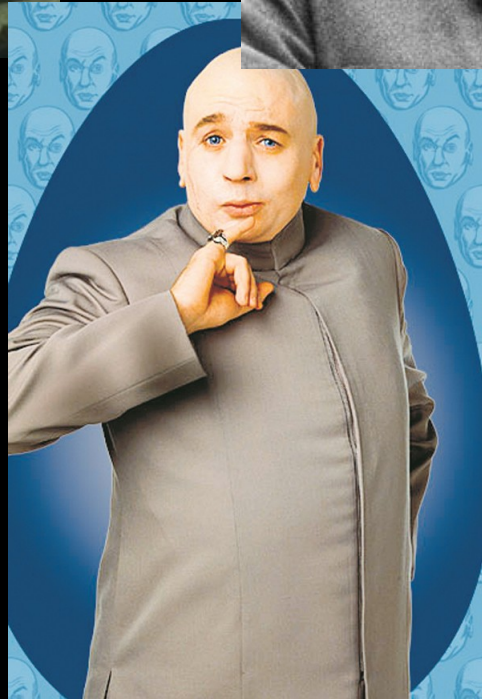
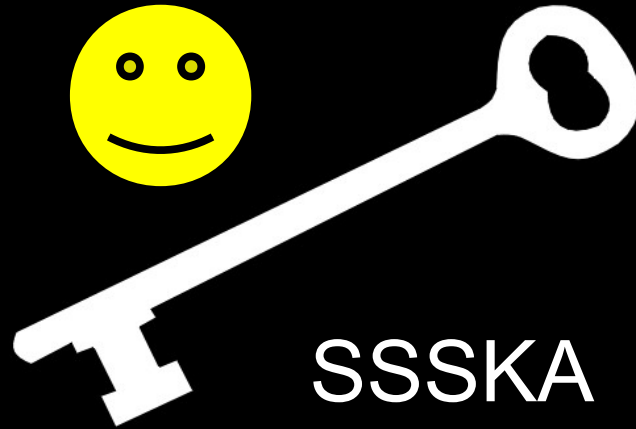


Evil





Surrogate Key Abuse



Society to Stop
Surrogate
Key Abuse

Key = a unique predicate
which identifies a tuple

Key
room 204
date 2009-04-17

Surrogate Key = an
arbitrary unique ID value
added to a tuple, unrelated
to tuple contents

Surrogate Key
ID 44906
room 204
date 2009-04-17

Surrogate Key Abuse =
misuse of surrogate keys
in a way which harms
your data

Primary Key =
meaningless
implementation detail





824

825

826

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832

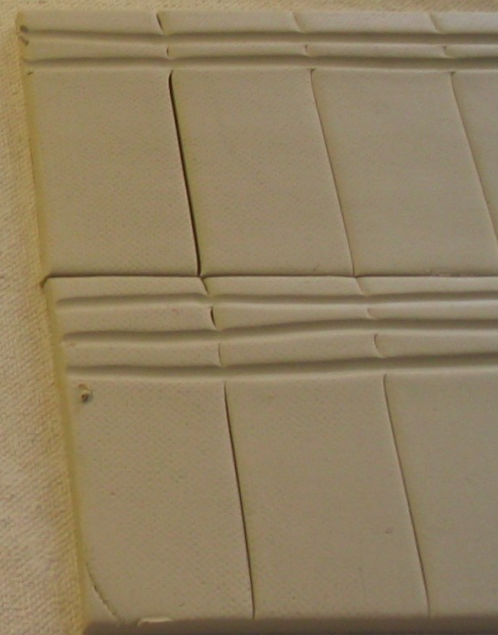
833

834

835

836

837





Bronze Test #4

125	23	Cornwall	100% Thick
175	35	Whiting	605
125	23	EPK	120% Thin
5	10	Size	514

2/2

Bronze Test #5

125	27	Cornwall	100% 2 DID
175	39	Whiting	630
125	23	EPK	1 DID
5	10	Groutley	100% 522

2/2

same MIXING problems

15 ~~150~~ 75
180
Glossy Bow Flower
GB #1 BUG
0.5 CORAL
~~300~~ ~~200~~ ~~100~~

632 80%
THICK DIP 100%
506
THIN D.D. 100%
552
+ 3% Zr + Single
621 DOUBLE

[illegible]

Bronze Test #4

125 23 Cornwall
 175 35 Whitby
 125 23 EPK
 5 10 SIZY
 2/2

Bronze Test #5
 125 23 Cornwall
 175 25 Whitby
 125 23 EPK
 5 10 GRESTLEY
 2/2 MIXIN'S PROBLEM

~~15 150 75~~
 150

Glossy Bow Flower
 GB #1 BUS
 0.5 CORAL
~~3.05 ZEPHYRUS~~

Forms of Abuse

- No real key
- Unnecessary surrogate keys
- Swapping keys

Forms of Abuse

- No real key
- Unnecessary surrogate keys
- Swapping keys
- ObjectIDs (and UUIDs)

Excuses

- "It's standard"
- "There isn't a good key"
- "My framework requires it."
- "Keys shouldn't change"

Excuses

- "It's standard"
wrong. SKs not in relational model
- "There isn't a good key"
no, you just don't know what it is
- "My framework requires it."
get a better framework
- "Keys shouldn't change"
what's CASCADE for then?

Excuses

"Performance"

Excuses

premature optimization

= doing things for

"performance" which you
haven't tested

Excuses

premature optimization

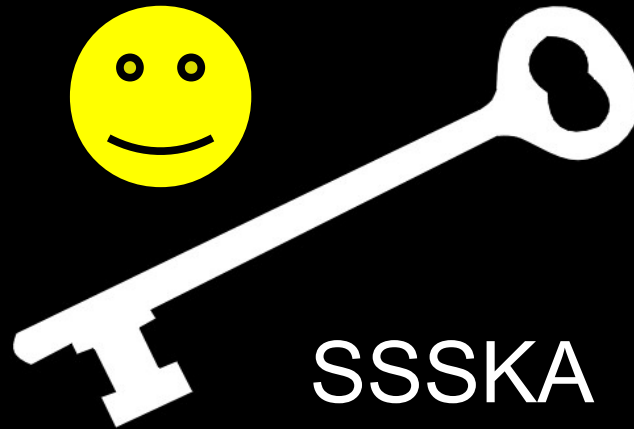
*generally harms actual
performance*

Avoid S.K.A.!

- Make sure all relations have real keys
- Use natural keys where you can
- Avoid premature optimization

If You Really Loved
Your Data, You
Wouldn't Abuse Keys.





Learn More about S.K.A.:
<http://it.toolbox.com/blogs/database-soup/primary-keyvil-part-i-7327>
(google "primary keyvil")