

Indian Institute of Information Technology, Vadodara

COST ESTIMATION

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We are using COCOMO model for estimating the total efforts required for the project. COCOMO model works primarily according to size of the project along with other parameters. So we need to get an approximate idea about how many KLOC our project will be of. This can be done by using analysis of similar projects done in the past. So the estimated KLOC for our project is = 5, which is 5000 lines of code. Now, as our team is small and consists of experienced members, so this will be a organic model.

According to COCOMO model -

$$E(i) = Effort(initial) = a(KLOC)^b$$
 $(Unit: person - month)$

$$Tdev = c(Effort)^d (Unit: month)$$

$$a = 3.2, b = 1.05, c = 2.5, d = 0.38, Expected KLOC = 5$$

Initial Effort (Ei) = a * (KDLOC)^b =
$$3.2 * (5)^{1.05} = 17.34PM$$

 $TotalDurationTime = c * (Ei)^d = 7.39Months$

So, by calculating the values using COCOMO model, we can conclude that with the given skill set and technology used So, with a team of 5 members, it would take about 17.34/5 i.e. 3 months approximately.