



Better Software –
Simpler, Faster



Complexity starts in the Small

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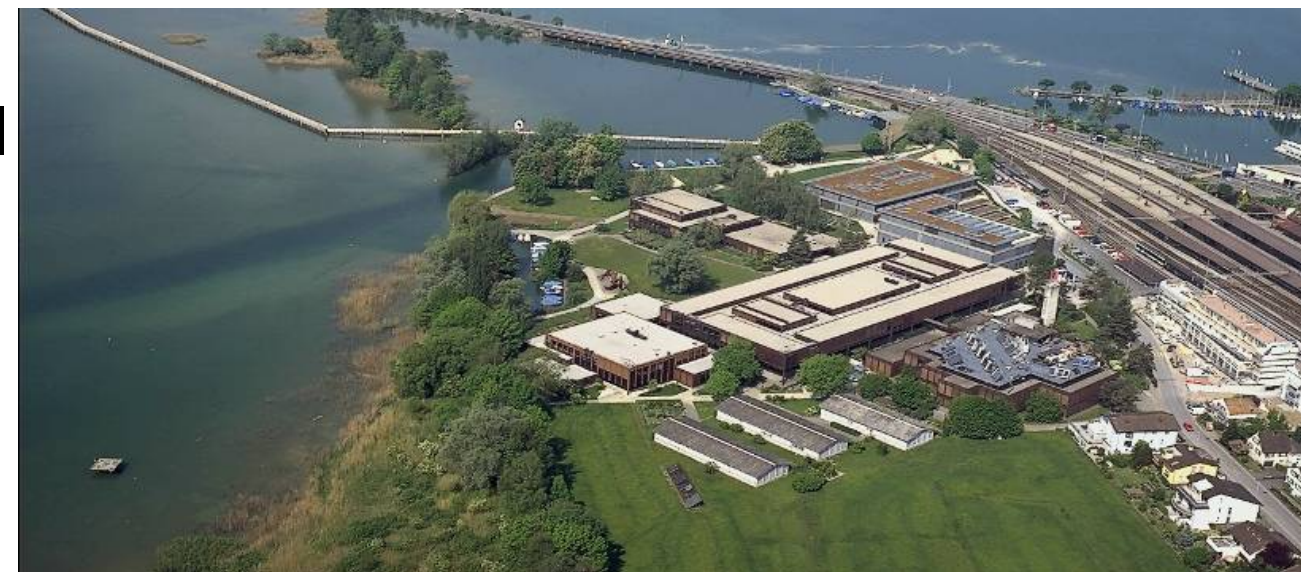
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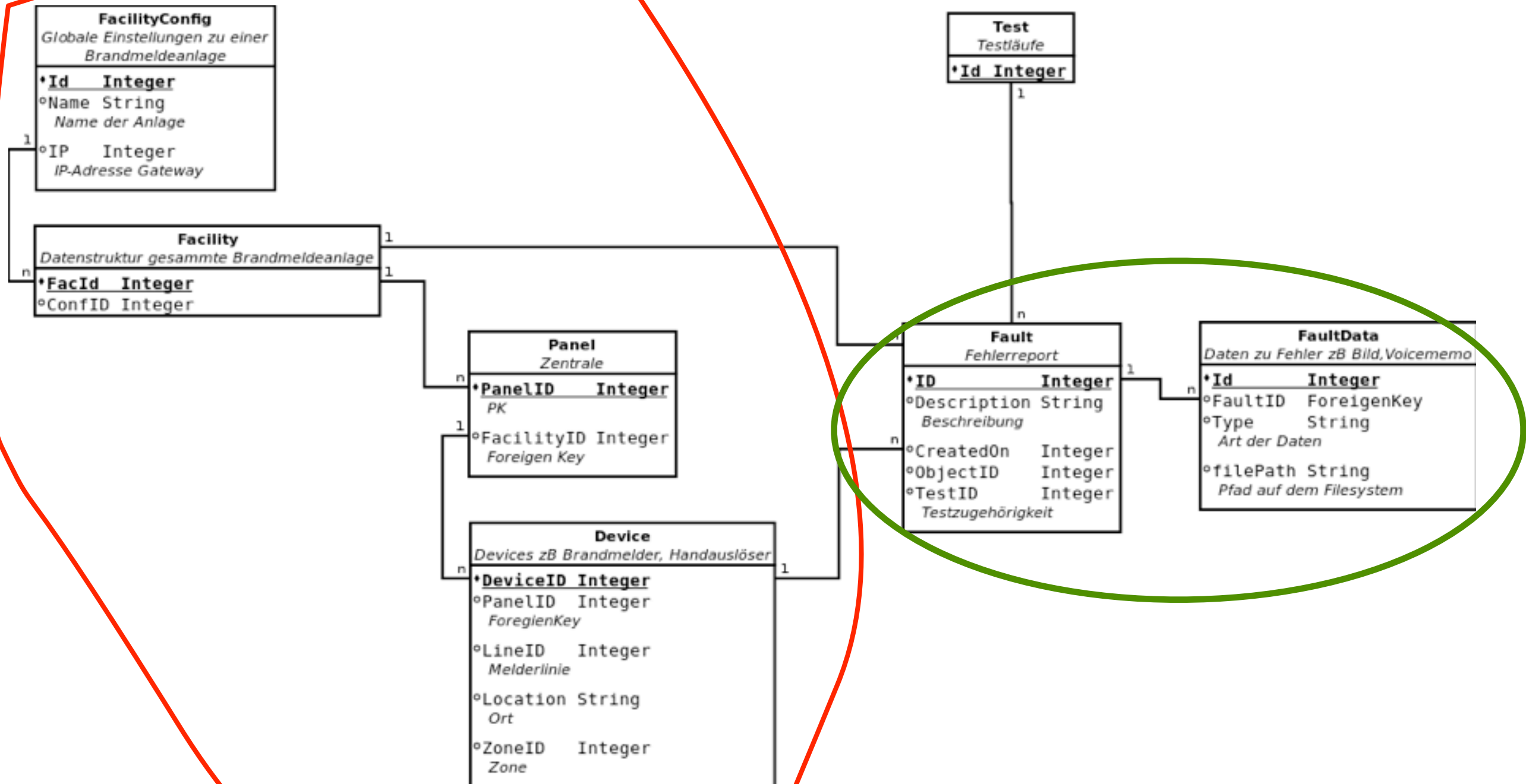
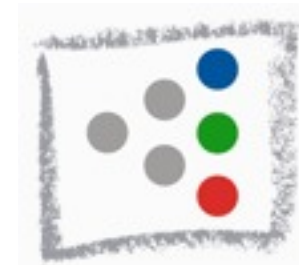
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<http://ifs.hsr.ch>

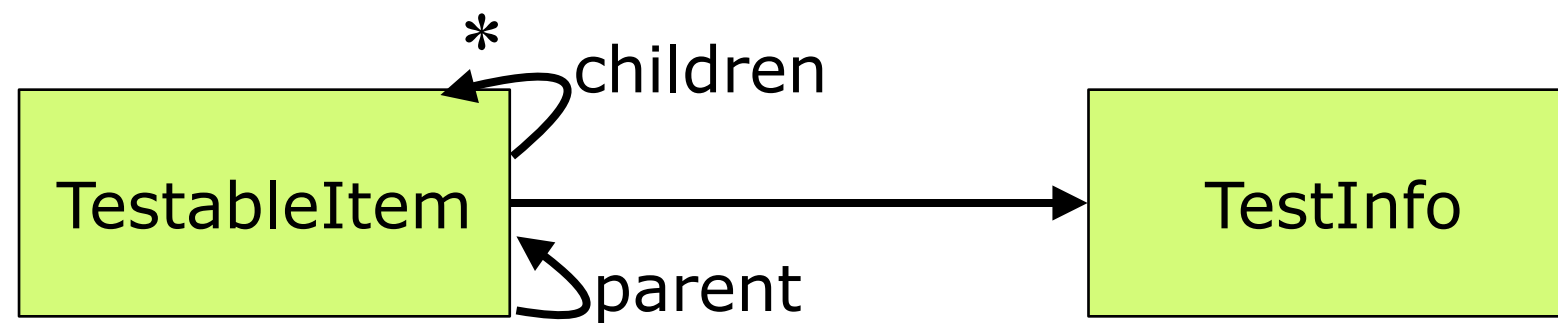
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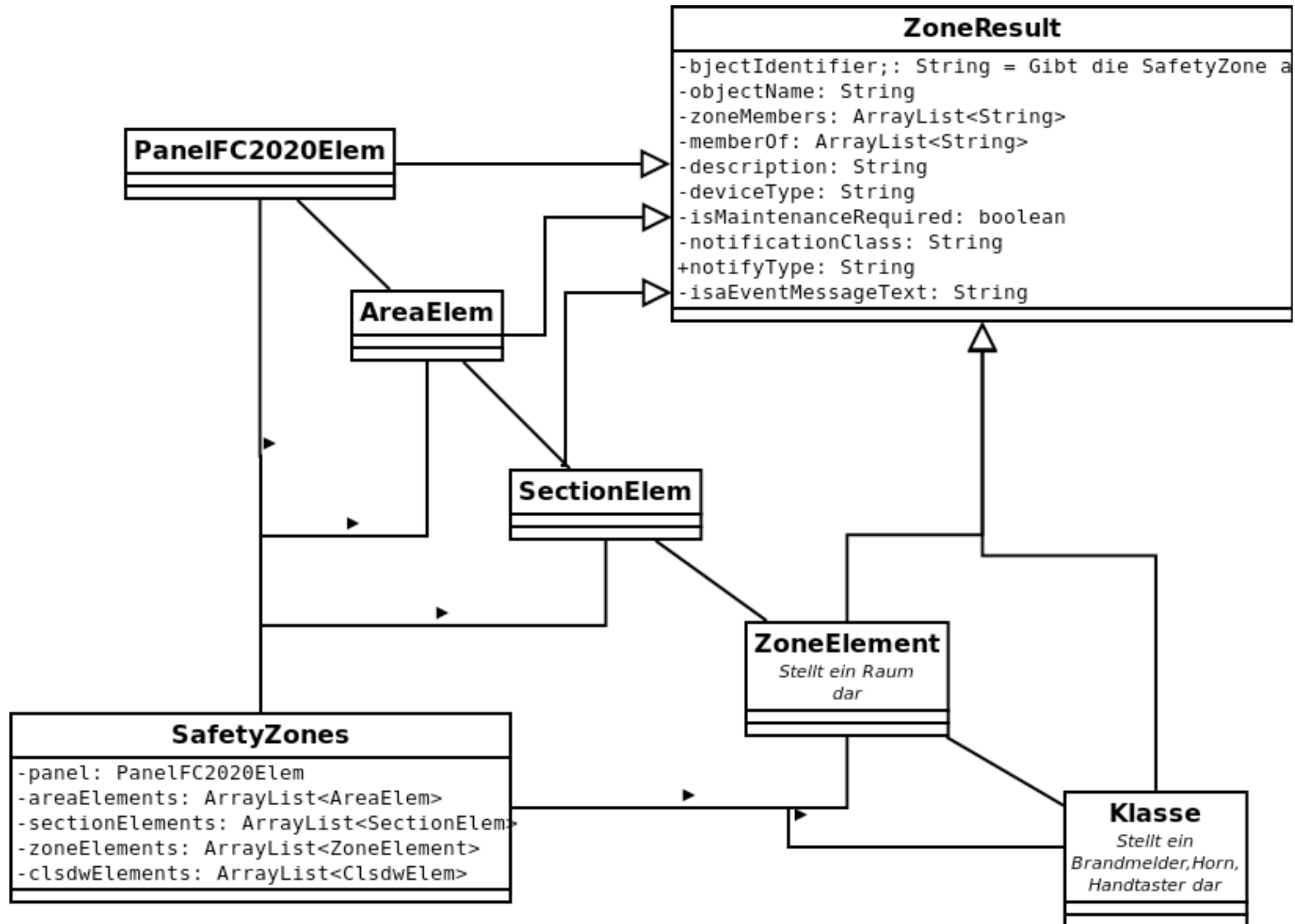
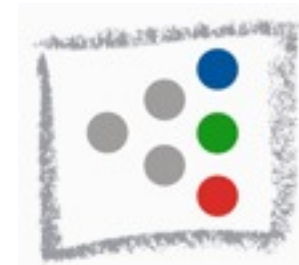
An early student design



How it could be done

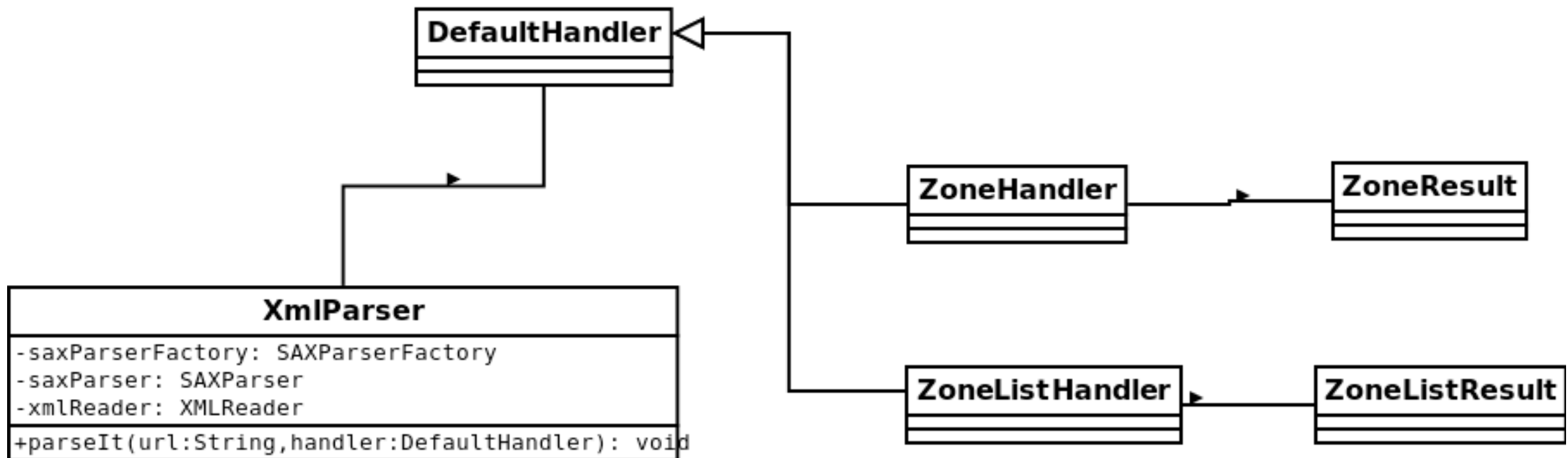


Symptom Empty classes



Simplification

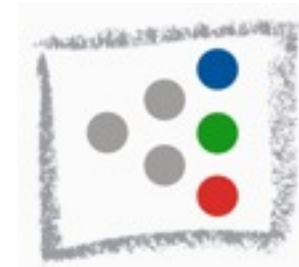
Keep data as data



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.....



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- **That's it.**