

# FAIL COMPILATION VOLUME 1

Johann Böhler [github.com/bitionaire](https://github.com/bitionaire)

# DISCLAIMER

*“One man's crappy software is another  
man's full time job.”*

*Jessica Gaston*

#1

HARD CODING

# THEORY OF ABSOLUTIVITY

$\forall$  software developer  $\exists$  hard-coded file path

```
File output = new File("D:\\Bachelor\\IDOS\\output\\ev-gas\\");
File input = new File("D:\\Bachelor\\IDOS\\ev-gas\\");
```

*Source: Bachelor thesis, 2012*

# ONE TIME THING? SURE ...

```
writer.write("<!DOCTYPE html PUBLIC \"-//W3C//DTD XHTML 1.0 Transitional//EN\" \"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd\>");  
writer.write("<html xmlns=\"http://www.w3.org/1999/xhtml\">");  
writer.write("<head>");  
writer.write("<link type=\"text/css\" rel=\"stylesheet\" href=\"/javax.faces.resource/theme.css.xhtml?ln=primefaces-ngv\>");  
writer.write("<link type=\"text/css\" rel=\"stylesheet\" href=\"/javax.faces.resource/main.css.xhtml?ln=css\>");  
writer.write("<link type=\"text/css\" rel=\"stylesheet\" href=\"/javax.faces.resource/primefaces.css.xhtml?ln=primefaces&v=5.0\>");  
writer.write("<link type=\"text/css\" rel=\"stylesheet\" href=\"/javax.faces.resource/watermark/watermark.css.xhtml?ln=primefaces&v=5.0\>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/watermark/watermark.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/jquery/jquery.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/primefaces.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/validation/validation.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/validation/validation.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<script type=\"text/javascript\" src=\"/javax.faces.resource/toggleNavigation.js.xhtml?ln=js\></script>");  
writer.write("<style type=\"text/css\></style><script type=\"text/javascript\" src=\"/javax.faces.resource/jquery/jquery-plugins.js.xhtml?ln=primefaces&v=5.0\></script>");  
writer.write("<title>Awesome software</title></head>");  
writer.write("<link rel=\"shortcut icon\" type=\"image/png\" href=\"/resources/img/ico.png\></head>");  
writer.write("<body>");
```

*Source: Internal project, 2013*

# COVER YOUR TRACKS

```
/**  
 * @author <a href="mailto:...>Johann BÃ¶hler</a>  
 */
```

*Source: Bachelor thesis, 2012*

# #2

# OVERCONFIDENCE



# 1 TYPO FIX

- *Unit Tests?* Nah ...
- *QA deployment?* Waste of time



= 6 WASTED HOURS

# REFACTORING

Mission: Rewrite of 20.000 LOC

# WHAT CAN POSSIBLY GO WRONG?



- 1 release in 1 month
- LOC reduced to ~2.000
  - Should I even bother mentioning that there weren't any existing tests?
- 3 months of cleaning up
  - Fixing bugs

Re-adding use-cases

# TESTING

Many low test coverage percentage projects

- a. Testing is hard
- b. Testing business value is even harder

**#3**  
**LATER DUDE**

*“There's nothing more permanent than a temporary hack.”*

*Kyle Simpson*

```
// FIXME closer spec will reduce startup time  
// ".*/[^/]*servlet-api-[^/]*\\.jar$|.*jstl.*\\.jar$|.*taglibs.*\\.jar$"  
webapp.setAttribute(JETTY_INCLUDE, ".*\\.jar$");
```

*Source: Internal project, 2016*



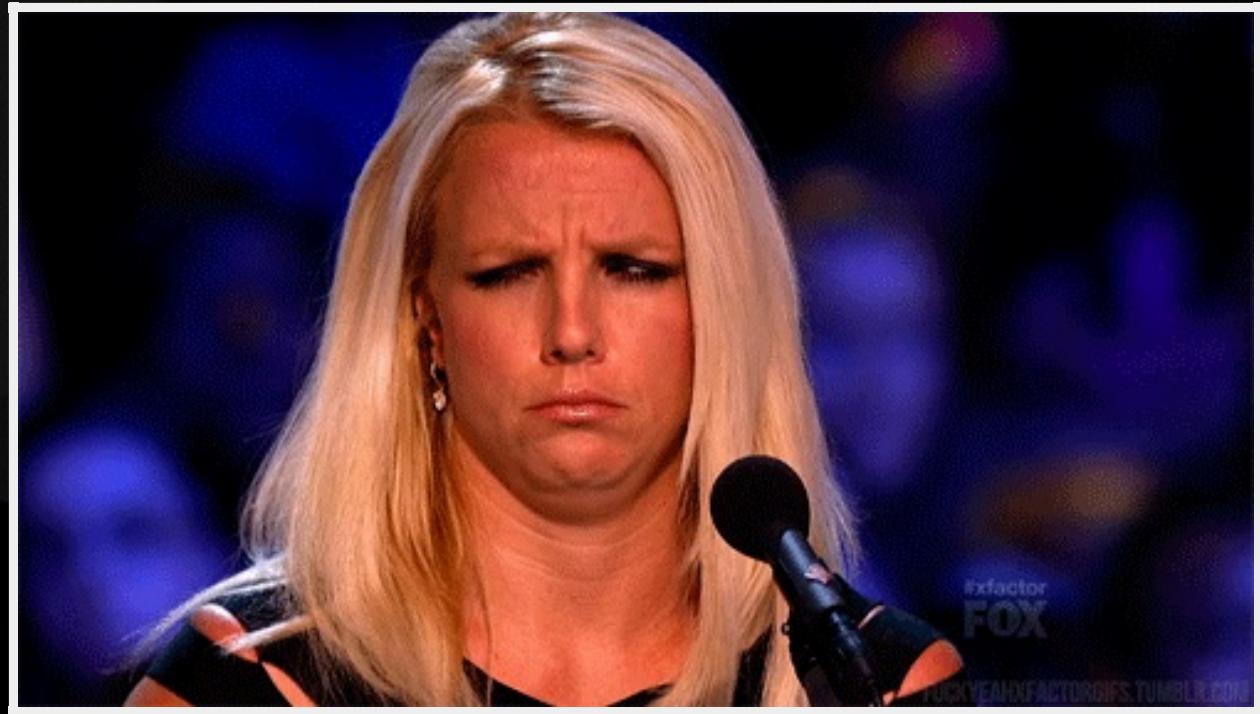
```
// TODO validate application properties (mandatory options)
```

*Source: Bachelor thesis, 2012*

#4

NAMING

# Physical unit?



*Source: Internal project, 2014*

```
char[] array = input.toCharArray();
// ...
boolean full = true;
for (int i = array.length - 2; i >= 0; i--) {
    if (array[i] < 'z') {
        full = false;
        array[i]++;
        break;
    } else {
        array[i] = 'a';
    }
}
```

*Source: Internal project, 2014*

## **ASK YOURSELF**

Is it easy to understand?  
Do I recognize the use-case?

## **SAY YES!**



# #5

## TO CODE OR NOT TO CODE

Never start what has little to no value



Never start what you don't expect to finish



Don't waste your time once you're way over the initial limit



# THE TRUTH

It's not black and white

# PRACTICE MAKES PERFECT



THX