

Code Smells

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Possible problems with a software

Bad
design

Bugs

Failures



A code smell is a surface indication that usually corresponds to a deeper problem in the system.
- Martin Fowler

Mostly simpler

- ▶ Found by simple code review/IDE
- ▶ Examples:
 - ▶ Duplicated code
 - ▶ Large class
 - ▶ Primitive obsession
 - ▶ Refused Bequest



How to fix them?

- ▶ Duplicated code: extract to a method in a safe and reasonable place & remove the duplication
- ▶ Large class: cut in peaces
- ▶ Primitive obsession: wrap to objects
- ▶ Refused bequest: Split the interface



Difficult

- ▶ Found by review with deeper domain knowledge
- ▶ Examples:
 - ▶ Feature envy
 - ▶ Shotgun surgery
 - ▶ Divergent change



How to fix them?

- ▶ Feature envy: parallel change
- ▶ Shotgun surgery: merge the many uses
- ▶ Divergent change: extract class



Tipps & Tricks

- ▶ Fix asap
- ▶ Use IDE
 - ▶ Extract
 - ▶ Safe delete
 - ▶ Inline
- ▶ Plugins

Conclusion

- ▶ Reduce bugs count
- ▶ Increase lifetime
- ▶ Better design
- ▶ Ease the development



QUESTIONS?



THANK YOU!

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References

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