CS-UY 4513 Software Engineering (DP I)

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Chapter 1 - 1, 6, 8, 15, and 16

1. Explained in section 1.3., for projects between 1992 and 1998, development averaged 25% of the project while maintenance averaged 75% for development and post-delivery maintenance costs. The ratio is 1:3. This means that maintenance will cost 3x more to maintain; which comes out to roughly $530,000 \* 3 = **$1,590,000.**
2. Explained in figure 1.6., fixing faults in post-delivery maintenance of projects relatively averaged out $368 while in the analysis phrase averaged out $3. The ratio is 123:1. This means that during the analysis phrase it would have costed $18,900 / 123 = **$153.66.**
3. In page 14 of the textbook, “Studies have shown [Boehm, 1979] that between 60 and 70 percent of all faults detected in large projects are requirements, analysis, or design faults”. This means that, during the implementation stage, many faults are expected to be seen, and coding is part of it. So if the implementation stage is quality assured, there will be less problems in the later stages.
4. COTS are generalized softwares and may not fit the intended software product being developed. This could cause integration issues. COTS could get outdated; it is a third party software and that company would be responsible for supporting it. Cost for developing software could be cheaper by integrating a COTS software, as they are mass produced for general purposes.
5. Because the component is open source, it saves time and money to use already written and free code. Open source components tend to be more widely used, noticed, and consequently maintained. However, open source codes could be inferior to code made professionally and could downgrade the software product.