

# Modern Apprenticeship

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### Agile Conference 2008

#### Craftsmanship over crap!



## Software Craftsmanship Summit

- Libertyville, IL
- 2008



# SC Manifesto

As aspiring Software Craftsmen we are raising the bar of professional software development by practicing it and helping others learn the craft. Through this work we have come to value:

Manifesto for Software Graftsmanship

Raising the bar.

Not only working software, but also well-crafted software

Not only responding to change, but also steadily adding value

Not only individuals and interactions, but also a community of professionals

Not only customer collaboration, but also productive partnerships

That is, in pursuit of the items on the left we have found the items on the right to be indispensable.

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Not only working software, but well-crafted software



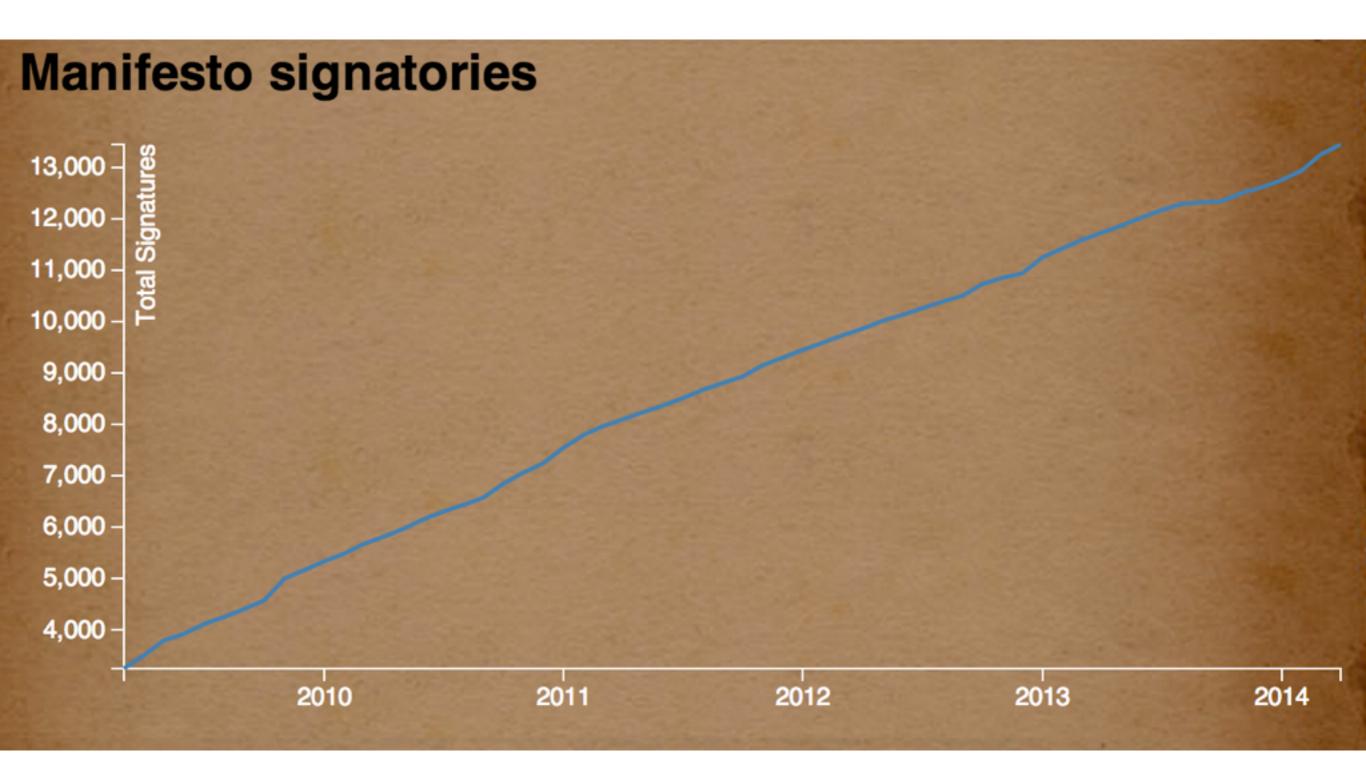
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#### Not only individuals and interactions, but also a community of professionals



Not only customer collaboration, but productive partnerships

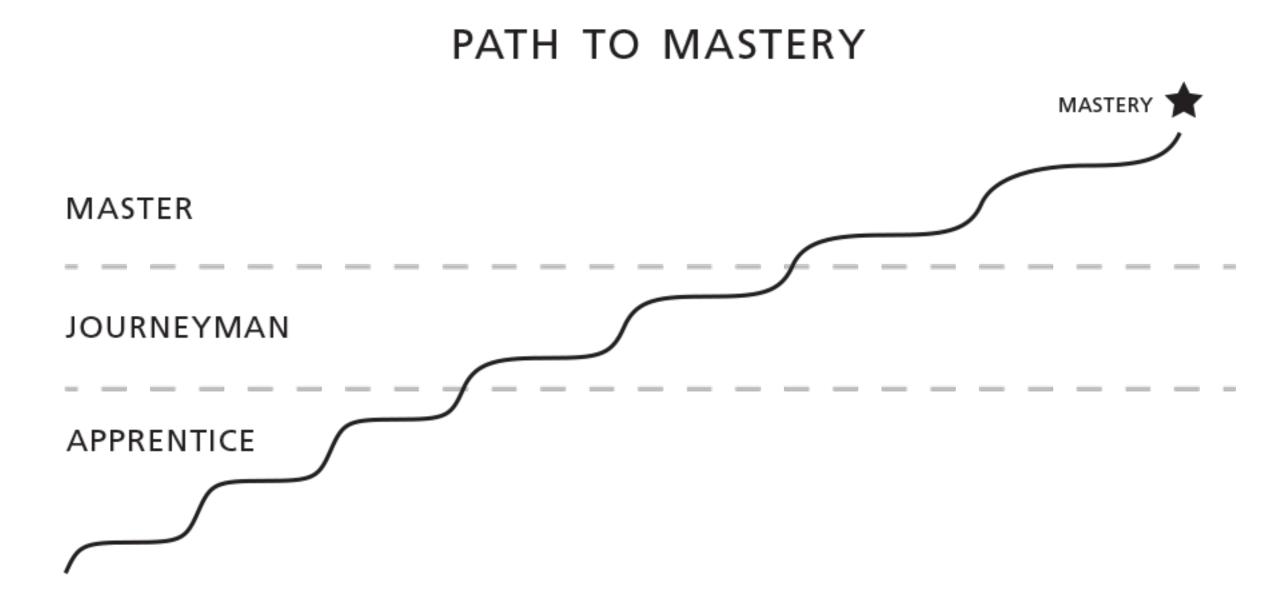


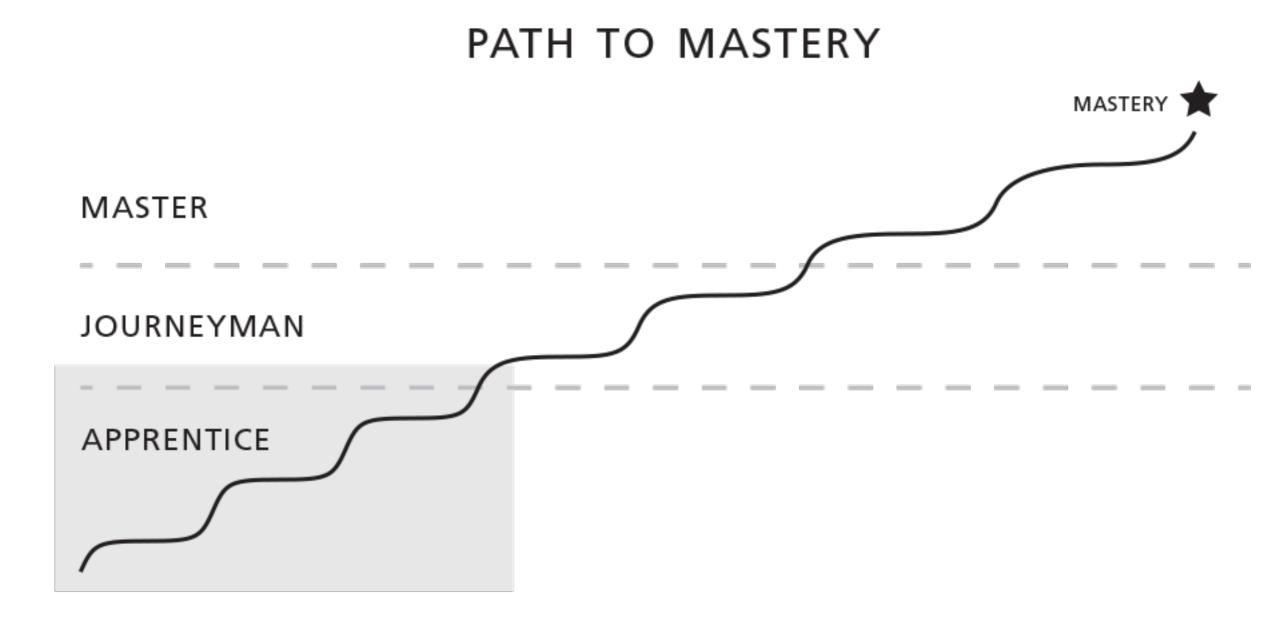


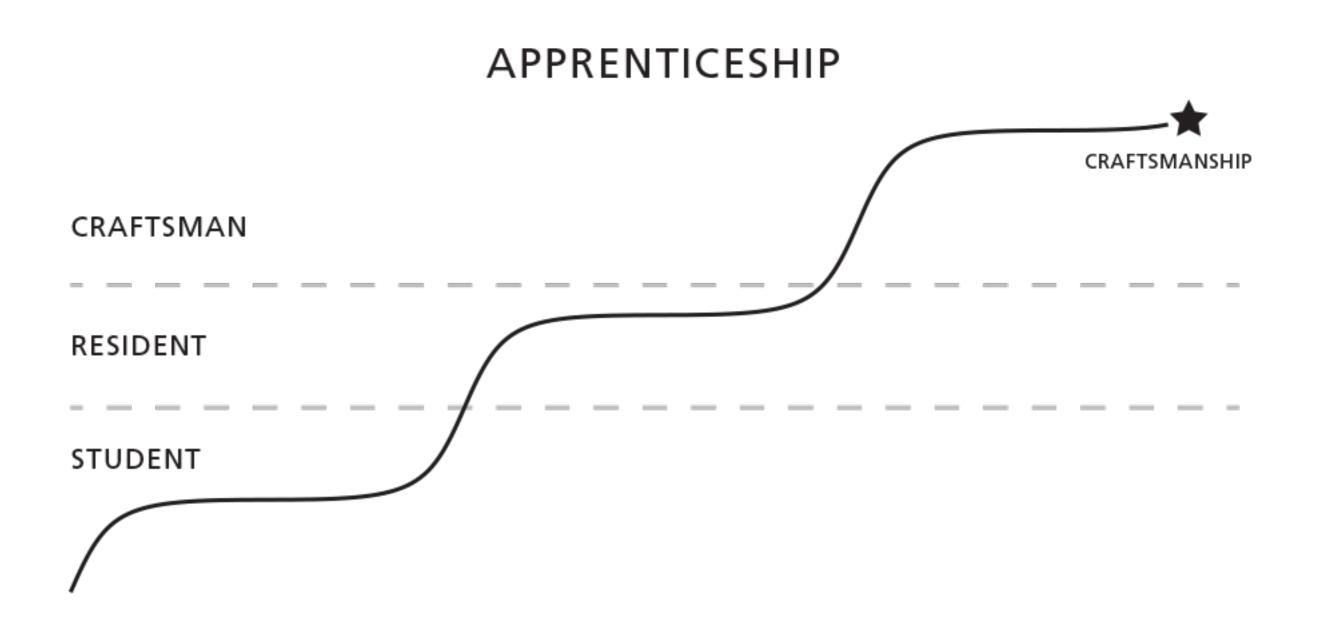
# Modern Apprenticeship in the wild

#### 8th Light Apprenticeship

8 Years, 82 resident apprentices Average 5 months 100% of new craftsmen since 2010









### Student

- Internship
- College
- Boot camp



### Student

- Immersive learning
- Theory and practical
- Teacher driven



#### Student

#### Goal is to find vocation

#### Vocation – Apprenticeship

Vocation is the deliberate decision to combine your passions and aptitude to a life-long pursuit of craft.

#### Vocation – Litmus

# "Code is an end in itself, not just a means."

-Brian Marick

#### **Code Schools**

"Become a professional in 12 weeks." "Buy a house with no money down."

### **Code Schools**



#### 7 Resident Apprentices



#### Resident

- Training focused
- Entry level employment
- Apprenticeship programs



#### Resident

- Deliberate practice
- Teaching / Mentoring
- Working on a team



#### Resident

 Goal is finding a mentor relationship and a curriculum.

#### Mentor

Humanizes the material and can use empathy to create motivation or inspiration.

## Mentor - Relationship

- Meet weekly
- Support
- Skill assessment

# Curriculum

- Toolsets
- Frameworks
- Paradigms
- Languages

#### Practice – Types

- Breakable toys constrained wild
- Concentration pomodoro, pairing
- Shared experience HTTP Server



# Craftsman

- Working on a project
- Delivering quality code
- Full time employment



# Craftsman

- Learning professionalism
- Code of ethics
- Building intuition



## Craftsman

Goal is professionalism

#### Suzuki Method

Professionals are not self-taught. Learning to be a professional is learning tacit knowledge from professionals.

#### Intuition

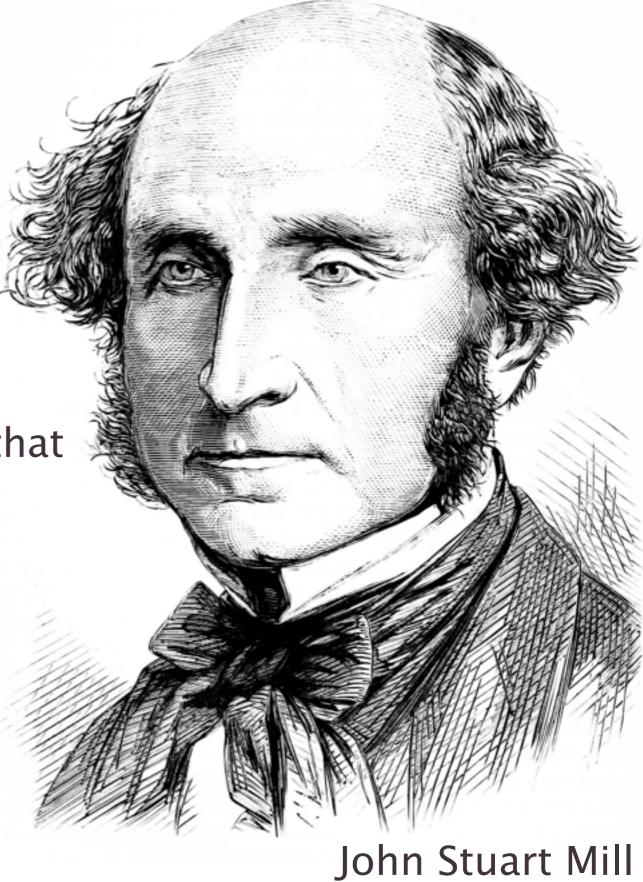
- System 1 vs. System 2 thinking
- Concentration pomodoro, pairing

# Software code of ethics

#### Purpose

"In the end [craftsmen] are not loyal to a particular boss or even to a company but to a set of values they believe in and find satisfying." —Goran Lindahl

#### Proper course of action is the one that maximizes utility and reduces suffering.



#### Strong practices, weakly held

Across every craft, perfection is defined externally. It isn't up to us to define; it's up to us to discover. We teach the apprentices the best utility tools and frameworks, for now. "Act only according to that maxim whereby you can, at the same time, will that it should become universal law"



#### Immanuel Kant



#### • We do X.

• We do not do Y.

 We continually master a variety of technologies and techniques.

• We do not let unfamiliarity dissuade us from using the best tools.

- We embrace differences of opinion and personality.
- We do not allow our current practice to impede improvements.

- We teach anyone with the willingness to learn.
- We do not hoard our knowledge or practices.

 We take responsibility for the correctness of our code by testing it thoroughly.

• We do not tolerate preventable defects.

#### Leader/Employer responsibility

To have a great and diverse team in software, you have to make that team.



# Thanks! questions?