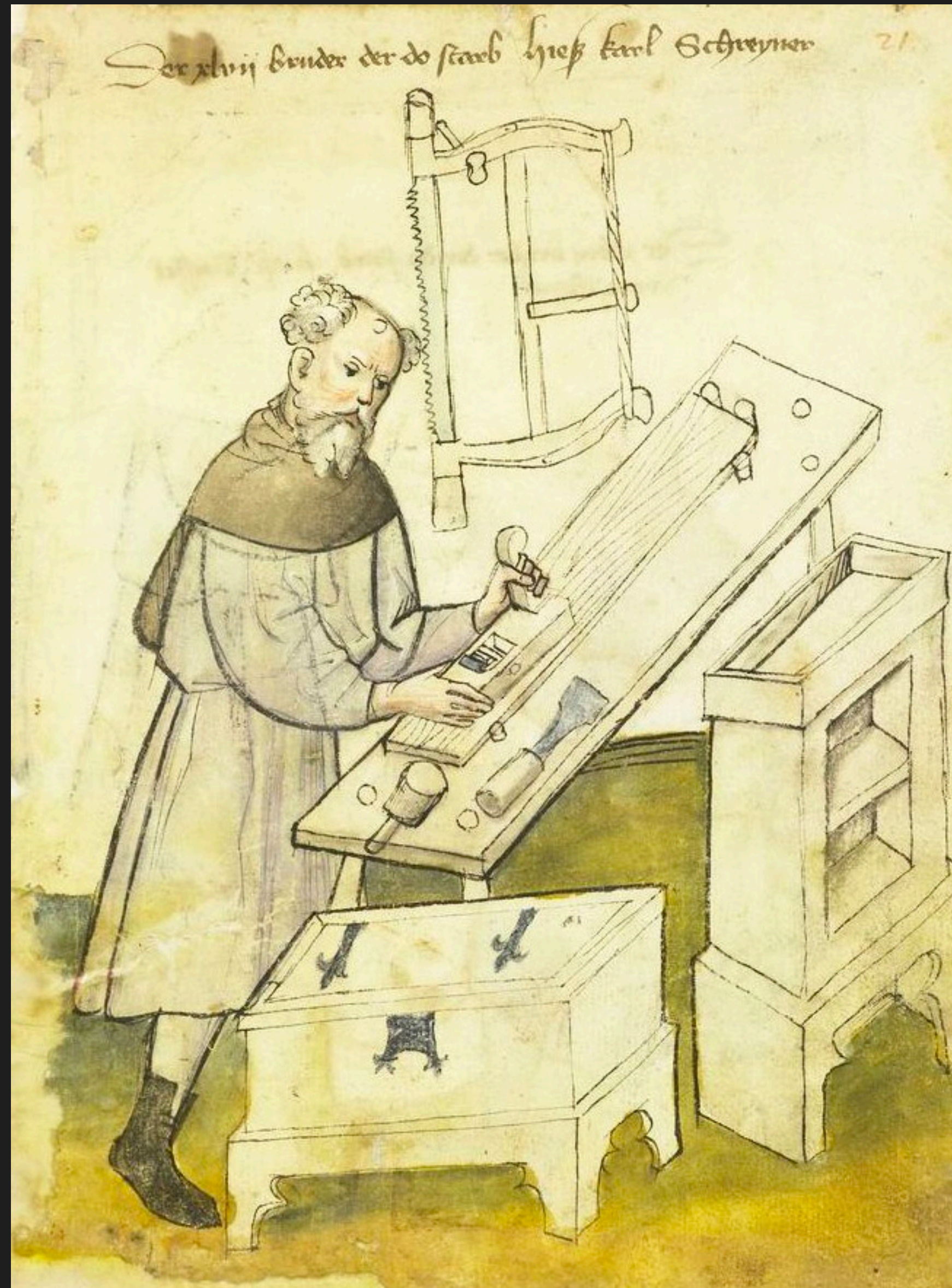




# Introduction to the 12 Essential Principles of Scalable Software Development



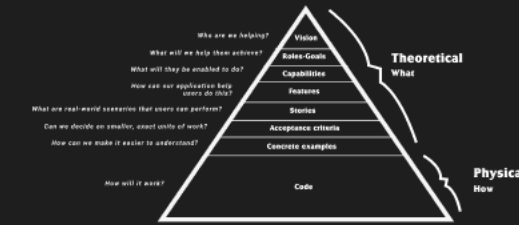


*There was once a woodworker who was so focused on learning all the tools of the trade that he never took the time to learn the fundamentals — such as the right types of wood for the job.*

*He could use a saw, plane, and drill with the best of them, but when it came time to build a mere table, he had no idea how to **choose the right kind of wood** to make it sturdy and beautiful.*



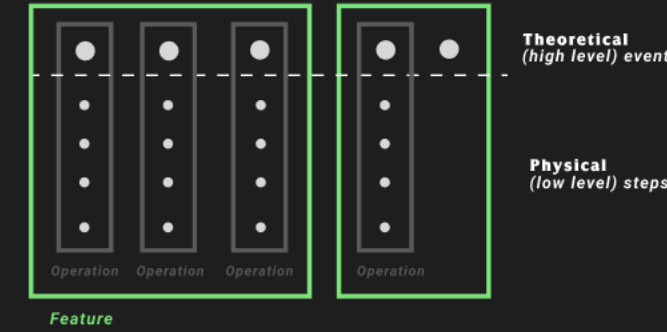
Tools, techniques & patterns are important,  
but **principles — thinking tools upon which  
you can orient yourself — are foundational**



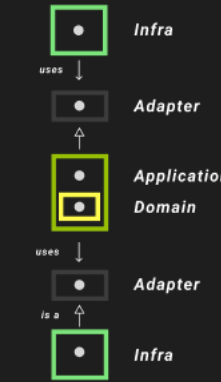
Metaphysical Essential  
**Abstraction**



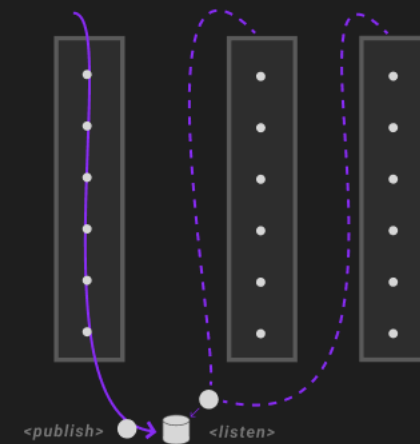
Metaphysical Essential  
**The Feedback Loop**



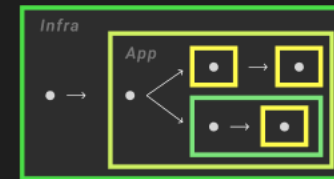
Physical Essential  
**Vertical Slicing**



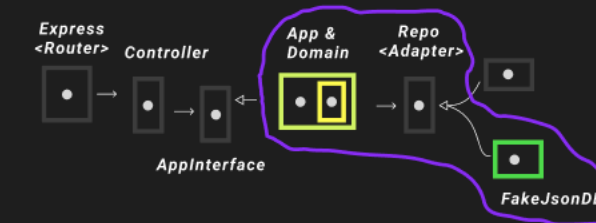
Physical Essential  
**Horizontal Decoupling**



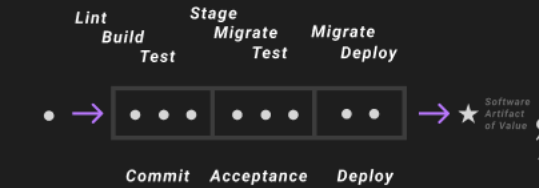
Physical Essential  
**Temporal Decoupling**



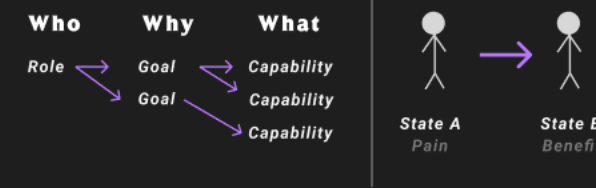
Physical Essential  
**Composition**



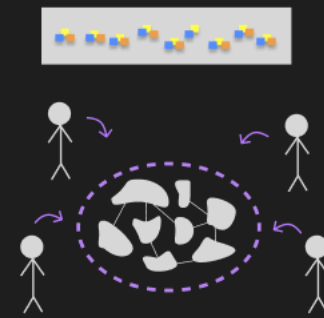
Physical Essential  
**Subject / System Verification**



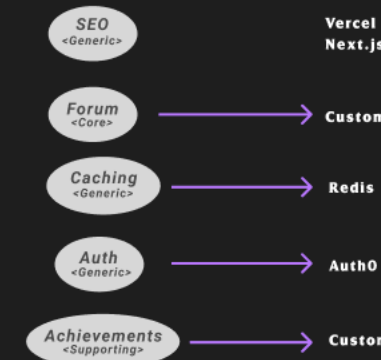
Physical Essential  
**Deployment & Delivery**



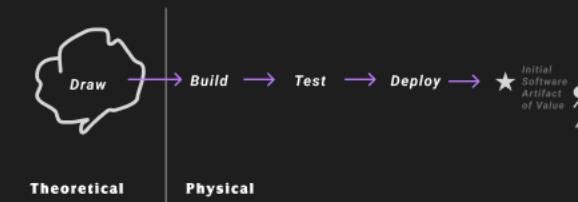
Theoretical Essential  
**Value Identification**



Theoretical Essential  
**Domain Discovery**



Theoretical Essential  
**Strategic Design**



Physical Essential  
**The Walking Skeleton**

# What we'll cover

- *What the 12 essentials are & why we need them*
- *An explanation of the 3 categories (metaphysical, physical, theoretical)*
- *A high level overview of each of the 12 Essentials & how we'll learn each throughout the course*

# What are the 12 Essentials & why do we need them?

- *Phronesis = Wisdom*
  - *The masterful Phronimos developers*
  - *Look to the experts for guidance*

# 3 Categories of Essentials

## *Metaphysical*

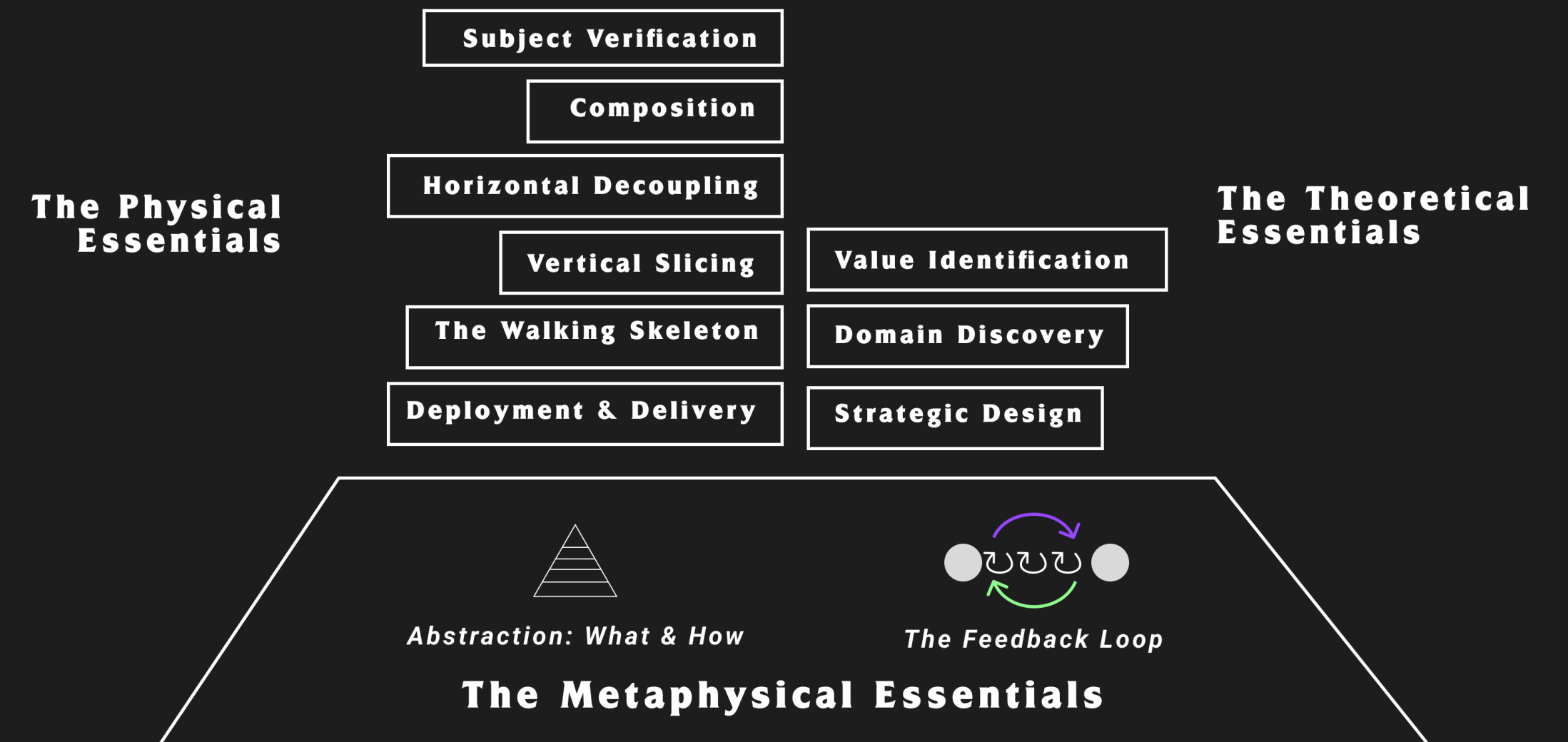
- the core mental models based on the realistic nature of goal achievement & problem decomposition

## *Theoretical*

- the potential, upfront, planning, thinking, designing conceptual part of problem decomposition

## *Physical*

- the actual, hard source code, implementation part



# What to focus on?

*Planting seeds. Like the previous mental models, focus on just understanding the ideas. We'll continually refine your implementation skills throughout the Phases of Craftship.*