Complexity starts in the Small

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An early student design
How it could be done

TestableItem

*children

parent

TestInfo
Symptom Empty classes
Simplification
Keep data as data

```
XmlParser
  saxParserFactory: SAXParserFactory
  saxParser: SAXParser
  xmlReader: XMLReader
  parseIt(url: String, handler: DefaultHandler): void

DefaultHandler

ZoneHandler

ZoneResult

ZoneListHandler

ZoneListResult
```
Symptoms of useless Complexity

- more classes in design model than in analysis
  - lack of abstraction
  - find commonality,
  - concentrate on (common) functionality, not fields or real-world concepts (without different functions)

- classes with CRUD functionality only
  - let data be data, do not put a class dress around it
  - classes should have a functionality reason to exist

- (deep) class hierarchies
  - often with almost empty base classes
  - or empty leaf classes

- dependencies on concrete types
Get rid of Stuff.....

• That's it.