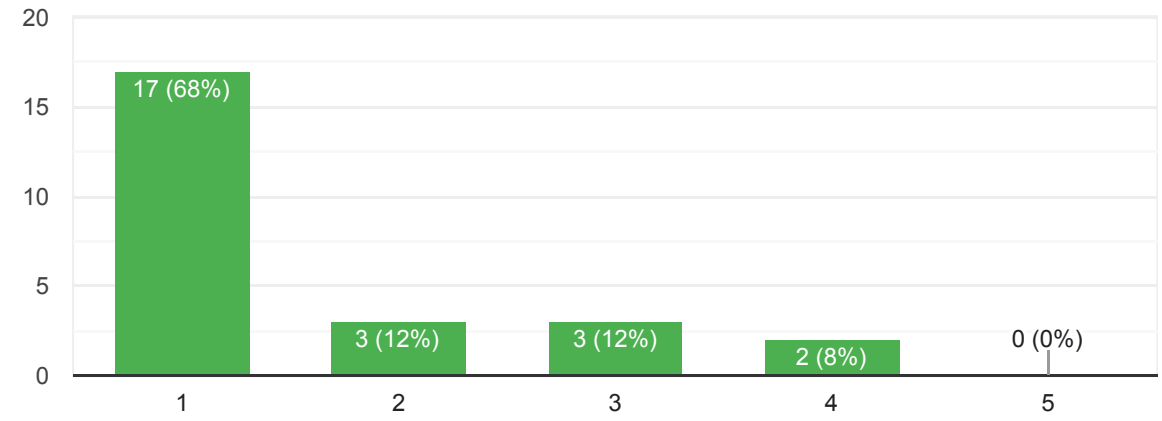
Task

Maintainability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Reliability

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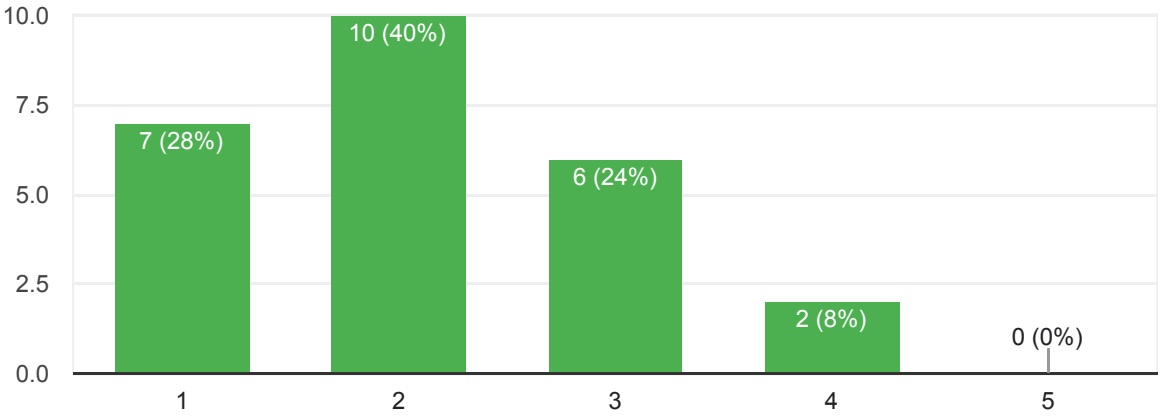
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Architecture Quality

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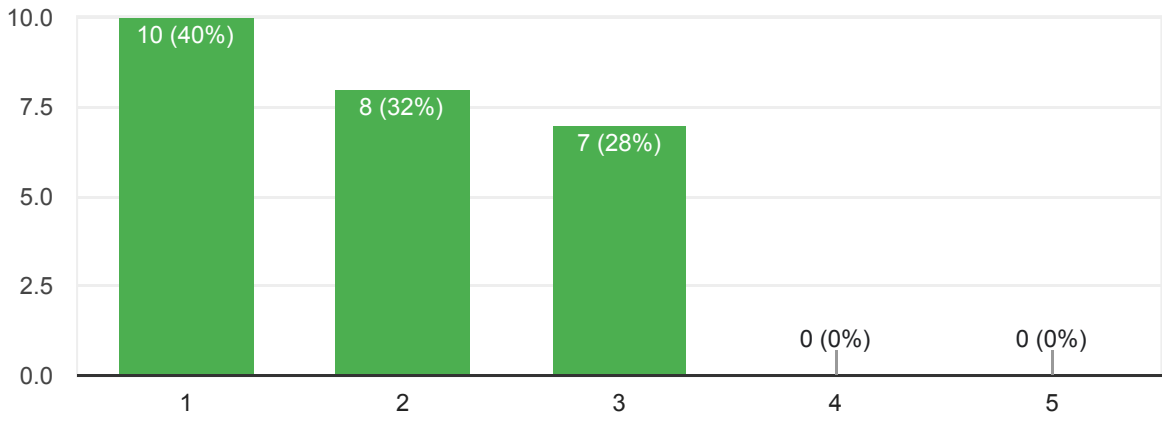
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Freshness

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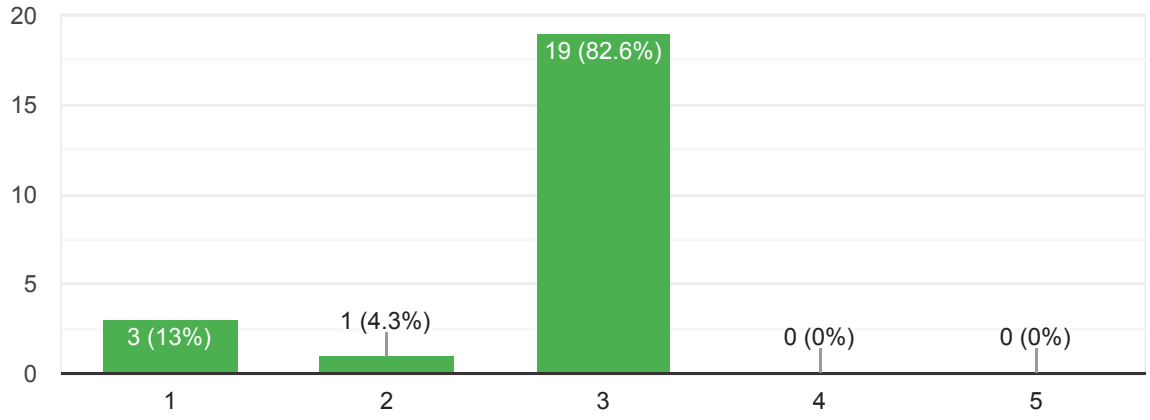
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses

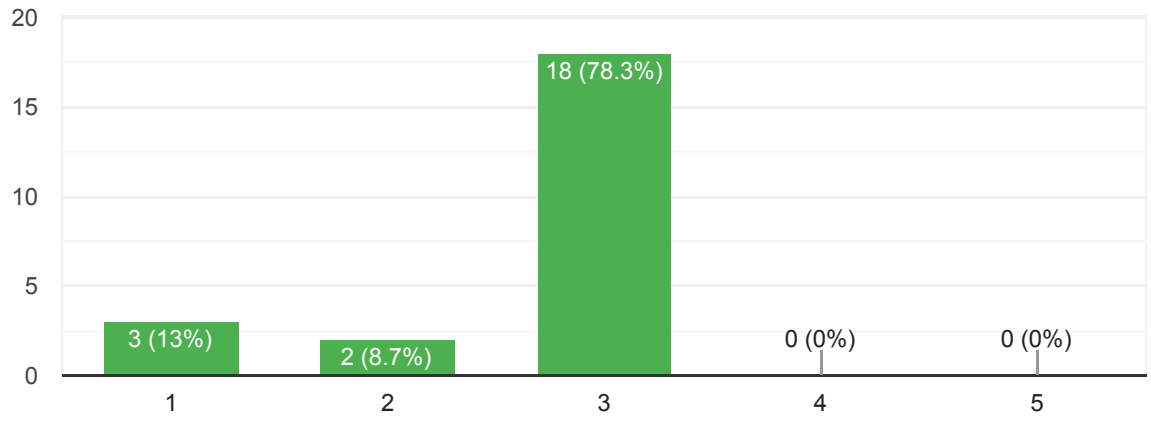


Performance Efficiency

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Refactoring 3: Extract Method

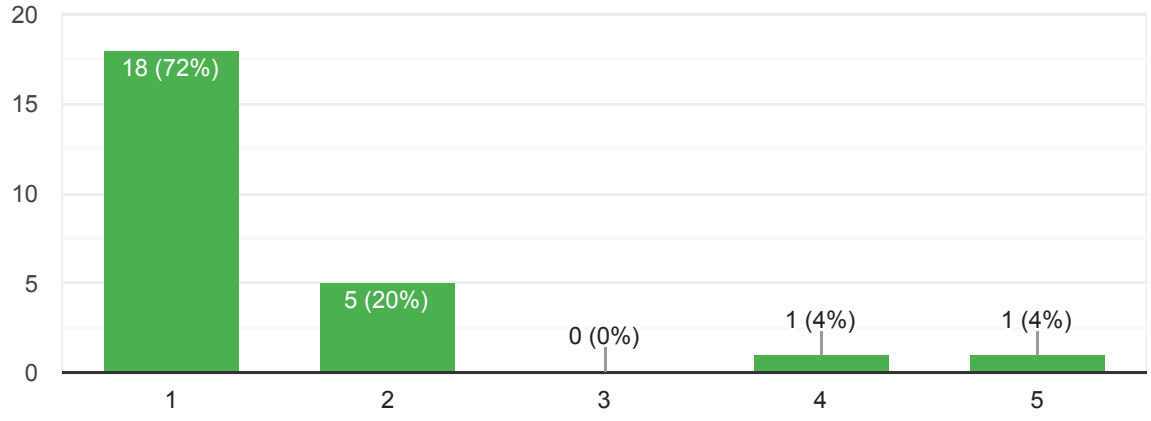
Task

Maintainability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

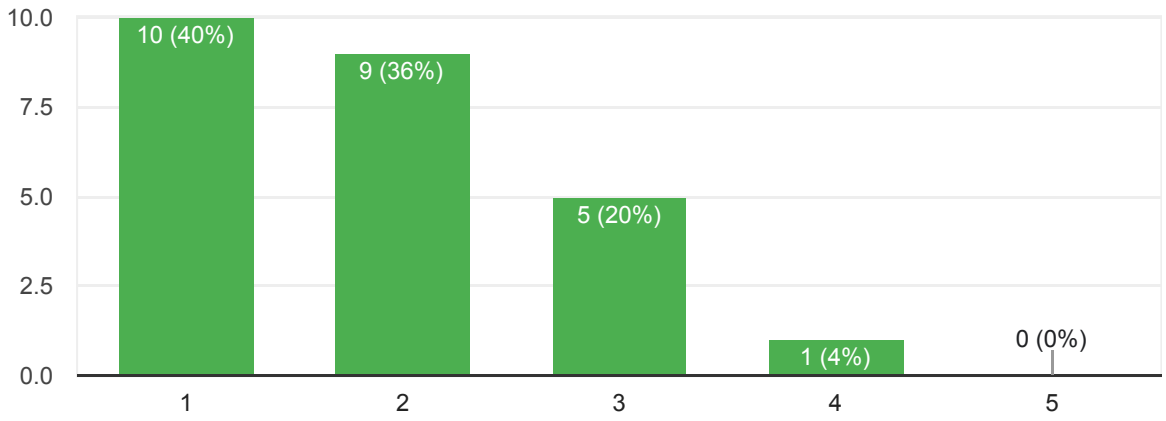


Reliability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

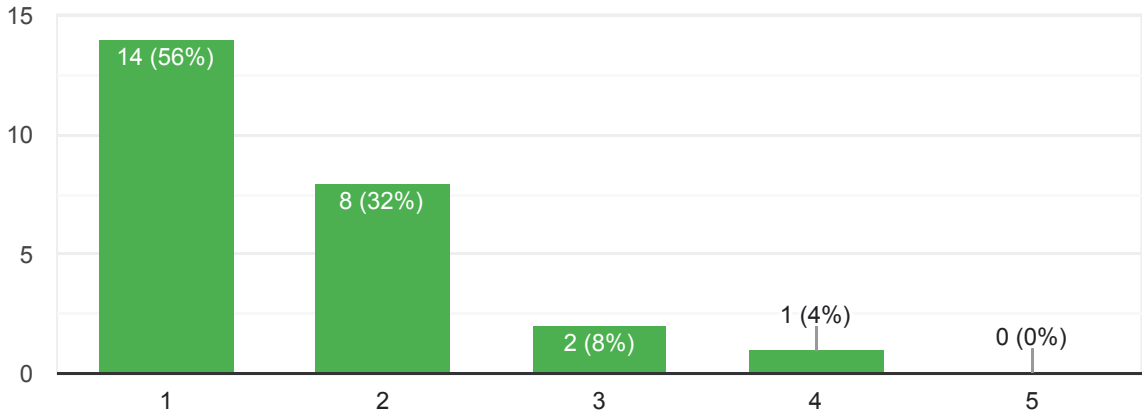


Architecture Quality

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Freshness

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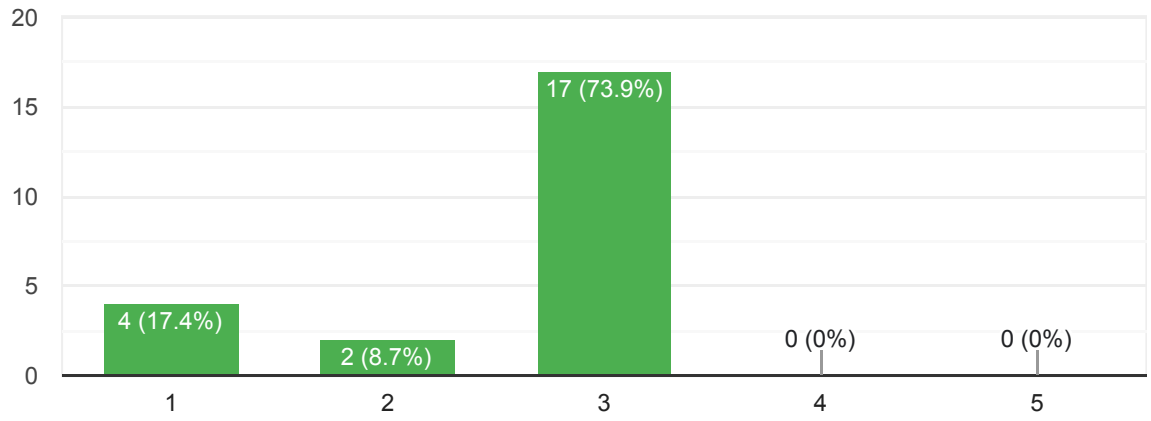
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses

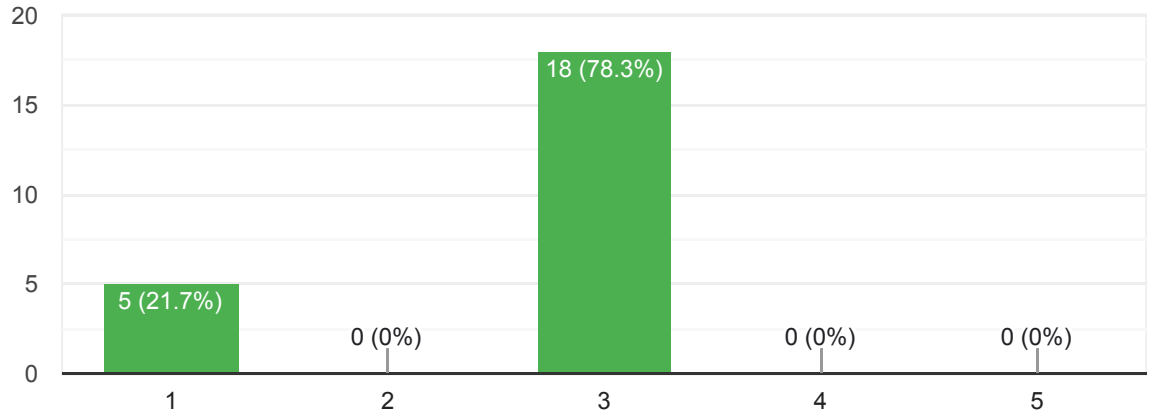


Performance Efficiency

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Refactoring 4: Introduce Indirection

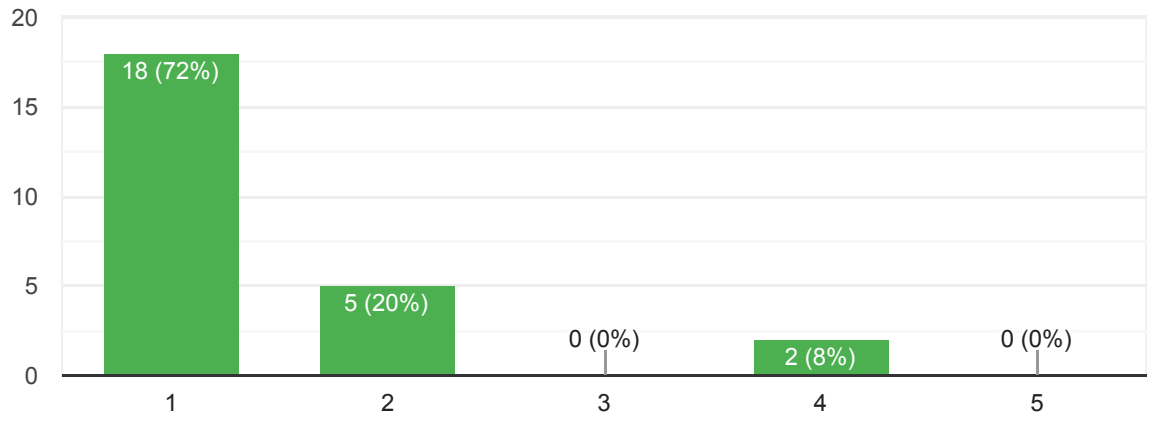
Task

Maintainability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Reliability

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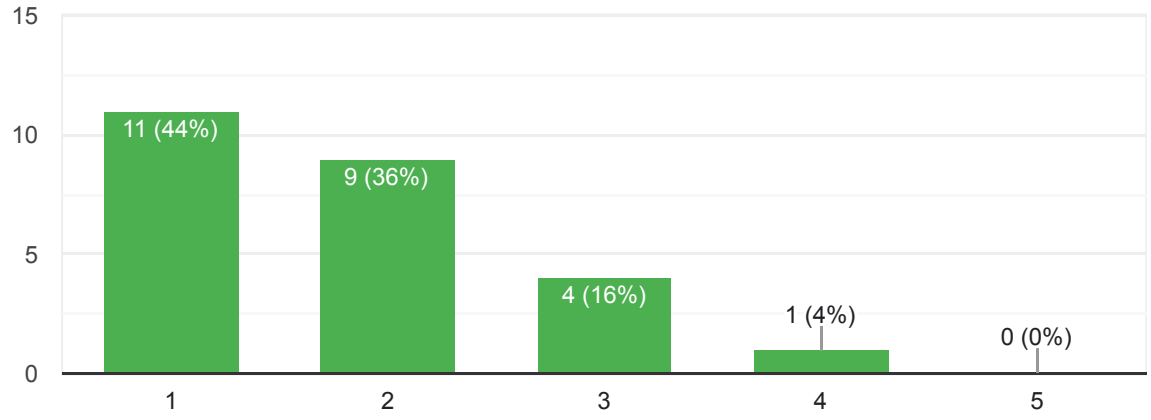
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Architecture Quality

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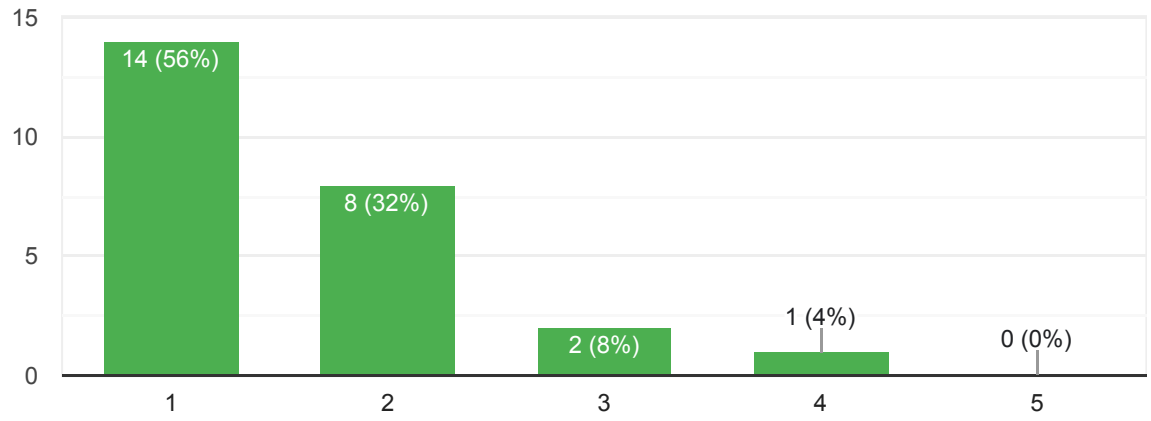
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Freshness

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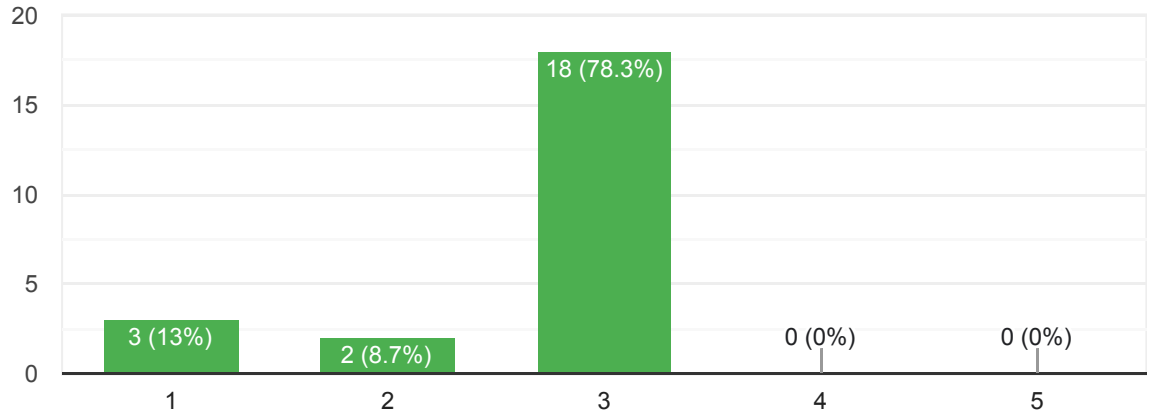
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Performance Efficiency

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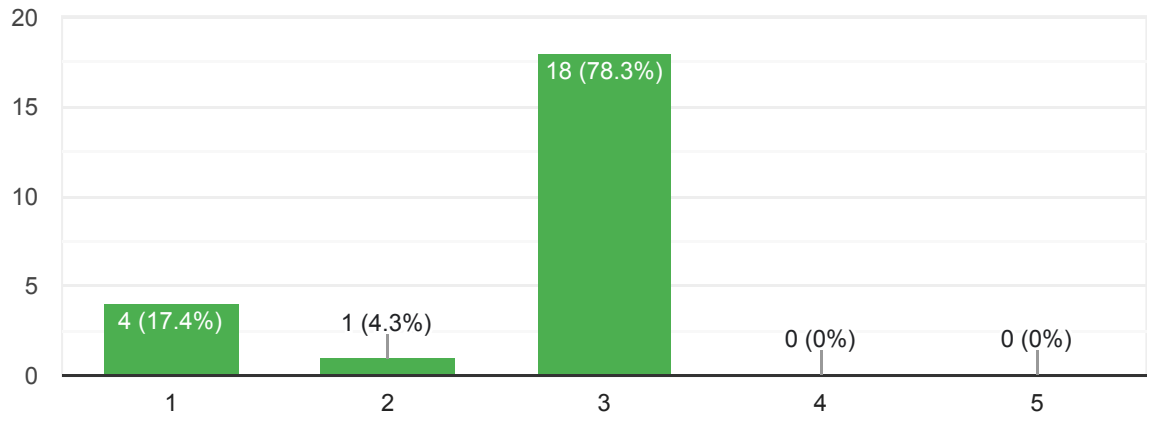
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Refactoring 5: Inline Method

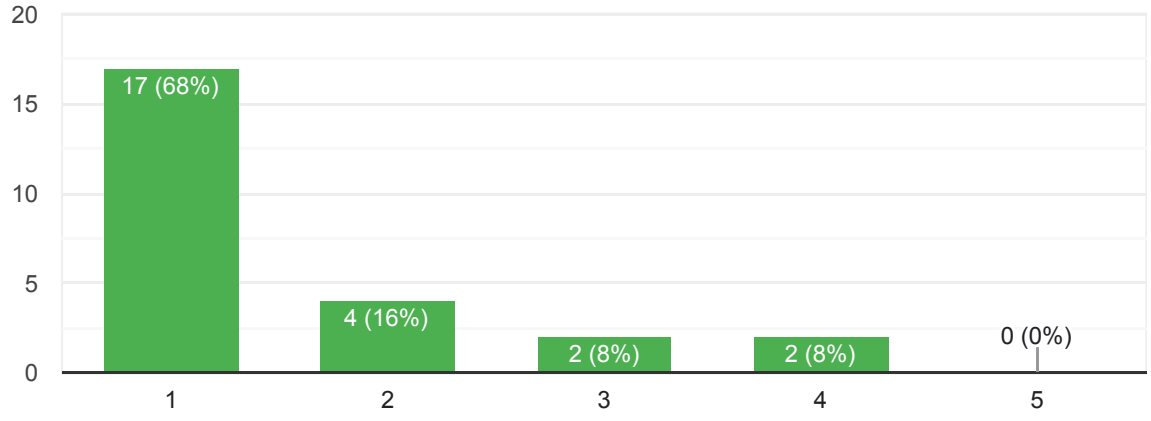
Task

Maintainability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

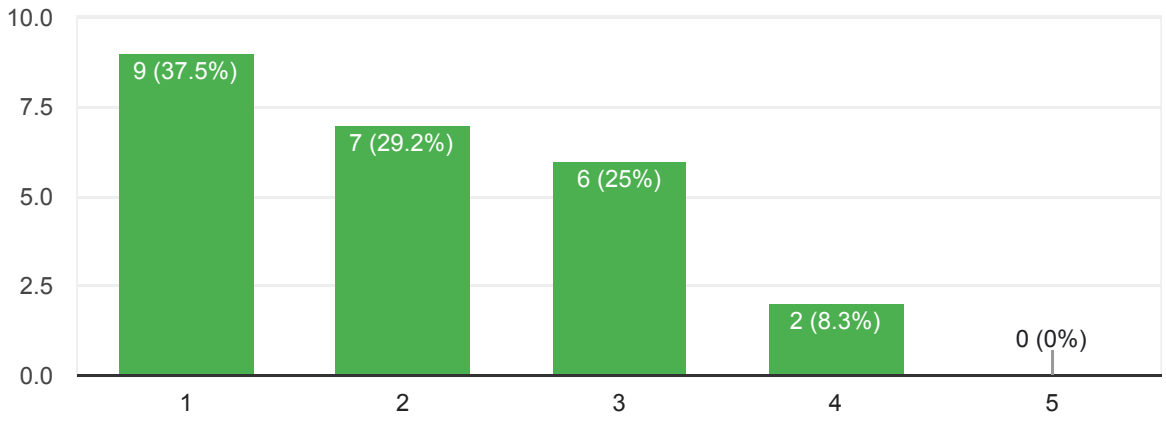


Reliability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

24 responses



Architecture Quality

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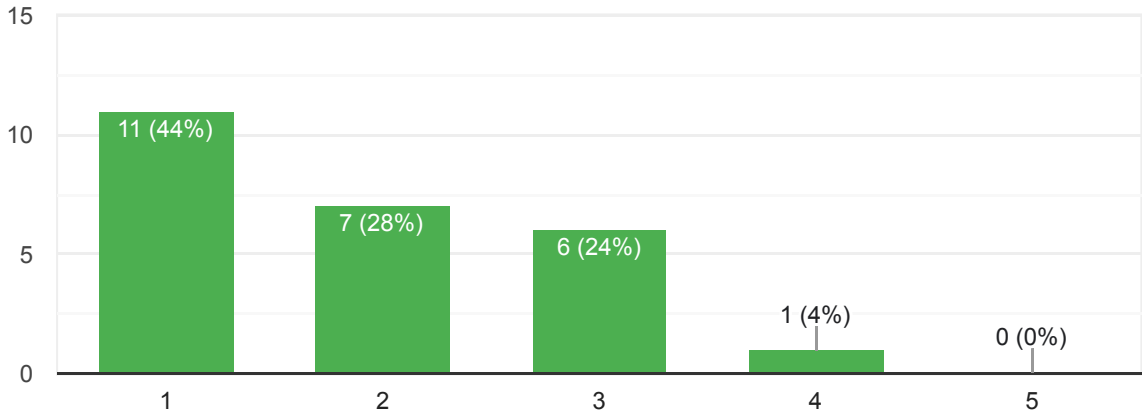
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

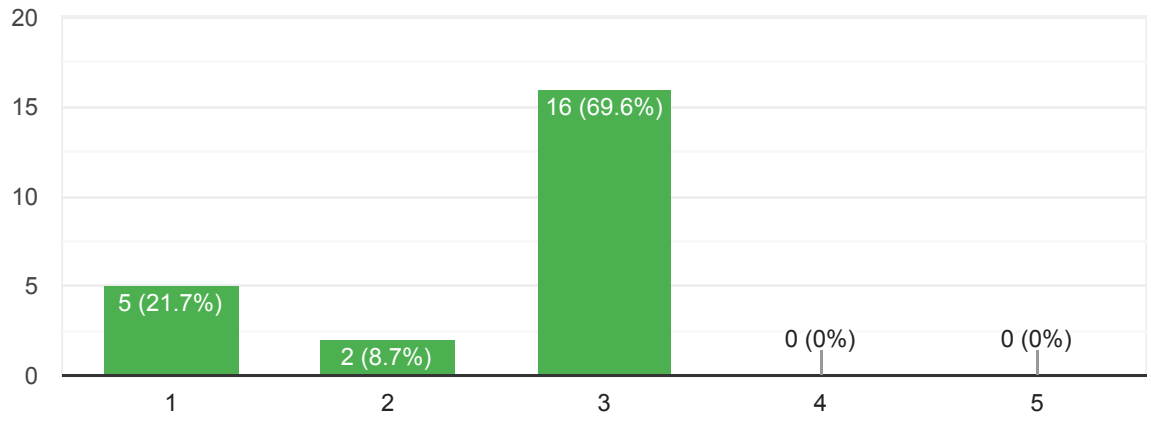


Freshness

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Performance Efficiency

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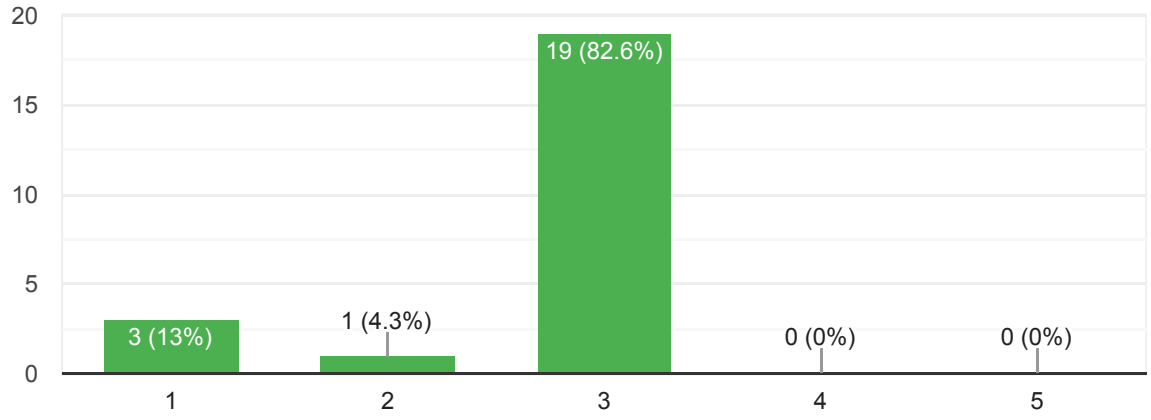
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Refactoring 6: Introduce Parameter Object

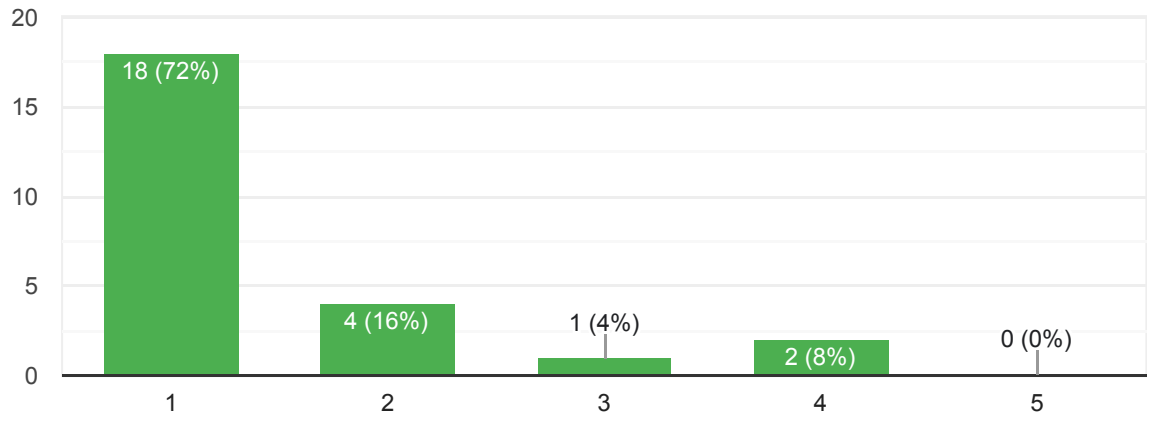
Task

Maintainability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

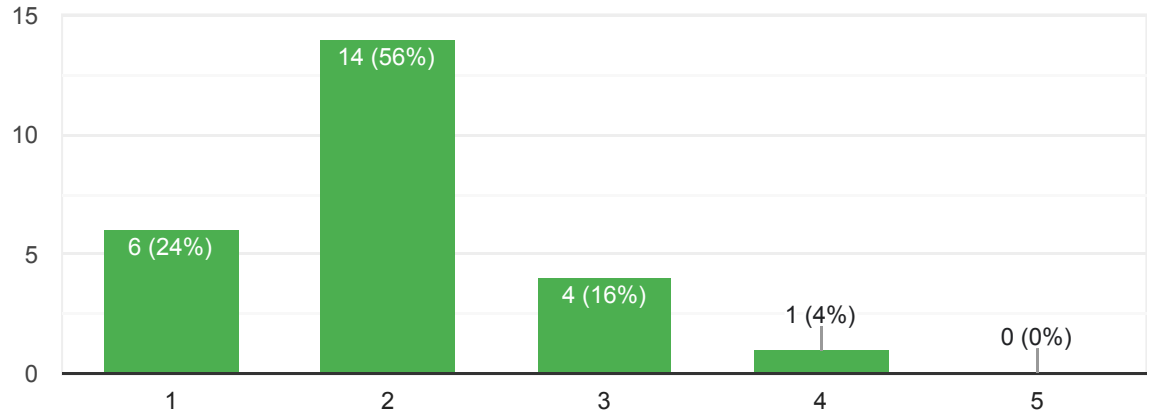


Reliability

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses

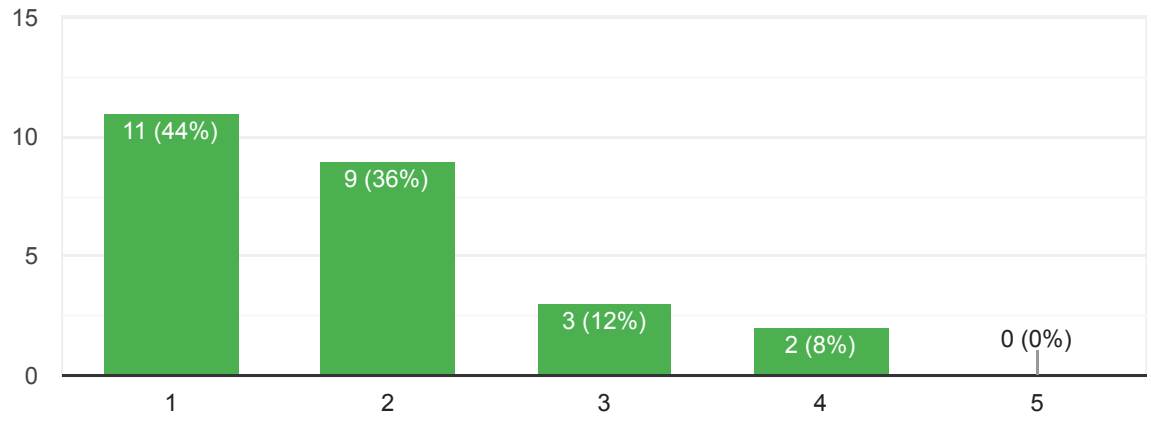


Architecture Quality

Copy

Would implementing this refactoring in **System A** require more or less effort than in **System B**?

25 responses



Freshness

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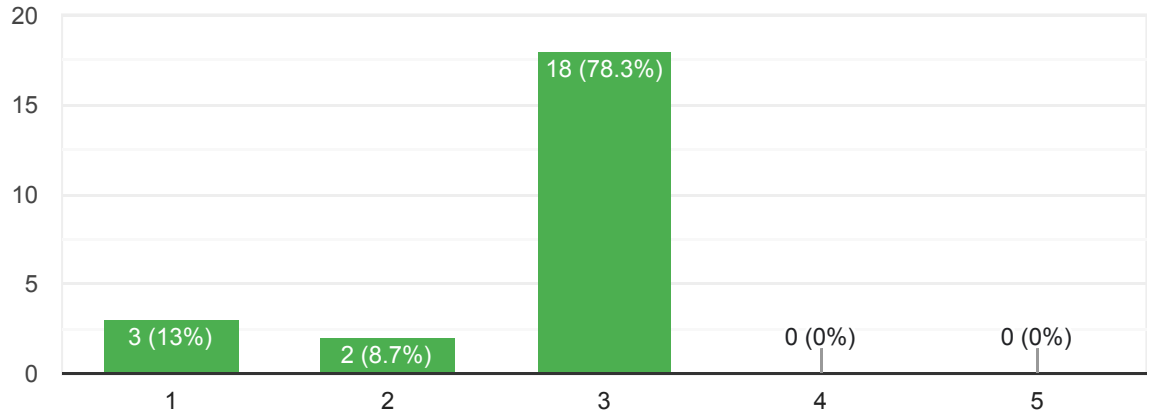
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Performance Efficiency

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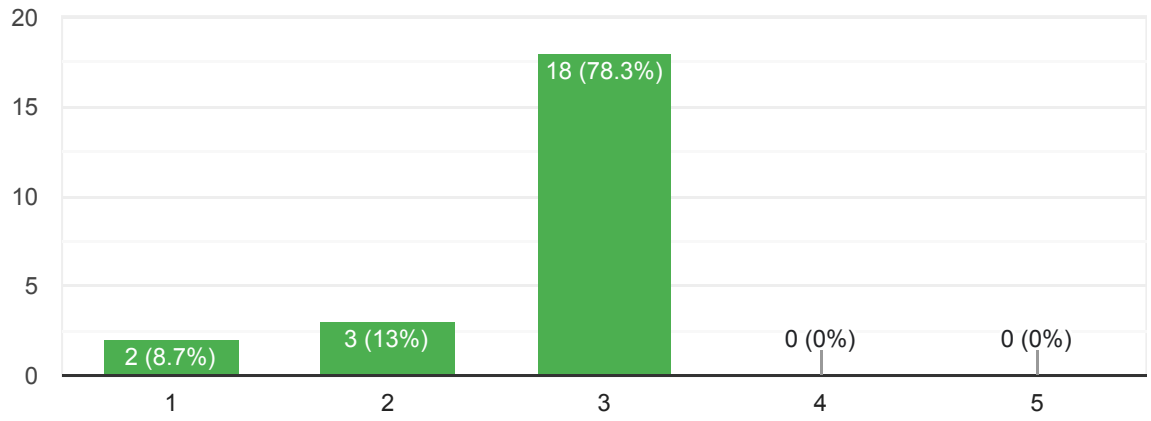
Would implementing this refactoring in **System A** require more or less effort than in **System B**?

23 responses



Thank you for your participation!

Do you have any additional comments?

6 responses

No

Bugra here.

The refactoring effort, in my opinion, directly depends on the required testing effort.
The testing effort depends on how much of the codebase has been impacted.
The "how much" is determined by the volume of the system and the dependency structure (how coupled the things are).

Please note that many of these refactoring can be done automated nowadays, meaning that there is almost no manual effort. However, the testing is still the actual effort.

Good luck!

As I indicated in my answers, I don't believe the runtime behavior of the system and this type of refactorings don't have any relation.

It wasn't really clear what was expected of the 5-point scale. I mostly based by answers on 1 or 2 characteristics per model; e.g. with fewer LOC I assume there are less possible candidates for the given refactoring type, so less effort.

I think since all the refactoring patterns require changing and retesting code, the characteristics presented have very similar effects on the time required for it. Therefore my answers are mostly the same across the various patterns.