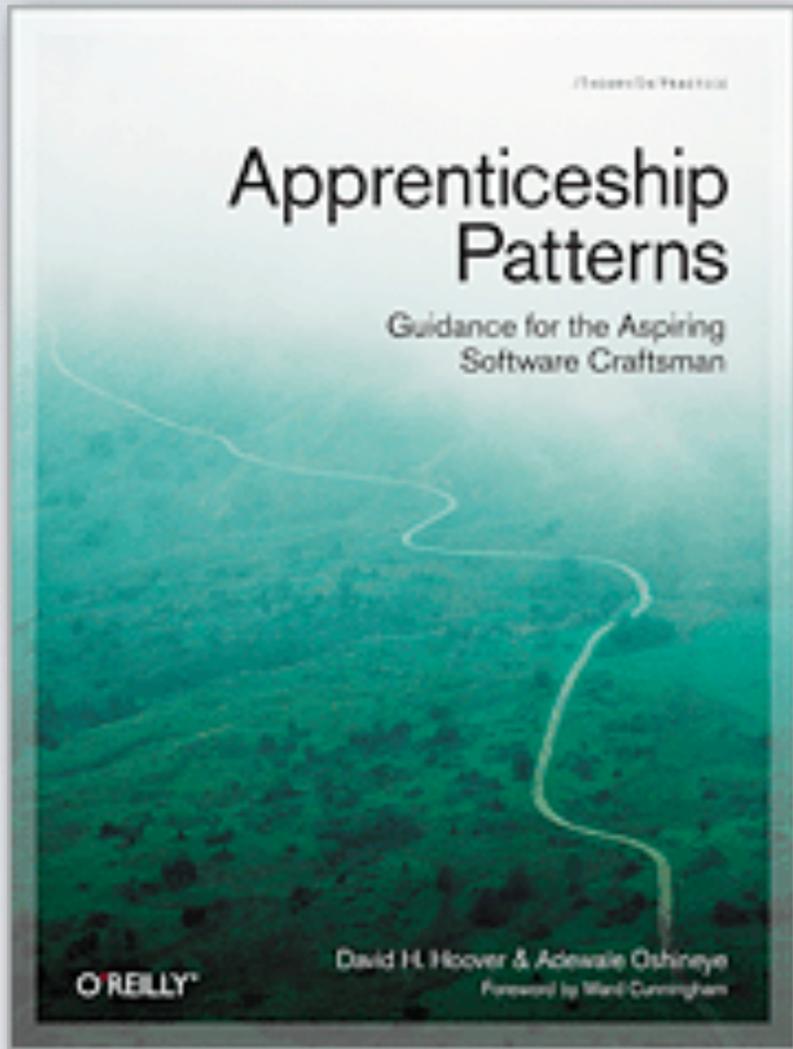


SOFTWARE CRAFTSMANSHIP  
VIA  
APPRENTICESHIP PATTERNS

Ade Oshineye



[www.oshineye.com/+](http://www.oshineye.com/+)

# 4.5 YEARS IN 1 MOMENT



It took us 4.5 years to write the book. This is the only time Dave, me and Ward (who wrote the foreword) have ever been in the same place

# HERE'S A THING THAT WORKS



An exercise.

2 volunteers.

1 from each side of the room.

1 watches and will attempt to pass along what they saw

1 will have 30 seconds of explanation

The goal is to share the lesson with everybody in your side of the room

Time limit: 15 minutes

# NO EASY ANSWERS

Does this work?

Why?

Who learned fastest?

Who was better at teaching?

NO EASY ANSWERS



**Diversion**  
**ENDS**

# WHAT IS A PATTERN?

Is it just a clever trick?

“A pattern is a proven solution to a problem in a context”

# WARNING: STRAWMAN

~~“A pattern is a proven solution to a problem in a context”~~

Apprenticeship Patterns is an attempt at a pattern language  
The patterns should take you from one context to another

# THE WHITE BELT

sort | + (6 ? 49)

You've learned a few things and they're stopping you from learning new things  
Create opportunities to wear the white belt.  
Learn to enjoy being a beginner  
Pick a problem and solve it in the weirdest language you know

# PATTERN?

Resolve forces in a context  
Transformation of context

# PATTERN?

Family of solutions

Each solution transforms your context

Explained by picking one family-member

# PATTERN?

Unpacking a pattern's essence over time  
Initial exposition and Singleton

# PATTERN?

## Familienähnlichkeit

Family-resemblance: concept usually traced back to Wittgenstein  
Overlapping features without a common subset

# SOFTWARE CRAFTSMANSHIP?

“a community of practice united and defined by *overlapping values*”

# THE QUESTION OF SKILL?

Acquisition  
Growth  
Transmission

RECORD WHAT YOU LEARN

“a nursery not a graveyard”

RECORD WHAT YOU LEARN

*make mistakes*

SHARE WHAT YOU LEARN

“an ethical dimension to knowledge”

SHARE WHAT YOU LEARN



# AGILE BY ANOTHER NAME?



One question that gets asked quite frequently: there's nothing new here, isn't this all just agile by another name?

# THE QUESTION OF LORE

Making tacit knowledge explicit

Creating a shared vocabulary

Telling the stories behind our skills

The reason we call this a craft is because we're too young to be engineers or even scientists. We're not ready yet. We have to build up a lore that will become knowledge.

# FAMILIAR TOOLS

“In time, all of your favourite tools will become junk”

Every project has lots of new things.  
Your predictions (about quality and cost) are meaningless if everything is new.  
Identify a set of tools that you will master. Use them everywhere.

# APPRENTICESHIP & TEACHERS



FARM

Are we apprentices or disciples?

So much of our knowledge is tacit that we often have to say: "trust me." It's very easy for that authority to be abused.

# NO MASTERS...YET



The last line of Apprenticeship Patterns upsets a lot of people. It suggests that it's our job to train people who will disagree with us and eventually be better than us. If your students aren't surpassing you then you've failed as a teacher.

THANKYOU!

