

COCOMO MODEL

Our project is called "MediSync". This is a web-based, centralized database containing comprehensive medical records for each patient. Our system allows doctors and hospitals to instantly get a patient's complete medical history by entering their National ID (NID) and by further authorization by the patient.

We already know:

- Effort = PM = Coefficient*(SLOC/1000) ^P [100,000 SLOC/1000 = 100k SLOC]
- Development time = DM = 2.50*(PM)^T
- Required number of people = ST = PM/DM

Software Project Type	Coefficient <Effort Factor>	P	T
Organic	2.4	1.05	0.38
Semi-detached	3.0	1.12	0.35
Embedded	3.6	1.20	0.32

Our COCOMO Model:

Organic projects are relatively small and straightforward. They usually involve well-understood requirements and have a small team of experienced developers. Given the nature of our project, which is a web-based centralized medical records system with limited functionality for now, it fits into the "organic" category.

Approximate line of code = 15,000

- Coefficient (C) = 2.4
 - Project Complexity (P) = 1.05
 - SLOC-Dependent Coefficient (T) = 0.38
 - Total line of Code = 15,000
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- Effort = PM = $2.4 * (15,000/1000) ^{1.05} = 41.21991233$
 - Development Time = DM = $2.50 * (41.21991233) ^{0.38} = 10.27260746$
 - Required Number of People = ST = PM/DM = $41.21991233/10.27260746 = 4$.