

The Codeless Code

Fables and Kōans for the Software Developer

thecodelesscode.com github. com/karianna/codelesscode

README!

This is a storytelling presentation - whilst you may glean some snippets of enlightenment from reading these slides, the experience will be like the fish living in the Ocean...

It does not comprehend that there is a sky

Disclaimers

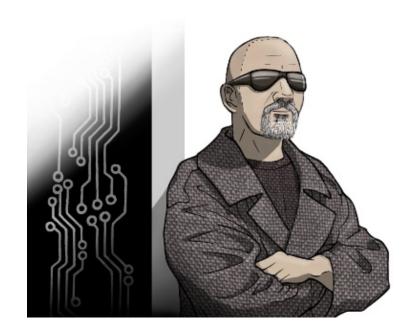
The stories in this collection are works of fiction, synthesized from ideas acquired over many years. Any resemblance to persons living or dead, or to corporations, situations, religions, philosophies, gross acts of injustice, or other works of fiction — past, present, or future imperfect — is purely coincidental.

No* actual monks were harmed in the making of this presentation.

* Well, maybe a few...

"Cultural appropriation" is a topic that seems to come up a lot these days when discussing art of all types. We humbly accept suggestions on how to run this presentation more sensitively - especially if you're a member of one of the groups that you feel is being misrepresented in a cringe-worthy way.

Qi - The Scribe



Creator & Illustrator Codelesscode.com

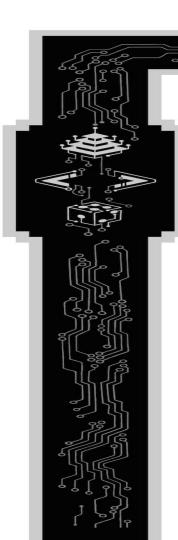
Diabolical Developer - Story Teller



Java Champion & CEO @ www.jclarity.

In a land far far away.....





Section 1 - Code

- Case I The small stuff
- Case III Encapsulation
- Case VI Empty
- Case XIII Evolution
- Case XIX By any other name
- Case XXXIV The naming of names

Case 1 - The small stuff

If you take care of the little things, the big things take care of themselves



Case I - The small stuff (in Java)

```
public class TheSmallStuff {
   private final static Logger LOGGER = LoggerFactory.getLogger(TheSmallStuff.class);
   private int addend1 = 0:
   private int addend2 = 0;
   public static void main(String[] args) {
        TheSmallStuff me = new TheSmallStuff();
        me.generateSum();
   private void generateSum() {
        LOGGER.info("Sum of two addends is: " + addend1 + addend2 + "");
```

Case III - Encapsulation

Keep your innards to yourself



Case III - Encapsulation (in Java)

```
public class Monk {
    public Stomach stomach = new Stomach();
    private Mouth mouth = new Mouth();
    public Mouth getMouth() { return mouth; }
}
```

Case III - Encapsulation (in Java)

```
package com.codelesscode.presentation.encapsulation;
/** Case III - Encapsulation */
public class Encapsulation {
    private Monk monk = new Monk();
    public static void main(String[] args) {
        Encapsulation me = new Encapsulation();
        me.feedingTime();
    private void feedingTime() {
        // Implementation goes here...
        monk.stomach.feed();
```

Case III - Result

ERROR c.c.p.encapsulation.Stomach

- Monk ends up with food mashed into robes.

Case VI - Empty

Empty collections are better than null



Case VI - Empty (in Java)

```
public class Empty {
    private final static Logger LOGGER = LoggerFactory.getLogger(Empty.class);
    /** Is initialised to null */
    List<?> dataCollection = null; // new ArrayList<>();
    public static void main(String[] args) {
        Empty me = new Empty();
        me.printCollectionSize();
    private void printCollectionSize() {
        LOGGER.info("Collection Size is:" + dataCollection.size());
```

Case XIII - Evolution

Stand on the shoulders of Giants but not follow others blindly

Case XIII - Evolution (In Java)

Case XIX - By any other name

Magic numbers have no semantic meaning



Case XIX - By any other name (in Java)

```
public class ByAnyOtherName {
    public static int NUMBER_OF_DAYS_I_WILL_PERFORM_PENANCE = 7;
}
```

"Verb your expletive nouns!"



```
// This is an action (verb), not a noun
public class Walking {
    private Human human;

    // This is a noun, not an action (verb)
    public void human() {
        human.walk();
    }
}
```

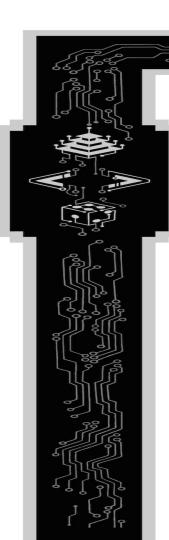
```
// A Noun!
public class Human {

    // A verb!
    public void walk() {

        // TODO Get that lazy Human walking
    }
}
```

```
public class TheNamingOfNames {
   // Do NOT do this
    int x;
    int x1;
   int x2;
    int x3;
    int x4;
    int x5;
    int x6;
                       public int performTaxCalculation() {
    int x7;
                           // Hmm was it x2 or x3 we needed to divide by?
    int x8;
                           return x1 / x2 * 100;
    int x9;
    int x10;
```

```
public void lambdaNaming() {
    Stream<String> nameStream = names.stream();
   // n is not a good name
   List<String> tNames = nameStream.filter(n -> n.startsWith("T")).
                                                 collect(Collectors.toList());
public void exceptionNaming() {
   trv {
        Files.delete(Paths.get("Nonsense Path"));
   // e is not a good name
   catch (IOException e) {
        e.printStackTrace();
```



Section II - Testing

- Case VII The enemy of Good
- Case XXIX Goldfish
- Case XLIV The backwards monk
- Case LVIII Enough to hang yourself by
- Case LXIII Shackles

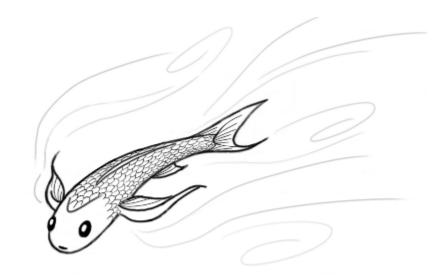
Case VII - The enemy of good

Perfection is the enemy of good



Case XXIX - Goldfish

You are a programmer, automate



Case XXIX - Goldfish (In Chef)

```
# Upgrade if current version is out of date
ark jpdm_dir do
    url jpdm_url
    path node[:jpdm][:install_location]
    owner node[:jpdm][:user]
    group node[:jpdm][:user]
    action :put
    strip_components 0
    subscribes :create, "remote_file[#{tmp_version_file}]"
    only_if {InstallJpdm.getLocalVersion(version_file) != InstallJpdm.getLatestVersion()}
    not_if {force_install}
    notifies :restart, "service[jpdm]"
    ignore_failure ignore_errors
end
```

Case XLIV - The backwards monk

To go forwards you must go backwards



Case XLIV - The backwards monk

```
@Test
public void returnFalseIfURIIsBad() {
    LicenseClient licenseClient = new LicenseClient("username", "", "http://<server>:<port>");
    assertFalse(licenseClient.requestFloatingLicense());
}
```

Case LVIII - Enough to hang yourself by

The whole system matters



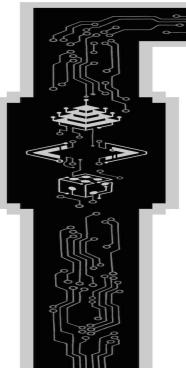
Case LXIII - Shackles

Let it go



Case LXIII - Shackles (In Java)

rm -rf *



Section III - Performance

- Case IX Infinities
- Case ?? Heroism

Case IX - Infinities

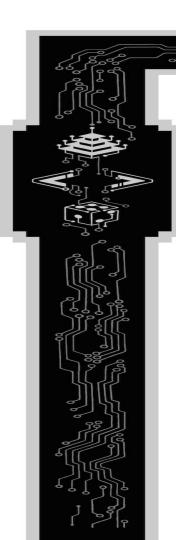
All things must come to an end



Case?? - Heroism

Heroes die young





Section IV - Non Code

- Case XVI Documentation
- Case XXVI The uncorrected monk
- Case XXXII Weeds
- Case LXIX Up To Date

Case XVI - Documentation

Code is not everything

Case XVI - Documentation

```
//113.325: [Full GC (System.gc()) 37M->32M(96M), 0.0943030 secs]
else if ((trace = FULL_GC.parse(line)) != null) {
   if (trace.gcCause(3, 0) == GCCause.JAVA_LANG_SYSTEM)
        forwardReference = new G1SystemGC(trace.getDateTimeStamp(), trace.getPauseTime());
   else
        forwardReference = new G1FullGC(trace.getDateTimeStamp(), trace.gcCause(3, 0), trace.getPauseTime());
}
```

Case LXIX - Up to date

The source is long...



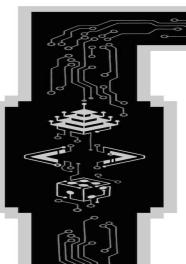
Case XXVI - The uncorrected monk

Lead by example and do not tolerate excuses

Case XXXII - Weeds

The path to the answer is as important as the answer...





Section V - Third Parties

- Case X Pride
- Case XXII Safety

Case XXII - Safety

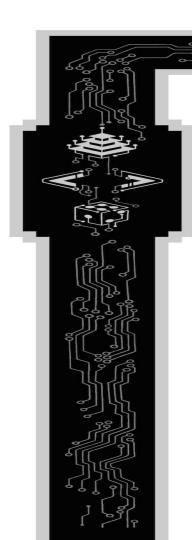
DefaultImpl extends Abstract implements Interface

Case X - Pride

NotInventedHere.java

Case X - Pride (at jClarity)

```
package com.jclarity.jpdm.communications.logging;¶
] /**¶
 \cdot \cdot \cdotThis\cdotis\cdotnot\cdotmeant\cdotto\cdotbe\cdota\cdotgeneric\cdotlogging\cdotinterface,\cdotsimply\cdotsomething\cdotthat\cdot¶
  \cdot * \cdot \mathsf{must} \cdot \mathsf{be} \cdot \mathsf{used} \cdot \mathsf{within} \cdot \mathsf{ipdm} \mathsf{-comms} \cdot \mathsf{and} \cdot \mathsf{ipdm} \mathsf{-stopwatch}.
  public interface NIHLogger {¶
   ····public·void·error(String·message, ·Throwable·cause);¶
   ....public.void.error(String.string);¶
   ....public.void.debug(String.message);¶
   ....public boolean is Debug Enabled(); ¶
   ····public·void·debug(String·string,·Throwable·t);¶
   ....public.void.trace(String.message);¶
   }¶
```



Enlightened?

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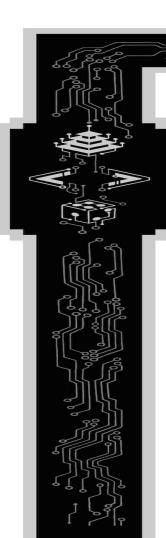
Case LXV - Two choices

The method that takes **Object** will cheerfully accept **LeftFoot**.



Case XXV - Compromise

Prototype

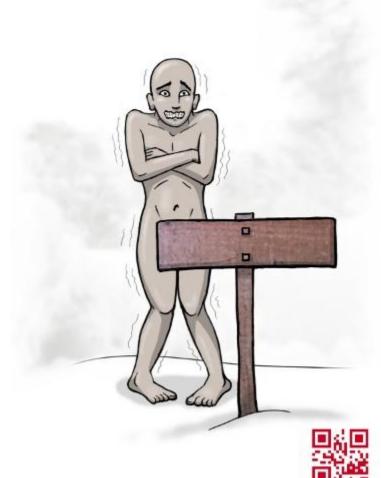


Section VI - Misc

- Case LXXII Too Eager
- Case LXXIII The white pearl
- Case LXIV Bathwater

Case LXXII - Too eager

Handle laziness with grace



Case LXXIII - The white pearl

Logging causes haystacks



Case LXXIV - Bathwater

Levels matter



Case 67 Case 73

Case 41 - Garbage

Case 39 - The river of tea

Case 38 - Language

