

DEBUGGING SUCKS

JOHANNES DIENST

DISCLAIMER



Highly opiniated talk

Do NOT take it personally!

WHATS THE PROBLEM

```
AstTO astTO = getAstDAO().getAstDetails("123456");  
  
// Next line causes NPE  
testBuyTO.setSalutation(astTO.getSalutation());
```

GOT IT?

WTF?! APPROACH

LOGFILES SHOULD HELP...



Source wifflegif.com

No way this can go wrong!

ELLIOT SAYS

Debugging's actually all about finding the bug. About understanding why the bug was there to begin with. About knowing that it's existence was no accident.

DEBUGGER HELPS?

```
AstTO astTO = getAstDAO().getAstDetails("123456");  
  
// astTO == null  
testBuyTO.setSalutation(astTO.getSalutation());
```

```
return jdbcTemplate.query(  
    "select * from MASTERDATA where \"NUMBER\" = ?",  
    new Object[] { theNumber },  
    new ResultSetExtractor<AstT0>()  
    {  
        // Omit extraction ;)  
    } );
```

OBVIOUSLY NOT!

PRAGMATIC APPROACH

Take a deep breath and THINK! about what could be causing the bug.


```
return jdbcTemplate.query(  
    "select * from MASTERDATA where \"NUMBER\" = ?",  
    new Object[] { theNumber },  
    new ResultSetExtractor<AstT0>()  
    {  
        // Omit extraction ;)  
    } );
```

HERE WE GO...

SOLUTION

```
AstTO astTO = getAstDAO().getAstDetails("123456");  
  
if (astTO == null)  
{  
    Log.get().warn("Missing AstNo in Database: '123456'");  
    astTO = getNewDummyAstTO();  
}
```

**MISSING DATABASE ENTRY CAUSED
THE BUG!**

A man with dark hair and light eyes, wearing a black t-shirt, is sitting on a red, ornate metal structure. He is looking off to the side with a thoughtful expression. The background shows a red metal wall and a window with a grid pattern. The text 'LESSONS LEARNED' is overlaid in large white letters, followed by a list of five items.

LESSONS LEARNED

1. Debugging still sucks
2. Necessary evil
3. Think!
4. Root cause analysis
5. Check your assumptions!



JohannesDienst



johannesdienst.net



jdienst@multamedio.de