From: Felipe Cabrera[SMTP:cabrera@MICROSOFT.com]
Sent: Monday, October 07, 1996 2:35PM
To: Mechler, Edmund
Subject: SE Ethics

Ed,
    Please do not feel overwhelmed or disappointed but pleased that
smart people are reading your document in a careful manner.
    Do you think you may address the points discussed below?

    -- Felipe

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>Subject: Re: FW: SE Ethics
>
>Felipe,
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>I share xx's general concern that this is fine in theory but hard to
>apply. I realize that codes of ethics should be idealistic, but they
>also must be credible -- that is, practitioners should be able to
>see how the code shapes their work. Another way of saying this is
>that this draft seems a little naive.
If I remember correctly, there was a debate in Ethics between Absolute and Relative but
not idealistic and practical. The code doesn't shape work but guides SEs in areas of
concern. I don't understand the "naive", aren't we advocating all of the items in the code?
>
>The Code doesn't discriminate in intensity, even though some of the
>points are pretty close to absolute and others are currently viewed
>by many as good practice. I'd sign up to expecting an SE to refuse to
>work on a project that is blatantly unsafe or fraudulent. However,
>deviations from this committee's view of good process doesn't fall in
>this category, and the Code doesn't distinguish. For example, for me
>"thou-shalt-absolutely"s include 2.01, 2.03 (but see note), 2.07, 4.04,
>4.08, 4.09 whereas "you should make a good-faith attempt to" include
>1.01, 1.05, 4.06, 5.06, 5.11.
I have never seen intensity associated with Ethics; guidelines are statements to help
judgment. If a project is "blatantly" something then I don't need a code; the code is for the
gray areas.
>
>There are some other points that require each software engineer to
>control things over which he/she has no control. Naturally the SE
>should try to achieve all this, by working within the company if not
>directly. But holding individual SEs responsible for things outside
>their control is another place where the degree of responsibility
>and consequence isn't clear: 1.01, 1.06, 1.07, 1.09, 1.12, 3.04, 4.02,
>6.06, 6.10

The question is, Where does the responsibility begin? It must start at the SE Professional. I think too much "Thou shall not" or Thou shall" is being read into the Codes Items. They are guide lines.

>
>There are some points at which mechanism creeps in. The Code should,
>I think, state the objective and leave implementation to the best
>judgement of the engineer. (This is the usual rule about specifications.)
>Examples: 1.01 (the new one about written specs, added between Aug 8
>and Sep 30), 2.02 (the "well-documented" part), 2.03 (the "affix
>signature" part), 5.13, 6.02 (the only way I can understand this one
>is as an implementation of something I haven't figured out yet).

I do not see the "mechanism". We did not lay out steps but areas that the SE should be aware of. We tried to put them in a SE logical order which might give it an allusion of steps. The items are not objectives but guidelines for judgments.

>
>A particular problem area is international business. Even if the
>Code is intended for US practice, many US firms operate internationally.
>3.02 and 3.03 (on bribes, kickbacks, etc) don't really address the
>very gray situation in some countries. For example, I understand that
>in some countries customs officials are not supposed to take payments
>(by whatever name), but the computation that yields their salaries
>assumes they *are* receiving such payments.

This is an area that goes back to Ethics being absolute or relative. I personally have not heard of a system using bribes, kickbacks, etc. that has worked. I have heard of systems that removed them and had better results. Anyway, this area was adapted from the PE Code, most of those people do business internationally.

>
>There are also omissions in the handling of intellectual property.
>Piracy appears in 4.04, confidentiality and public domain IP are used
>inconsistently in 4.05, copyright but not patent appears as part of a
>list in 4.07, trade secret and nondisclosure are mentioned nowhere at
>all (though 4.05 was probably intended to address them), there's also
>nothing about export restriction, and what's there about privacy is
>politically loaded.

"Patent" will be added to 4.07. If "export restriction" is desirable please write the statement and where it should be placed; I am not sure it fits here. As for privacy being politically loaded, maybe, but from an ethical point of view we should be very aware of these conditions.

>
>On the whole, I think the document would be more likely to be read if
>it were shorter, crisper, and more realistic. A supplementary document
>could work through examples in a little more detail than the 2-liners
>that constitute most of this document.

This a matter of style. We decided on the PE Code model to list some of the detail items associated with a rule.

>

>Specific comments:
>
>Introduction:
> - "to assure ... used for good" makes me uneasy (who gets to decide
>   what's "good"?)
Ethics is a set of principles or values that guide our judgments.
> - The last sentence about the second-order bullets being incomplete
>   sets of examples is pretty obscure.
General disclaimer saying we cannot give all instances of a rule in ethics.
>
>Rule 1
> - 1.04: Who on earth gets to decide whether goals are "proper"?
Ethics is a set of principles or values that guide our judgments.
> - 1.10: software/documentation seems mismatched to privacy. Privacy
>   probably belongs under Rule 2 anyhow. Further, there's a big
>   difference in the privacy arena between what's legal in the US
>   and what many people think is "proper".
There is a difference, something legal could be unethical. The items are guidelines for judgments.
> - 1.13: What if the client wants quality of product (==> not minimum
>   price) and quality of life for SEs and programmers (==> not
>   maximum productivity)?
The client should then have a code or mission; I am not sure these fall under the SEs control. Anyway these do not seem to me to be mutually exclusive.
> - 1.14: It is not the case that "fad" is the same thing as "departure
>   from standard practice". In fact, there's a good case that
>   some standard practices ARE fads.
That is so true. A great deal of resources are applied because it is the latest fad , not because it fits the project and if we are luckily we end up where we started. As professionals this is an area we should be trying to decrease the occurrence of.
>
>Rule 2
> - 2.03 Presumably this means engineering documents about the product,
>   not other documents the SE may sign at various times?
Yes it refers to Rule 2
> - 2.07 Wouldn't it be nice to have a level of practice that allowed this?
As professionals we should try hard to get there; we have too much finger pointing.
>
>Rule 3
> - 3.02, 3.03 See note above about the realities of international business.
See reply to international note.
> - 3.05, 3.06 Are these acts always and without exception unethical? I've
>   been a member of a number of groups in which potential conflicts
>   were managed other than by complete exclusion. Indeed, 3.07
>   offers an alternative, thereby creating disagreement among
>   3.05, 3.06, and 3.07.

I am not sure I understand your experiences but 3.05 and 3.06 give a guideline for these conditions and 3.07 gives an alternative if 3.05/3.06 can not be applied.

>

>Rule 4

> - 4.01 I agree with Dennis.

I think competency is quit recognizable and since you agree with the first reviewer; The commentator paints a very bleak picture of our industry.

> - 4.05 Good sentiment, but imprecise statement. There are many

>   degrees of confidentiality to observe. In particular, copyright

>   material is widely availablle in books but not public domain.

>   Do you really mean an SE should say "I found the algorithm in

>   a standard textbook but must keep it confidential?" That's what

>   this point says.

First, I haven't seen a standard textbook in a while. Shouldn't it be the responsibility of the SE to bring your example to light? If I use an algorithm for gains what is the ethical thing to do?

> - 4.07 Why just *copyright* laws? Why not *all* laws?

We have 5.10. I have seen "Obey all Laws" in ethics documents but find it hard to put general legal factors in ethics for two reasons. To a degree ethics transcends legal and if a concept is legal doesn't necessarily imply ethical.

>

>Rule 5

> - 5.08 How does this differ from 2.05?

5.08 refers to working with other SEs where as 2.05 is more toward the public in general.

>

>Rule 6

> - 6.02 Is it the intention of the Code to eliminate anonymous

>   refereeing? That wouldn't be consistent with 5.13. More

>   seiously, engineers review engineering artifacts regularly.

>   As far as I know, reviewers of public artifacts don't check

>   in first. This would preclude product reviews undertaken without

>   prior warning to the developer; it would impede product selection

>   in the same way. What is this really trying to say?

6.02 is not even related to 5.13. Shouldn't a professional be advised that their work is being reviewed? The item doesn't refer to public artifacts. I must be missing the point of anonymous refereeing or without prior warning since I never deal with them. Is it to trap someone? What happened to walkthroughs?