

(Review) Common Engineering Design Pattern Fri Nov 2nd 2018

Break up your project into smaller problems
and then combine the solutions to each of
the of them to accomplish your project's goal.

Example: Hardware Design of a Computer

Circuit ← What is the smallest scale (electronics)? TRANSISTOR
Next scale? LOGIC GATES ← several trans. together
Next scale? Solving small problems. e.g., 1-bit adder ← several logic gates
Next scale? IC's ← Example of IC: ALU (= combining circuits).

After IC's next level is

(PCB) Board

(e.g. Graphic Card)
or Motherboard!!)

Finally a nice, fancy case, or (HD, Power supply)
a Display, Keyboard, mouse