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**1. Considering the project planning task set-I and set-II, what are the at least 2 parameters necessary to be included in the COCOMO model. Justify your selection of parameters.**

-> Considering the project planning task set-I and set-II, I can choose SLOC and DM for COCOMO model.

SLOC: Source lines of code are software metric used to measure the size of a software program by counting the number of lines in the text of the program's source code. SLOC is typically used to predict the amount of effort that will be required to develop a program, as well as to estimate programming productivity or effort once the software is produced. Without source line of code it is impossible to calculate with the COCOMO model because this is a mandatory. As we know two tasks we have to know how many lines each of them needs.

DM: Software delivery is the process of deploying an application to the market. After programming is done, the software should undergo several quality assurance tests to ensure it meets the specifications. All these are done before the completed program is produced. Without knowing how much time needed we will not be able to calculate how many people will be needed for the project. So It is a mandatory as well.

**2. Describe how project effort/cost is related with project delivery time?**

-> Effort refers to the number of labor units required to complete a task, activity or project, and are often called 'man-hours'. Effort is usually expressed as either. time units (days, hours, minutes) a monetary value, or material needs. The budget determines how much each work element should cost, the cost of each level of the work breakdown schedule (WBS), and how much the total project should cost. Actual performance can be compared to these plans to determine how well the project is progressing or finished. When Project Delivery Time gets passed the deadline it effects in the project cost and we need much more money for the project to complete. And it is a huge issue because if it gets passed the deadline then the money has to get cut from our profit which will reduce our profit. In this way they are relatable.

Effort and delivery time equation:-

Ea = m (td 4/ta 4)

Here, explanation of the equation:-

Ea = effort in person-months

td = nominal delivery time for schedule

to = optimal development time (in terms of cost)

ta = actual delivery time desired