

Distribution of Code

10–20% of the code = central algorithm.

80–90% of the code = exceptional details.

99.99% of execution time is spent in the central 10–20% of the code.

Distribution of Code

“99.99% of execution time is spent in the central 10–20% of the code.”

It’s hard to test the exceptional details code, the 80–90% of the code, because it gets executed less than 0.01% of the execution time, ...

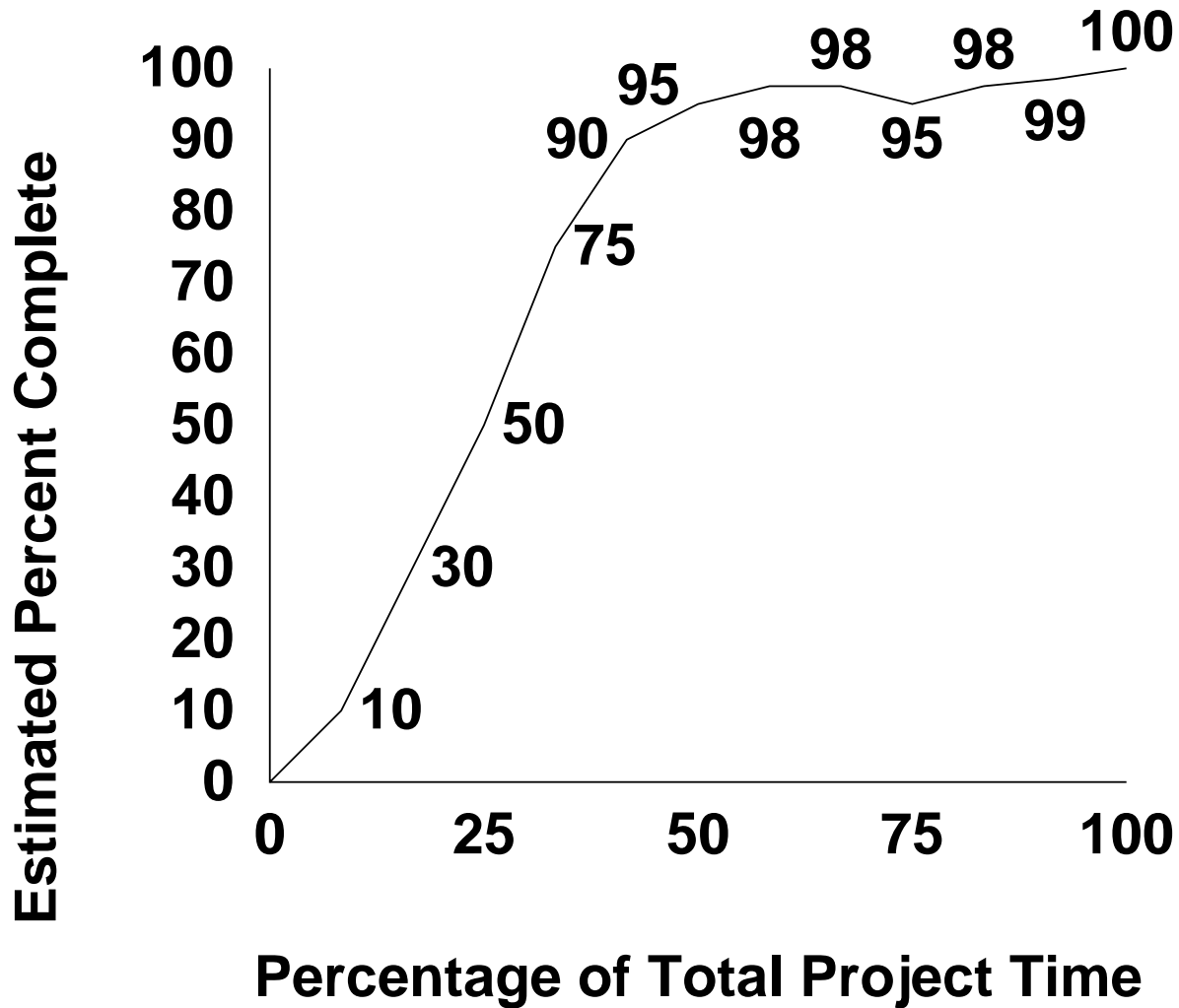
and correcting a defect in this 80–90% of the code likely involves changes in related fragments scattered over the entire code.

Formal Model Still Useful

Hoare continues,

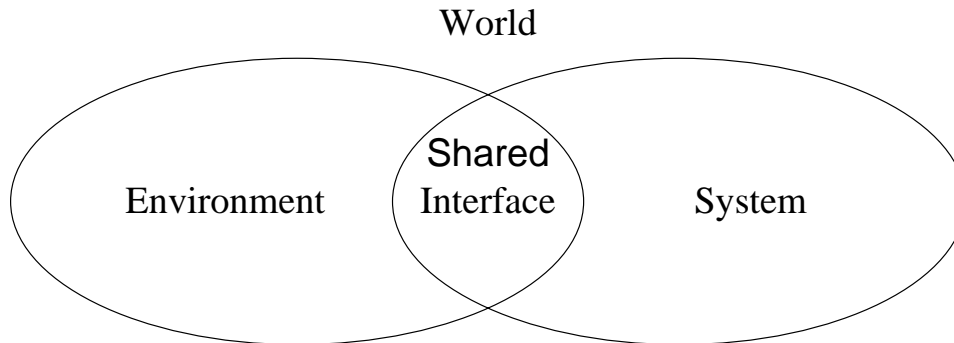
It is not the intention of this note to deprecate the value of mathematical modeling in addition to program design. Without a mathematical model, everything would be an exception.

Accuracy of Estimates During Development



Where Are the Exceptions?

From where is that 80–90% of the code = exceptional details?



From the Env, but not from the outside World!

But are we sure that it's not from the outside World?