5. Programming in the Large

Using Comments Effectively

Use comments to/for:

- **Explain philosophy.** Don’t just document details; also document philosophy, motivation, and metaphors that provide a framework for understanding the overall structure of the code.

- **Offer examples.** Sometimes an example is worth a pile of documentation.

- **Have conversations with other developers!** In a collaborative project, you can sometimes ask a question just by putting it in the source. You may come back to find it answered. Leave the question and the answer for others who might later wonder, too.

- **Maintain your “to do” list.** Put a special marker on comments that you want to return to later: ??? or !!!; maybe use !!!! for higher priority. Some projects keep to do lists and change logs in files that are separate from the source code.

```lisp
(defun factorial (n)
  ;; !!! What about negative numbers? --Joe 03-Aug-93
  ;; !!! And what about non-numbers?? -Bill 08-Aug-93
  (if (= n 0) 1
      (* n (factorial (- n 1)))))
```
Lisp Users and Vendors Conference
August 10, 1993

Tutorial on Good Lisp Programming Style

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