Letters to the Editor

“Small Scale Computing” issue raises doubts in some . . .

Editor:
The special issue on Small Scale Computing (Computer, March 1977), while excellently done, raises some worries about the improper proliferation of the wrong kind of computing excellence that bear comment.

The general tone of the issue gives one to believe it won’t be many years before virtually anyone with $500 to $1000 to spend on a hobby can get into the computing business in a serious way. Perhaps it won’t take even that much money! There seems to be the implication there’ll be a massive “cottage industry” for software that does interesting things, and the article [by Calvin Mooers] on protecting your software even suggests how to set up a business selling your code. In many ways this is delightful, but there are problems.

Here’s a typical situation. Suppose somebody becomes a computer “freak” and spends a number of years fiddling around with things. Serious specifications don’t have to be met since when you’re your own customer you can change the specifications to match what you’ve delivered. Deadlines don’t mean anything since, after all, it’s your own time. You get pretty good at Basic and enjoy it so much you decide to get a job, full-time, in the computing profession. You’re hired somewhere because you’ve got experience that looks good and there’s a need for that application. But what might really happen when you’re on the job is chaos, pure chaos.

Look at it from the other viewpoint. How does someone who’s considering two bids for a job from independents, one twice the size of the other, decide between the alternatives. Suppose it’s a graduated programming “hack” versus the seasoned professional, whose more realistic and competent bid is the higher one. Managers have little to go on save comparing intangibles like reputation and perceived experience. When the low cost bid wins, but fails to deliver on time and within specification, the decision-maker has a new problem: how to handle giving up half the real cost as a loss. This doesn’t even consider the time that was lost learning an expensive lesson.

If there were a single way of stating the worry it would be this: proliferation of capability without attention to quality will give the computer business a very bad name. Computing as a hobby can be delightful, and can serve the profession by identifying (and, perhaps, doing some of the training for) a good professional.

But the dividing line between amateur and pro, however fine, does have to be drawn. The “pro” is concerned with real costs, achievable schedules, and Quality (with a capital “Q”), and those are concerns nurtured over years of experience, thoughtful training, and a very serious attitude. Of course computing can be fun, but it seems to make sense to keep “fun” and “business” separate to some extent.

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evokes animadversions from others . . .

Sir:
Jim Warren’s recent article, “Personal Hobby Computing: An Overview,” left a bit to be desired.

Intel developed and delivered the 4004 microprocessor in 1971 with the 8080 coming shortly thereafter. There were many computer hobbyists prior to that time, welded together by Steve Gray’s Amateur Computer Society. These people were interested in using old or surplus computers for their hobby. Many were trying to roll their own PDP-8’s from scratch.

The popular hobbyist movement dates from July 1974, six months before the MIT’s Altair computer. At that time Radio-Electronics carried a cover story on the Mark-8 Mini-computer, which was an 8008-based hobby system. There were close to 700 of these systems in various form by the end of 1974, and there was a large computer hobby group, the Mark-8 Users’ Group in Lompoc, CA, set up by Hal Singer at the Cabrillo High School and John Craig, now an editor of Kilobaud. Software and hardware ideas were being exchanged well before the Altair ever came on the scene. There were also some 8080-based systems available, notably one from Scelbi Computer Consulting in Connecticut.

Dr. Bob Suding, now with the Digital Group in Denver, was instrumental in pushing many modifications and additions to the Mark-8 computer. There are still many in use today even though the 8080, 6800, and Z-80 have been out for some time.

I am sorry that Mr. Warren neglected to mention these facts and people who have made a lasting imprint on the computer hobby.

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