

Snap, snap, bugger, no images ...

Software testing is a much maligned activity and software testers rarely enjoy much kudos in a company. This is probably because it is viewed as 'easy'. After all, anybody can break a piece of software. Well this is probably true especially with the quality of much modern software but breaking it in all the ways your user might before they get their hands on it is not so easy. Moreover doing this within a tight budget and impossible deadlines imposed by somebody with as much idea of software development as a dandelion is definitely not so easy and requires great skill and not a little training. Good software testers are rarer than good designers in my experience and given that around 50% of the budget of a successful software development project is expended on testing in its various forms, at least as important.

Good software testing is not whimsical however. You don't walk into a room full of flies and swat the nearest one otherwise you will have a sore arm long before you make any significant difference. A good tester knows that he or she has only so many swats and will therefore seek out lucrative ones like the week-old pizza slice on the table. You might think this analogy is a little far-fetched but it has long been known that defects cluster in software. Where you find one, there is an enhanced probability that you will find more. Successful testers know this and when they find one, instead of relaxing they renew their efforts knowing that it is very likely there is a cluster nearby.

One of the places that defects cluster is around edges. In this sense, an edge separates two sets of input parameters with potentially very different properties. If you want to sound good at a programming party, they are called equivalence classes. Alternatively try to get out more. A very simple example would be if you know an array can contain between 1 and 255 elements. An experienced tester will focus on the ends with 0,1,2,254,255 and 256 elements knowing that programmers have a thing about edges.

So do these really occur as often as I am suggesting? Oh yes, indeed, so my "Lord take me now" moment of the month goes to Canon and the programmers of their nifty line of Ixus digital cameras. I have just returned from a trip to the US - New Orleans and then the Rockies around Evergreen. Unsurprisingly, I took lots of snaps. Next to a tranquil pool at around 9,000 feet last Saturday, I snapped a really beautiful scene. After a moment's thought for want of a better word, my camera said "Memory full". "Bugger" sayeth I and switched to edit mode to remove an earlier snap or two, at which point my camera said "No Images". I switched back to snapping mode, "Memory full", it says; back to edit mode and "No images". I tried everything but to no avail. In the end, I had to reformat the memory card to recover, losing everything. Thanks Canon. I don't mind you screwing up exotic things but you do not, repeat DO NOT, release boundary errors in basic file handling and I don't care if you can make the damn camera sing like a demented hamster every time I take a snap.

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