C Coding Standards

Naming Conventions

- Variables
  - Use only lower case
  - Use underscores to separate words in a name: first_name
  - Need to be descriptive: array_length
  - Commonly used variables like i, j, and k for loop control and array indexing are acceptable.
  - Arrays should indicate that it is multiple items: customers

- Definitions
  - All #define statements must be in UPPER CASE: #define ARRAY_SIZE (10)
  - Except for using upper case follow variable naming conventions.
  - Always use parentheses around numeric values in #define statements.
  - Never use hard coded numbers except in #define statements.

- Functions
  - Need to be descriptive: get_customer_account
  - Using a verb and an object often adds clarity: create_report

Comments

- Need to describe purpose: // search array for a customer number
- Do not just describe how the code works: a = b + c; // add b and c and put in a
- Many programmers now prefer using // for single line comments.
- /* */ syntax is still used but should be formatted to show clearly the range of comment text.
- Inside functions describe the purpose of each significant section of code.
  - Loops should have a comment describing the loop’s purpose (unless obvious).
  - Complex expressions should be documented.
- Functions must have a block of comments right above the function describing:
  - Purpose
  - Input parameter(s)
  - Output