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**Section: K**

**1. As a project manager of your proposed project in this course, which 3 software quality attributes you will consider first and justify your answer with respect to your proposed project.**

-> Software Quality Attributes are features that facilitate the measurement of performance of a software product by Software Testing professionals, and include attributes such as availability, interoperability, correctness, reliability, learnability, robustness, maintainability, readability, extensibility, testability etc. Based on my project it needs performance, maintainability and efficiency first. First of all it needs to perform in a well manner all the time because with lacking in the performance it will not survive in the long run. Not only will that it become mostly unusable for my client. So it is a must to that software to perform well. Next it needs to be maintained well if it is not maintenance regularly then it will fail in the long run. We will need to adapt to the new technologies and implement them in our systems to be successful with our software in the future. Lastly our software needs to be efficient because without efficiency people might not be encouraged to use it. It should be efficient in every such way in disk space, capacity or memory. It should need minimum hardware to run in every computer. Based on my project i will see these attributes in my software first.

**2. List down 2 potential risks of your proposed project and briefly describe which risk management technique you apply to handle those risks.**

-> My project can have two risks mostly. One is the performance risk and another one is the schedule risk. The project was supposed to be completed in a short amount of time so there could have scheduling risk and also for this reason our project can have performance issues as it was not tested that properly. For the performance problem, we can use prototyping, tuning and simulating our system. So that we can see at the time of development will it be a risk after development of our software. To solve the scheduling problem we need to use the incremental development technique we also need to analyze the previous project and compare the timelines so that we can get an idea.

**3. What challenges you face to continue the course and project work?**

-> In summer semester, we get short time to complete to complete this course. It is hard for us to complete everything properly in this short time. Some of challenges I faced while attending this course which are:

i) Grouping problem

ii) Time maintaining problem

iii) Within short time completing project

iv) Mental pressure

**4. Suppose an organic project is expected to have 6,500 line of code from previous project management data where the effort coefficient factor is 2.4, project complexity is 1.05, and SLOC-dependent coefficient is 0.38. Calculate the estimation of total effort, total development time, and required number of people needed to develop this project. If my client wants me to complete the project in 1 month then what adjustment you need to perform in the above calculation?**

->

Project Type: Organic

Coefficient factor: 2.4

SLOC: 6500

P: 1.05

T: 0.38

Effort Estimation, PM = 2.4\*(6500/1,000)^1.05

= 17.13

Development Time, DM = 2.50\*(PM)^T

= 2.50\*(17.13)^0.38

= 7.36

= 8 months

= (8\*22) hours

= 176 hours

Required Number of People, ST = PM/DM

= 17.13/8

= 2.14

= 3

So, I need 8 months and 3 persons to complete this project. If my client wants to complete this project 1 month then I will increase the person number.

New required Number of People, ST’ = PM/DM’

= 17.13/1

= 17.13

= 18

**MCQ:**

1. Regression Testing

2. Recovery Testing

3. Support Risk

4. Organic, Semidetached, Embedded

5. PM

6. Fake Medicine Detection System

7. SLOC, PM, DM, T, ST

8. Use Case Diagram

9. COCOMO

10. 100%