Constructor Complexity

Test. Saving Face.[1]

Details Anne Zdravkova came to programming via the science library of a large chemical company. Self-taught, Zdravkova had spent a lot of time reading anything they could get their hands on about programming languages.

Zdravkova also had two high end graphics machines at home on which to practice programming.[2] But Zdravkova did not want to remain an amateur. They wanted to get out of the library business and be a full-time IT professional. By being persistent and using connections inside the company, Zdravkova eventually managed to get a transfer to the IT department as a programmer. There they went to work on a large system project with many dozens of modules, hundreds of variables and over a thousand conditions in all.

Things did not go well. The problems soon began, the run results just did not check out the way they should. Many conditions listed in the unit test plan did not give the expected results and Zdravkova had trouble figuring out why: there were too many variables and conditions. Zdravkova had never encountered such complexity before: at home all the programs were simple, with little more than a few thousand lines of code, never more than fifty conditions, and fewer than twenty variables. Zdravkova was sure that they could come to understand the complexity with just more time but time was running out. When the team leader, Philipa Gotterbarn, asked how it was going Zdravkova lied about the difficulties, saying that it was all under control. Losing face now would mean the end of their dream. Zdravkova really believed that with just a bit of fine tuning the modules would be ready.[3]

When it came time for integration testing, Zdravkova changed one of the programs to simulate acceptance of a transaction that the program could not process: it just passed the transaction on to a subsequent program. From there the deceptions continued. Zdravkova felt powerless and in a downward spiral. At one point a colleague, Don Foot, became suspicious but Zdravkova convinced them that everything would be all right with just a little more time.

The day of reckoning came with volume testing. Everything, or so it seemed, went wrong, and most of it was eventually traced to Zdravkova's programs. A great deal of time, money, and credibility had been lost.

Fortunately the modules Zdravkova was working on did not make it into production unchanged.

Cast	Role
Don Foot	Bazile Programmer
Katerina Gerdes	Library boss
Philipa Gotterbarn	IT team leader
Anne Zdravkova	Programmer

Table 1: C_3 Cast

[1] This is a modification of another case I had laying about. I tried but failed to locate the original. Source: Unknown

[2] Before long, they had convinced the boss of the library, Katerina Gerdes, to obtain access to expensive but valuable national databases specializing in chemical information. For an amateur, Zdravkova's accomplishments were pretty impressive.

[3] Zdravkova knew that some of the conditions were almost right (but could not say for sure which ones), and so penciled some of them in as complete on the unit testing documentation. The 'almost' and 'not quite' syndrome continued.