Career Growth, Recognition and Continuous Learning

For Software Craftspeople

Steve Ropa
Where is the industry today?
You are a great programmer, now you are an architect
You are a great programmer so you must be a good manager.
Our New Metaphor

Software

Craftsmanship
Apprentice

Number one job: acquiring skills

Skills are acquired by doing

Nobody seems to want to be called an apprentice
The majority of our career would fit in this category.
Still acquiring skills, but mostly by practicing our craft.
For money.
The further we are in this stage, the more mentoring we do.

Journeyman
Master Craftsmen

The ultimate level of accomplishment

Masters spend a lot of time mentoring others
So what’s wrong with that?

• How is compensation managed within such broad bands

• People like to be recognized for their growth and accomplishment
So how can we measure growth
Five major facets

• Codecraft
• Professional Skills
• Tools
• Technologies
• Lifecycle Skills
Codecraft

• Flow Control
• Structure and Digital Data
• Standard Libraries
• Code construction
• Error Handling
• Unit Design
Professional Skills

• Invention Strategies
• Implementation Strategies
• Troubleshooting
• Communication
• Pace
• Ethics
Tools

- Consoles
- Version Control
- Debugger
- IDE
- Regex
Technologies

- System Administration
- RDBMS
- Data Comm
- Build Tools
- Collaboration Tools
Lifecycle Skills

- Estimating and Planning
- Process for Practitioners
- Software Lifecycle
- Requirements
- Testing

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.
Warning...we are talking about evaluation and judgement – tread carefully
Dreyfus Skills Acquisition

- Rules and Features (Novice)
- Situations and Principles (Competent)
- Salience and Maxims (Proficient)
- Intuition and Feel (Expert)
- Absorption and Reflex (Master)
Recognition within a matrix of skills
What about Specialization
So who evaluates someone

- Evaluate one’s self
- Peer/Team assessments
Make your own Wanderbuch
Example of Codecraft worksheets
Define the standards in advance
Maybe something like this?
Are you suggesting we need a governing body, or certifications?

☐ YES
☒ NO
☐ MAYBE
Pattern Language
Thank You