Cocomo (Constructive Cost Model)

Cocomo (Constructive Cost Model) is a regression model based on LOC, i.e **number of Lines of Code**. It is a procedural cost estimate model for software projects and often used as a process of reliably predicting the various parameters associated with making a project such as size, effort, cost, time and quality. The key parameters which define the quality of any software products, which are also an outcome of the Cocomo are primarily Effort & Schedule:

- **Effort:** Amount of labor that will be required to complete a task. It is measured in person-months units.
- **Schedule:** Simply means the amount of time required for the completion of the job, which is, of course, proportional to the effort put. It is measured in the units of time such as weeks, months.

According to Boehm's definition, our software project is said to be an **organic type** as the team size required is adequately small (2 members), the problem is well understood and has been solved in the past and also the team members have a nominal experience regarding the problem.

We will be using the first level, **Basic COCOMO**. It can be used for quick and slightly rough calculations of Software Costs. It's accuracy is somewhat restricted due to the absence of sufficient factor considerations.

Considering the values of a, b , c and d to be taken from the organic model we get the following calculations:

1. Effort = 6.28 pm (person-months)
2. Development time = 5.02 months
3. Average Staff Size = 1.25 ≈ people
4. Productivity = 0.4 KLOC/months (Kilo-Lines of code per month)